

REVIEWS

J. Linguistics 41 (2005). doi:10.1017/S0022226705213634
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Artemis Alexiadou, Elena Anagnostopoulou & Martin Everaert (eds.), *The unaccusativity puzzle: explorations of the syntax–lexicon interface* (Oxford Studies in Theoretical Linguistics 5). Oxford: Oxford University Press, 2004. Pp. x + 372.

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Studies in a broad range of theoretical frameworks commonly make reference to unaccusative or unergative verbs. It seems, however, that not all linguists mean the same thing when using these terms. For some, the terms are used as semantic attributes, for others as syntactic attributes, and for still others these terms have both a semantic and syntactic component to them. It is also far from clear that all researchers would classify all uses of every verb in the same way. What is responsible for this state of affairs? After intensive research on phenomena falling under the rubric of unaccusativity for the past twenty-five years, it would appear that unaccusativity is not a unified phenomenon from either a semantic or a syntactic perspective. Figuring out how the different phenomena which have been studied under the rubric of unaccusativity fit together is what I take to be the heart of the unaccusativity puzzle. The book under review represents an attempt to look at unaccusativity in light of recent advances in syntax, lexical semantics and morphology. All the contributions represent work in mainstream frameworks of generative grammar, and all – except for one, which takes unaccusativity to be a solely semantic phenomenon – assume that unaccusativity is syntactically represented. Despite this shared underlying perspective of the studies, no single solution is provided to the unaccusativity puzzle. However, it seems to me that the book indicates that much progress has been made over the past twenty-five years in untangling aspects of the puzzle.

The original formulation of the Unaccusative Hypothesis gave unaccusative verbs a unified syntactic representation and identified this representation with that of passive verbs, i.e. as a Verb Phrase (VP) which has a direct internal argument but no external argument. More recent studies suggest that unaccusativity is not a unified phenomenon syntactically, as I will elaborate below. Moreover, it was originally assumed that membership in the unaccusative and unergative subclasses is semantically determined, but no unified semantic property was offered for all unaccusative verbs. This is

true both for Perlmutter's (1978) formulation of the hypothesis and for Levin & Rappaport Hovav's (1995) extended study of unaccusativity. The former gives lists of verb classes generally classified as unergative or unaccusative, with no unified characterization of either group; the latter has more than one linking rule which links arguments, based on semantic properties, to the direct object position.

Since then, there have been attempts to provide a unified semantic characterization of all unaccusative predicates. However, if it is emerging that unaccusativity is not a unified syntactic phenomenon, it is also less likely that a unified semantic characterization can be found. Two semantic properties often associated with unaccusative verbs are telicity and lack of agentivity, but these properties can vary independently (Dowty 1991, Levin & Rappaport Hovav 1995). Furthermore, the syntactic correlates of these two properties, which are localized inside and outside the VP, respectively, can themselves vary independently. Finally, as recent syntactic theory offers a more articulated structure outside the VP, there are more options for representing unaccusativity syntactically.

Gennaro Chierchia's 'A semantics for unaccusatives', which is a slightly revised version of an influential paper circulating since the early 1990s, represents one attempt to provide a unified semantics for unaccusatives. It focuses on the lack of an external argument. Starting with the observation that many unaccusative verbs have causative counterparts and often share morphology with lexical reflexives, Chierchia suggests that all unaccusative verbs are derived from causative verbs by a semantically restricted process of reflexivization – a view also expressed in Tanya Reinhart & Tal Siloni's contribution. The reflexivization process affects the external argument, preventing it from being expressed syntactically.

This analysis leads to certain interesting insights (for example, concerning the distribution of *da sé* 'by itself' phrases in Italian) and is perhaps appropriate for many unaccusative verbs. However, the attempt to provide a unified semantic analysis for all unaccusative verbs leads Chierchia to some conclusions which appear to me incorrect. Unaccusative verbs which lack a causative counterpart, for example *appear*, are assumed by Chierchia to have an abstract non-lexicalized causative verb. Significantly, non-lexicalization is idiosyncratic, which, Chierchia argues, accounts for the unstable valency of these unaccusative verbs. Now it is well-known that Italian manner-of-motion verbs, which ordinarily select *avere* 'to have', select *essere* 'to be' when they appear with a bounded path phrase, yielding a telic interpretation. This suggests that these normally unergative verbs are in fact unaccusative in this use. This in turn leads Chierchia to the position that the Italian equivalent of *Gianni ran into the garden* involves a verb derived from a basic causative verb which happens not to be lexicalized. Yet, the same verb *run* is not derived from a causative verb when it occurs without the directional phrase. In this, Chierchia makes the rather common mistake of confusing

causativity with telicity. But his analysis is also not supported by the kind of morphological evidence which motivated the causative analysis of unaccusative verbs to begin with: cross-linguistically, intransitive manner-of-motion verbs are generally NOT marked by reflexive morphology, regardless of whether they occur with or without telic directional phrases, and they are hardly ever related to a more basic causative counterpart. This is a solid generalization, not an idiosyncratic morphological fact. But if deriving the unaccusative uses of manner-of-motion verbs from causatives is untenable, then there is no unified semantic representation for all unaccusative verbs.

The other attempt at providing a unified semantic characterization of unaccusative verbs relates unaccusativity to telicity. This approach is represented by Angeliek van Hout's 'Unaccusativity as telicity checking' and Hagit Borer's 'The grammar machine', which identify unaccusatives as intransitive telic verbs. The correlation made is really between telicity and direct objecthood, as these authors both suggest that a telic predicate, whether intransitive or transitive, requires the presence of a direct object. By focusing on direct objecthood as a trigger for telicity or, more precisely, on movement to the specifier position of a functional projection above VP (AgrOP for van Hout, AspP for Borer), they do not have anything to say about the semantic correlates of the absence of an external argument. Borer's article assumes telicity to be the determining semantic factor for unaccusativity, but it in fact aims at addressing a much larger issue concerning the syntax–lexicon interface, to which I will turn below. Despite the fact that there is an undeniable tendency for unaccusative verbs to be telic, van Hout's arguments for equating unaccusativity with intransitive telics are not completely convincing. The diagnostic which she uses throughout her paper is auxiliary selection in Dutch, but the explanatory connection between auxiliary selection and the syntactic configuration of unaccusativity has never been established. In fact, patterns of auxiliary selection vary widely across languages, to a much greater extent than the classification of predicates as unaccusative or unergative. Van Hout herself admits that there are Dutch atelic verbs which select *zijn* 'to be' (for example, *blijven* 'to stay'), and as Hans Bennis points out in 'Unergative adjectives and psych verbs', experiencer object verbs in Dutch such as *bevallen* 'to please' also select *zijn* 'to be'. Thus, either auxiliary selection is not a diagnostic of unaccusativity or unaccusativity is not uniquely correlated with telicity.

As mentioned above, earlier accounts of unaccusativity provided a unified syntactic representation for unaccusative verbs. A number of studies in this volume suggest otherwise. The recent trend to include a *v*P-layer above the VP results in a wider range of options for representing different classes of predicates. For example, in his carefully argued article, Bennis reaches the conclusion that while the classic unaccusative configuration is one in which no *v*P is projected, there are two other configurations in which an external

argument is absent. In the first, a ν P is projected, but passive morphology absorbs the external theta-role (along the lines suggested in Baker, Johnson & Roberts 1989). In the second, a ν P is projected and the verb can assign accusative case, but there is no external argument generated and hence it is possible for the internal argument to move to the specifier position of ν P. Bennis argues that this last configuration is what is found with a certain class of psych verbs in Dutch. More specifically, object experiencer verbs with non-agentive subjects (as in *That behavior amused me*) project both the experiencer and the stimulus arguments VP-internally. Bennis shows that there is good reason to assume that the experiencer argument is assigned accusative case, thus motivating the projection of a ν P-layer. There are also thematic reasons for assuming that the stimulus argument moves from a VP-internal position to the specifier position of ν P. The additional syntactic articulation of the clause can provide us with more distinctions than were previously available. While some unaccusative diagnostics in Dutch, such as auxiliary selection, are sensitive to the absence of a ν P-layer, other diagnostics, such as inversion and the appearance in *as*-clauses, are sensitive to the absence of an argument in the external specifier position of ν P.

The same three-way configurational distinction is shown to hold in Adjectival Phrases. Therefore, the absence of an external argument needs to be dissociated from the absence of accusative case, since the head of Bennis' *aP* does not assign accusative case even when it is projected. I note, however, that if a unified analysis of auxiliary selection is to be provided for Dutch, something more must be said, since in certain instances, telicity does seem to be the determining factor, as for example in the contrast between *John heeft urenlang gelopen* 'John has walked for hours', which selects *hebben* 'to have', and *John is in vijf minuten naar huis gelopen* 'John walked home in five minutes', which selects *zijn* 'to be'.

There is a well-known tendency for unaccusative verbs, in particular for the intransitive variants of verbs participating in the causative alternation, to be marked with the same morphology as reflexives, middles, and sometimes passives. We see this tendency not only in Indo-European languages but also in other language groups such as Semitic. One of the attractive features of this book is the extended treatment of the causative alternation and the appearance of reflexive morphology as a possible unaccusative diagnostic. Five articles deal with this topic. This extended treatment of a single phenomenon from similar theoretical perspectives is important because, as already mentioned, studies often concentrate on one diagnostic as representing unaccusativity as a whole, while different diagnostics sometimes appear to single out disparate phenomena.

What clearly emerges from the discussions of what might be called 'reflexively marked transitivity alternations' is that the appearance of the reflexive cannot be taken to be a diagnostic of a single phenomenon.

In 'Against an unaccusative analysis of reflexives', Reinhart & Siloni argue convincingly that lexical reflexives, despite sharing morphology with unaccusatives, show neither the semantic nor the syntactic properties of unaccusatives. Both unaccusatives and reflexives are derived from two-argument verbs by a semantic process of reduction, but the former involve the reduction of the external argument, yielding a predicate which projects only its internal argument, while the latter involve the reduction of the internal argument, yielding a predicate which projects only the external argument. On this approach, shared by Chierchia in his contribution, the reflexive morphology is not strictly an unaccusative diagnostic: it is a morphological marker of reduction of more than one kind.

In 'Unaccusative syntax and verbal alternations', David Embick agrees that reflexive morphology is not an unaccusative diagnostic. He suggests that reflexive morphology is sensitive to a particular syntactic configuration, namely the absence of a full argument DP in the specifier position of *v*P. This configuration is shared by unaccusatives, passives and lexical reflexives, although these all differ in other respects, including the feature content of *v*. Languages may also differ in certain aspects of the derivation of reflexives. In Romance, *se*-clitics involve cliticization to the verb of an anaphoric external argument, while in Greek, the reflexive element appears to be an adverbial originating in a VP-internal position. Embick attributes the unergative properties of reflexives to the agentive features contained in the *v*-head – this is a property shared with passives. In contrast, unaccusatives lack agentive features in this position. This, however, would leave unexplained the numerous phenomena where unaccusatives pattern with passives rather than with reflexives, as illustrated in Reinhart & Siloni's article.

In 'Unaccusatives and anticausatives in German', Markus Steinbach shows that reflexively marked German anticausatives are syntactically transitive. Presumably, these verbs are derived from the same event structure as they are in other languages and from the same operation on event structure. This must mean that languages, within certain limits, vary in the way these event structures are mapped onto the syntax.

Finally, Artemis Alexiadou & Elena Anagnostopoulou report in 'Voice morphology in the causative–inchoative alternation' that while the intransitive member of the anticausative alternation is often marked with non-active morphology (which is shared by lexical reflexives and passives), this is not always the case. Levin & Rappaport Hovav (1995) suggested that the predominance of the pattern in which the intransitive variant of the causative alternation is morphologically marked supports the idea that these verbs are basically causative. However, Alexiadou & Anagnostopoulou point out that, at least in Greek, there is a semantic property shared by anticausative verbs without non-active morphology: they are all derived from basic adjectives. Even in the domain of clearly causative

verbs, then, the direction of derivation between the two variants may not be uniform.

What all this suggests is that the various ingredients of unaccusativity need to be isolated and that the diagnostics for unaccusativity need to be scrutinized in order to determine which diagnostic correlates with which aspect of unaccusativity. A complete theory will uncover the explanatory connection between the various diagnostics and the unaccusative properties of which they are diagnostic.

Two contributions deal with the question of the relation between the lexical properties of predicates and the syntactic environments in which they appear. Borer brings evidence from data on children's acquisition of the Hebrew *binyan* system to support her general position that it is not the semantics of the predicate which determines the syntax of a clause (as in the 'projectionist' approach), but rather the syntax of the clause which determines aspects of the interpretation of predicates (as in the 'constructionist' approach). Her article does not directly deal with unaccusative phenomena but is concerned with this larger issue, which is relevant to the theory of unaccusativity to the extent that we would like to understand the relation between the semantics of predicates and the syntax of the clause in which they appear. Borer's position is partly motivated by the phenomenon of intransitive verbs which show variable behavior as either unaccusative or unergative, with a correlated shift in interpretation. The phenomenon of variable behavior verbs does indeed deserve close scrutiny, as it pervades the English verb inventory and is not restricted to intransitive verbs. Borer suggests that predicates are listed in the lexicon with some basic indication of their meaning but without any explicit indication of the number and type of associated arguments. Particular positions in syntactic structures are associated with syntactically represented semantic features. Verbs can be freely inserted into a variety of syntactic contexts, and the semantics of the entire clause will be computed compositionally from the semantics of the predicate and the semantics associated with particular syntactic positions. Of course, not all verbs can project onto all syntactic configurations, and Borer suggests that projection is constrained only by the requirement that there be some compatibility between the semantics of the predicate and the semantics associated with the syntactic structure. However, this would in fact predict a greater degree of homogeneity across languages in terms of the compatibility of predicates with varying syntactic configurations than there really is. The most fruitful approach in this area seems to me to be a careful scrutiny of the cross-linguistic distribution of predicates across the range of syntactic contexts. A step in this direction is taken in Antonella Sorace's 'Gradience at the lexicon-syntax interface'.

Sorace examines the cross-linguistic distribution of a variety of verb classes with respect to auxiliary selection and sets up an auxiliary selection hierarchy. The verb classes which are highest on the hierarchy are most likely

to select the counterpart of English *be* as perfective auxiliary, while those lowest on the hierarchy are most likely to select the counterpart of *have*. The verb classes at the extremes of the hierarchy represent the core unaccusative and unergative classes, respectively. The behavior of these classes with respect to auxiliary selection is categorical and consistent across languages and insensitive to the compositional properties of the predicate. The verb classes at the extremes are also diachronically stable in their classification. Languages differ as to how far down the hierarchy they select the equivalent of English *be* and how far up the hierarchy they select the equivalent of *have*. As one moves toward the middle of the hierarchy, one finds increasing cross-linguistic variation and increasing instability within particular languages. Sorace points out that neither the traditional projectionist approach nor the newer constructionist approach can satisfactorily account for this state of affairs. A comprehensive theory will need to explicate the interplay of lexical and constructional factors, something which no theory to date does to a satisfactory degree. Progress in this direction will be made once the semantics of given constructions are more carefully studied.

While Sorace builds her hierarchy on the basis of auxiliary selection, she suggests that this can be a general unaccusativity hierarchy which will account for the distribution of verb classes with respect to all unaccusative phenomena. However, she never makes explicit what the semantic contribution of auxiliary selection is. If unaccusativity is not, as I have suggested, a unified semantic phenomenon, it is unlikely that predicates will distribute across the various unaccusative phenomena in the same way. Indeed, change-of-location verbs are at the top of the hierarchy for auxiliary selection, followed by change-of-state verbs. It is clear, however, that for participation in the causative alternation, it would be change-of-state verbs which would be topmost.

In sum, this book contains important studies on unaccusativity, isolating and discussing major pieces of the unaccusativity puzzle. Perhaps ten years down the road, we will be able to put this puzzle together and view the picture as a whole.

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(Received 30 May 2005)

J. Linguistics 41 (2005). doi:10.1017/S002226705223630
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Paul Bloom, *How children learn the meanings of words* (Learning, Development, and Conceptual Change). Cambridge, MA & London: MIT Press, 2000. Pp. xii + 300.

Eve V. Clark, *First language acquisition*. Cambridge: Cambridge University Press, 2003. Pp. xvi + 515.

Kyra Karmiloff & Annette Karmiloff-Smith, *Pathways to language: from fetus to adolescent* (The Developing Child). Cambridge, MA & London: Harvard University Press, 2001. Pp. ix + 256.

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This review considers three quite different recent works on child language. Paul Bloom's *How children learn the meanings of words* is part of the Bradford book series Learning, Development, and Conceptual Change, edited by Lila Gleitman, Susan Carey, Elissa Newport and Elizabeth Spelke. This series

includes state-of-the-art reference works, seminal book-length monographs, and texts on the development of concepts and mental structures. It spans learning in all domains of knowledge, from syntax to geometry to the social world, and is concerned with all phases of development, from infancy through adulthood. (ix)

In his acknowledgements, Bloom disarmingly begins by stating, 'This book contains everything I know about how children learn the meanings of words' (xi). He continues:

This is a topic I have studied for over a decade, and it has been immensely rewarding. The child's ability to learn new words is nothing short of miraculous. And the study of this ability bears on the most central questions in cognitive science. What is the nature of human learning? How are language and thought related? How do children think about the people and objects around them? (xi)

In its third printing in 2001, and with the back cover noting that it won the 2002 Eleanor Maccoby book award of the American Psychological Association, this promises to be the sort of book which is welcomed as further, in-depth reading on the specific topic of vocabulary acquisition, in the context of a more general course on child language.

Eve Clark's *First language acquisition* looks very much like the sort of work which belongs in the Cambridge Textbooks in Linguistics series

(although in fact it does not) and has the same title as David Ingram's (1989) work, which for many years has been a very useful standard course book. Clark's synopsis describes the book as taking

a comprehensive look at where and when children acquire a first language. It integrates social and cognitive approaches to how children analyze, understand, and produce sounds, words, and sentences as they learn to use language to cooperate and achieve goals. It takes a usage-based approach in considering what children learn, emphasizing pragmatic factors in language use, and includes research on word-formation, bilingualism, and dialect choice. (i)

This (accurate) description, together with the natural authority of the author, both as a textbook writer (Clark & Clark 1997) and as a leading scholar in the field of child language, will lead many who lecture in this field to welcome the book as the textbook of choice for years to come.

Kyra Karmiloff & Annette Karmiloff-Smith's *Pathways to language: from fetus to adolescent* is published in Harvard University Press's The Developing Child series, which, under the general editorship of Jerome Bruner, Michael Cole and Annette Karmiloff-Smith, aims at 'bringing together and illuminating the remarkable recent research on development from infancy to adolescence, for students of developmental psychology, policy makers, parents, and all others concerned with the future of the next generation' (i). Karmiloff & Karmiloff-Smith's preface flags up the fact that

[i]t might seem strange for a book about language acquisition to have the word 'fetus' in its title. Of course we do not mean to imply that the unborn baby already knows and understands language. But the fascinating journey of language acquisition does indeed begin during intrauterine life and continues through to adolescence and beyond. (vii)

Many will welcome this book's stimulating approach to the topic – the result of what the cover describes as a 'remarkable mother–daughter collaboration, [which] balances the respected views of a well-known scholar with the fresh perspective of a younger colleague prepared to challenge current popular positions in these debates'.

Taking these initial characterisations as a guide, let us now look at the books in order, starting with Karmiloff & Karmiloff-Smith's work (henceforth KKS), which might most readily be seen as an accessible introduction to the field. The book has a preface and eight chapters, entitled 'What is language acquisition?' (9 pages), 'Experimental paradigms for studying language acquisition' (32 pages), 'Speech perception in and out of the womb' (13 pages), 'Learning about the meaning of words' (29 pages), 'Becoming a grammatical being' (61 pages), 'Beyond the sentence' (31 pages), 'Atypical language development' (32 pages), and 'Rethinking the nature-nurture

debate' (14 pages). This list of chapter titles gives an indication of the authors' broad view of the field and also points to the areas emphasised in this book, namely grammar, vocabulary and discourse (dialogue and narrative), methods of study, and the evidence from language impairment. It is a particular strong point of the text that experimental methods are so well addressed, with clear and attractive illustrations. The excitement of 'getting your hands dirty' is part of what the authors want to convey, and the book as a whole is shot through with this sense of personal involvement. For this reason, one can imagine the educated lay parent, as well as the inquiring student, making headway through more abstruse topics such as pro-drop parameter setting, phonological, semantic and syntactic bootstrapping (both in chapter 5, 'Becoming a grammatical being') or anaphoric reference in narratives (in chapter 6, 'Beyond the sentence'). As well as an overall picture of language development in the child, the reader gains acquaintance with the role of brain mechanisms in language processing, the Child Language Exchange Data System (CHILDES) database, the 'competition model', connectionist approaches, construction-based theories, Universal Grammar, innateness, lexical constraints hypotheses, the MacArthur Communicative Development Inventory, sign language, and a broad range of conditions in which impaired language development is observed, including deafness, Down syndrome, specific language impairment and Williams syndrome, but not autism. Accessibility to these topics is enhanced by a very useful index and copious, chapter-by-chapter suggestions for further readings.

Let us now imagine that a student, stimulated by KKS as pre-reading, has signed up for a course in which Clark's book is the basic text. How would this book deliver the required breadth and deepening of contact with the field?

First language acquisition is organised in four parts. Part one, 'Getting started', is concerned, first, with the child's early conversations with adults in chapter 2, 'In conversation with children'; with analysing the speech stream to identify words in chapter 3, 'Starting on language: perception'; with early vocabulary representations and production in chapters 4, 'Early words', and 5, 'Sounds in words: production'; and with early mapping of meaning onto words in chapter 6, 'Words and meanings'. Part two, 'Constructions and meanings', focuses on children's acquisition of linguistic structure and two- to three-word combinations in chapter 7, 'First combinations, first constructions'; on morphological modification in chapter 8, 'Modulating word meanings'; on elaborating more complex structure within and between clauses in chapters 9, 'Adding complexity within clauses', and 10, 'Combining clauses: more complex constructions'; and on word coinage for filling gaps in the system in chapter 11, 'Constructing words'. Part three, 'Using language', looks at social skills for language use, including turn-taking, in chapter 12, 'Honing conversational skills'; at speech acts, language

genres and the growing range of goals for language use in chapter 13, 'Doing things with language'; and at choices of language and dialect in relation to addressee, setting, etc. in chapter 14, 'Language and dialect'. Finally, part four, 'Process in acquisition', picks up the issues of biological specialisation for language in chapter 15, 'Specialization for language', and acquisition mechanisms in chapter 16, 'Acquisition in change'.

There are some clear correspondences with the chapters and topics in KKS but, as you would expect, Clark offers a more developed treatment of a number of issues than KKS can provide, in particular with respect to child-directed speech, speech system development, the centrality and complexity of vocabulary, the development of grammar and the social uses of language. A particular strength of the book is the copious illustrative numerical and verbal data, provided in over 100 tables, which support the points being expounded and contribute to the strong sense that Clark's account is securely evidence-based. There is scope, too, to elaborate on certain issues of interpretation. In chapter 15, 'Specialization for language', under the subheading 'Starting small', Clark refers to Elman's (1993) demonstration that 'developmental restrictions on resources like working memory might be a prerequisite for learning complex domains' (413), a point which KKS, discussing the implications of connectionist modelling for acquisition and Elman's contribution to this, perhaps surprisingly stop short of.

However, there are also some significant gaps. There is no substantial treatment of methodological approaches (the brief mention of brain scan techniques in chapter 15 is not really a substitute); and while there is passing reference to sign language, critical periods, lateralisation and left hemisphere injury (all in chapter 15), there is no chapter on impaired language development. It seems to me that at the current state of the field, a review of trends in language acquisition research must address language impairment as seriously and as naturally as cross-linguistic evidence. Deaf children, children with limited mental abilities or children with supposed specific language impairment have a great deal to tell us regarding the language development process and the degree to which it relies on cognition and environmental input. Also, while continuity within child language and human language is discussed in chapters 5 and 16, there is no treatment of the big issue of species-specificity, which KKS address in their nature vs. nurture discussion. While KKS draw attention to the alternative models which researchers have proposed, Clark prefers to adopt a more example-based approach, discussing ideas without flagging them up as belonging to this or that school of thought. Thus, while Bates and MacWhinney are mentioned in several contexts, for example in reference to CHILDES (MacWhinney & Snow 1985) and the MacArthur Communicative Development Inventories (Fenson, Dale, Reznick, Bates, Thal & Pethick 1994), 'competition model' is not a separate section in the text and is not listed in the index.

Taking these two books together, it seems extraordinary that the topic of modularity does not get specifically addressed in either Clark or KKS – and Fodor's name, at least in respect of Fodor (1983), gets into neither index. Clark's text surely has the scope to include this issue, and KKS' omission is all the more peculiar, given the senior author's involvement in the debate, i.e. her well-known arguments against the standard Fodorian conception of modularity and her own articulate view of the issue (Karmiloff-Smith 1992). Research concerning language development in impaired individuals has raised the issue of developmental modularity, which goes to the heart of what might be innate and what might be open to developmental influences. This approach, known as neuroconstructivism (Karmiloff-Smith 1998), clearly belongs in an account of child language studies.

One issue that is clear in Clark's treatment is the centrality of words to the child's development of language. This is not surprising, given her long and respected involvement in research on children's vocabulary development (Clark 1993). It is reflected in her discussion of grammatical development in chapters 7 ('First combinations, first constructions') and 8 ('Modulating word meanings'), although one might wish that, like KKS, she emphasised more strongly the distinctiveness of the construction-based approach, exemplified by Lieven, Pine & Baldwin (1997) and Tomasello (1998), and its implications for the way we understand the relation between syntax and the lexicon. The centrality of lexical development is not just a reflection of the author's special expertise but something fundamental to language and its development in the child. This brings us on to the question how Bloom's book might fare as specified further reading in this area.

A first pass at the title might serve to emphasise the restricted scope of the book, which is concerned with the MEANINGS of words rather than with the lexicon as a whole. At least that is what you may think until you start reading. Once opened, it increasingly becomes clear that this book demonstrates how a scholar can connect with issues of considerable breadth by covering a restricted topic in great depth. Between the first and the last chapter, called, with nice conceit, 'First words' and 'Final words', respectively, the book deals with 'Fast mapping and the course of word learning' (chapter 2), 'Word learning and theory of mind' (chapter 3), 'Object names and other common nouns' (chapter 4), 'Pronouns and proper names' (chapter 5), 'Concepts and categories' (chapter 6), 'Naming representations' (chapter 7), 'Learning words through linguistic context' (chapter 8), 'Number words' (chapter 9), and 'Words and concepts' (chapter 10). It will be clear from this list that a virtue of this book is the breadth of word types considered. The book also deals with syntax as a context for word learning, examines types of language impairment, including Asperger's syndrome, autism and Williams syndrome, and briefly touches on sign language and chimpanzees. It ranges naturally over older and more recent views – picking a page almost at random, one finds in the context of human evolution

a reference to Darwin (1874) on the possible link between language and ‘certain high mental powers’ (242), as well as the following statement:

Daniel Dennett (1996, p. 17) sums up the strongest version of this proposal in admirably stark terms: ‘perhaps the kind of mind you get when you add language to it is so different from the kind of mind you can have without language that calling them both minds is a mistake’.

This ability to make the reader sit up and confront big issues ‘in admirably stark terms’ is reminiscent of KKS’ introduction, and it is a pity that it is largely lacking in Clark’s text. Incidentally, Fodor is copiously referenced in Bloom’s work, and not just, or even mainly, for modularity, which is just one of the ‘big issues’ addressed by Bloom along with theory of mind (chapter 3), essentialism (chapter 6), inference (chapter 8) and the language of thought (chapter 10).

In conclusion, we have in KKS a stimulating introduction to the field, which covers atypical as well as typical pathways, ‘big issues’ such as nature–nurture and the larger context of chimpanzees and evolution. Its reader is treated to a rather breathless style, which refers to authors by their first names and describes their findings as ‘fascinating’ and ‘exciting’. The text is supplemented by a good range of further reading suggestions at the end of each chapter, but these will present a big leap for the assumed reader. In its detail on language, the book is occasionally rather uncritical, for example in its treatment of morpheme/s and the measuring of mean length of utterance, a standard and fundamental yardstick of development.

Clark’s text has greater scope and coverage of some central topics but still has important gaps. It also suffers as a textbook from some aspects of the order in which it seeks to take students through the field. For example, the discussion of rote vs. rule vs. analogy in chapter 1 is likely to be difficult for students to appreciate, especially at a point when they have not yet been exposed to much data analysis. Similarly, the use of the English plural allomorphs as an example of acquisition in chapter 1, although hallowed by tradition, may be problematic. To consider distinct allomorphs apart from the natural articulatory constraints which operate in their word contexts seems to start with distinctions which are more real for the researcher than for the child and runs the risk of problematising the acquisition process in the wrong way. While Clark addresses fundamental concepts such as ‘stage’, no criteria are given for judging what is or is not a stage when she writes: ‘These findings suggest that the single-word period is not a discrete stage in development but rather a period in which children learn to produce larger and larger numbers of intelligible vocalizations’ (83). Clark’s treatment of the vocabulary spurt is fuller than in KKS but not as critically evaluative as Bloom’s chapter, which is sceptical and clearly sets out its criteria. The index is also not very helpful for a textbook. For example, there is no entry under ‘fast mapping’; when one finds ‘rapid mapping’, which is an unusual term,

the entry is simply ‘*see meaning*’, and under ‘*meaning*’, we find nothing related to fast (or even rapid) mapping. This is really not good enough, and the combined effect of these weaknesses is, regretfully, that *First language acquisition* may not quite be the coursebook anticipated.

Finally, in Bloom’s book we have a study which concentrates on a single area, namely vocabulary, but takes a broad approach within this area, covering a wide range of word classes, relating empirical findings to theory and connecting to large, interdisciplinary issues. A particular virtue is that Bloom evaluates his sources of information. A nice example is provided in chapter 7, ‘Naming representations’, where in reference to visual representations Bloom writes:

A paper on word learning (e.g., Bloom & Kelemen, 1995) will typically begin with some claims of how children learn names for objects, the description of the methods will note that drawings of objects were used, and the paper will end with some conclusions about how children learn names for objects, without any mention that these weren’t what they were actually tested on. (172)

Bloom goes on to note that in this respect

[d]evelopmental psychologists are in good company; the same assumption about the interchangeability of pictures and what they depict is held by perception psychologists. ... But there is good reason to believe that this equivalence assumption is mistaken, at least for word learning. (172)

This observation prompts some thought about the relation between visual and spoken representations of linguistic units as an object for children to acquire – see the remarks about plural allomorphy above. Even after the child has associated graphic symbols with phonological properties of linguistic units, there is a distinction to be drawn between the two modalities of language, and any uncritical assumption of equivalence can usefully be opened to closer examination.

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(Received 27 May 2005)

J. Linguistics 41 (2005). doi:10.1017/S002226705233637
© 2005 Cambridge University Press

Emma Borg, *Minimal semantics*. Oxford: Clarendon Press, 2004. Pp. x + 288.

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Minimal semantics fulfils the promise delivered in its title: it offers a view of semantic theory unaffected by the intrusion of those aspects of communicated content which come from anything other than the sentence. Semantic content is determined simply by deriving the truth conditions of sentences. Semantic theory is understood here as a ‘theory of literal linguistic meaning’ (I), and it is argued that the task of semantics does not extend beyond providing pure, pragmatically uncontaminated, sentence meaning. Borg strongly favours a formal approach to meaning where the object of semantic theorising is the sentence, and the methods are formal in that syntactic description is the only guide to sentence content. This view is contrasted with use-based accounts, which have been gathering many more followers lately and according to which the task of semantic theory is to provide a representation of utterance meaning in which the output of syntactic processing interacts with the output of pragmatic inference. Borg dubs these pragmatics-rich, contextualist approaches (see, for example, Recanati 2002, 2004) ‘dual pragmatic’ theories. In such theories, the analysis of meaning starts with the utterance as the basic unit, providing the truth conditions which pertain to the utterance and thus to the INTENDED content. Pragmatics is ‘dual’ because the output of pragmatic processing contributes both to the proposition expressed and, post-propositionally, to implicatures. Chapter 1 of Borg’s book, ‘A tale of two theories’, is devoted to the presentation of a

minimal, formal account, and, after an exposition of various arguments in support of semantic minimalism in the following two chapters, the author carries on with rebutting the arguments from the contextualist camp in chapter 4, entitled ‘Covert context-sensitivity: the problems of under-determination, inappropriateness, and indeterminacy’.

Borg provides a series of arguments in favour of minimal semantics, starting with the assumption that ‘[t]he truth-conditional semantic theory is governed, not by rich non-demonstrative inferential processes, but rather by formally triggered, deductive operations’ (8). Her strongest argument relies on modularity. As she puts it, ‘formal semantics and modularity about linguistic understanding seem to be a match made in heaven’ (8) – semantic understanding is modular and should be kept apart from the understanding of speakers’ intentions and from non-deductive inference (see also Borg 2004). Borg argues that modularity of semantic processing is to be assumed, and once it is assumed, speakers’ intentions fall out of the picture as irreconcilable with this modularity. In chapter 2, ‘Modularity’, she upholds Fodor-style modularity and argues that the understanding of meaning should be viewed as an encapsulated and computational language module. On the other hand, the understanding of acts of communication, she claims, ‘is about as informationally unencapsulated as you can get’ (90).

Discussing modularity is difficult in that it has to rely on ample hypotheses and a degree of speculation. It is certain, however, that the following alternative positions are available: either we are willing to admit different modules in semantics or we are not. Borg sides with the latter disjunct, while contextualists side with the first, albeit without resolving the structure of the assumed multi-modularity, i.e. pragmatics may or may not prove to be a module. Borg discusses two issues which may potentially weaken her view of modularity. One is the need to recognise speakers’ intentions in learning a language, and the other is the need for global, not module-specific, inferential reasoning in resolving ambiguities. She argues that both potential objections fail. Recognising the speaker’s intentions becomes unnecessary once the language has been acquired, and the role of global processes in ambiguity resolution can also be allowed in a modular theory. There is nothing wrong with this reasoning in principle. However, it seems to me that one might consider building a contextualist argument, using the same premises from intentionality and ambiguity.

To conclude, whether one adopts Borg’s assumption that semantics is better off as a modular enterprise is still a matter of preference and free choice. As she makes clear, her claim is conditional: if the understanding of literal linguistic meaning is best viewed as modular, then a formal, minimal semantics is best for the task at hand. What is still left in the air is whether there is strong support for the antecedent, although Borg certainly succeeds in raising it to the status of a plausible, convincing option. Her strong defence of minimalist semantics, using the argument of modularity, deserves

to be appreciated in that she demonstrates that it is indeed not unreasonable to follow this option.

For the readers already well versed in the semantics/pragmatics debate, chapter 3, 'Overt context-sensitivity: the problems of indexicality', is particularly interesting. It provides, in my view, the strongest and best developed argument for minimal semantics. Here, Borg demonstrates how one can maintain semantic minimalism in spite of the obvious need for contextual information in the case of indexical expressions. One of the strengths of the argument lies in its being an 'in-house' argument. It does not appeal to grand properties such as modularity or compositionality but instead shows, step by step, how to give a semantics of expressions which, to use Kaplan's terms, do not have content just in virtue of having a character, but instead have content because the character, such as 'she' or 'there', leads to the content in the particular situation of discourse. Borg combines the seemingly irreconcilable ideas (i) that formal operations on a syntactic form suffice in providing truth conditions of a sentence, and (ii) that the semantic content of indexicals, demonstratives and other deictic expressions such as *I*, *he* or *there* comes from the context of utterance. In other words, the problem is that the speaker's or the addressee's knowledge of who *he* or *they* refers to cannot figure in the semantics proper. Borg's resistance to incorporating epistemically given content of indexicals is well supported by her earlier argument from modularity. If semantics is modular, then we cannot introduce the agents' knowledge of referents into the semantic description. She offers the following suggestion:

[W]hat is special about demonstrative and indexical content resides not with the kind of epistemic contact between speaker and referent, but simply with the mode of expression of our thoughts. (186f.)

In practice, this means that in a sentence such as *That is red*, *that* is treated as a singular term which introduces a singular concept into the truth conditions. The content of *that* is an object, whatever it may be, which is referred to on this occasion. There is no room in this review to assess this proposal in the light of its predecessors, such as Perry's and Kaplan's views. Suffice it to say that Borg's solution is certainly worth attention. This chapter can also be profitably read as a self-contained proposal, not merely as an argument in favour of semantic minimalism.

Next, the issue of compositionality, as addressed in this book, requires closer scrutiny. Borg emphasises that the question of the delimitation of semantics is not merely a terminological debate, and supports this claim by saying that compositionality is a (welcome) constraint on formal minimal theories, whereas use-based (contextualist) approaches find compositionality less of a constraint. This is an issue which merits a much more detailed treatment. First, compositionality tends to be understood in semantics as a methodological requirement rather than a feature of semantic content

(see for example Groenendijk & Stokhof 1991) and thus one can understand it to be a task of semantic theory to show how this ASSUMED COMPOSITIONALITY can be formally described. Dynamic semantic approaches achieved this to a great extent by incorporating context change. A compositional treatment of utterances within a pragmatics-rich semantics has also been attempted (see Jaszczolt 2005). Indeed, Borg appropriately distances herself from criticising contextualists on the issue of compositionality, but perhaps it would have been more in keeping with the current achievements of the mildly and strongly contextualist orientations not to use compositionality as an argument in favour of semantic minimalism.

All in all, the choice to compare and contrast semantic minimalism with extreme contextualism has both its merits and its hidden dangers. While it is good to polarise the discussion in this way, at the same time the opportunity is missed to assess intermediate views, such as those represented in dynamic semantic approaches, where either the interpretation of the metalanguage (predicate logic) is altered to account for context change, as in Dynamic Predicate Logic, or the representations of discourse meaning are sensitive to more than just the logical form of the input sentences, as in Discourse Representation Theory (DRT). While Borg's argument from modularity still holds for these intermediate perspectives, the one from compositionality does not. Moreover, while DRT is briefly discussed in chapter 1, I believe that it is treated as somewhat too 'pragmaticised' and is thrown in the same basket as true dual pragmatic approaches. But one should remember that the role of intentions is very limited in DRT, where, for example, speakers' intentions are not a guide to external anchors.

In Borg's book, the contextualist view is clearly introduced and engagingly discussed. However, there are some small infelicities. Thus, Borg does not make it sufficiently clear that for relevance theorists 'semantics' has two meanings: the linguistic semantics, which comes as the output of the syntactic processing, and, more interestingly, truth-conditional semantics, which makes use of pragmatic enrichment. While commenting on Sperber & Wilson's 'somewhat non-standard ... use of the term "semantics"', reserved '*just* for the output of the formal decoding process' (43), she focuses on the minimal, linguistic semantics, although it is the other concept, that of truth-conditional, pragmatics-rich semantics, which plays an important role in Relevance Theory and other contextualist approaches.

In the climate of the recent surge in the debate on the semantics/pragmatics boundary, Borg's book is a welcome contribution which adds to this debate a new, rather extreme, but also refreshing view. We are all by now used to the issues debated within the contextualist camp, such as whether all pragmatic contributions to the propositional representation have to be traced to the constituents of the sentence or whether such additions are 'truly' unarticulated constituents which freely enrich the logical form in a 'top-down' manner (see, for example, Recanati 2002 and Stanley 2002), as

discussed by Borg in chapter 4. We are also used to the debates on the cognitive status of such pragmatic enrichment, which centre around whether it is conscious or subdoxastic. However, a defence of ‘uncontaminated’ semantics is rather scarce on the market. Perhaps one of the reasons is that two aims have been frequently conflated in the theorising on these issues: (i) providing a psychologically plausible theory of utterance processing and (ii) providing a formal, compositional theory of the meaning of sentence TYPES. The latter is what Borg sets out to do, and she does it with a distinct, new voice which merits attention – even the attention of entrenched contextualists.

Borg also addresses the issue of truth conditions of semantically underdetermined sentences and proposes truth conditions which allow for their satisfaction by a variety of different states of affairs. For example, ‘If *u* is an utterance of “Steel isn’t strong enough” in a context *c* then *u* is true iff steel isn’t strong enough FOR SOMETHING IN *c*’ (230, my emphasis). This is an interesting move, although it seems that it would be more in keeping with the principles of minimal semantics to go all the way and restrict the talk of truth conditions to the truth conditions of the SENTENCE rather than the UTTERANCE. Then, keeping the solution on a par with that for indexicals, we would obtain the following: a sentence *Steel isn’t strong enough* is true iff steel isn’t strong enough for something, where ‘something’ is restricted by the context of the utterance of this sentence. This, however, is merely a matter of polishing terminological distinctions rather than a radical revision.

A more fundamental objection can be levelled at Borg’s judgement that contextualists confuse the understanding of meaning as truth-conditionality with meaning as knowing whether the truth conditions are satisfied. It seems misguided to argue that since plausible verifications trigger the search for intended meaning, they also enter into the pragmatics-rich semantics. In other words, on a contextualist account, *Steel isn’t strong enough* becomes completed to read, say, *Steel isn’t strong enough to support the roof of the house*, but it is the truth condition that pertains to the unit so enriched that gives the appropriate semantics. The truth value figures only as a restriction on the plausible interpretations. Moreover, another argument levelled at contextualists is that a single unambiguous sentence would have to ‘possess an indefinite number of distinct semantic contents, depending on the range of acceptable ways in which it may be reported’ (252). This is at the very least puzzling. Advocates of pragmatics-rich semantics (and truth-conditional pragmatics) have gone to great lengths in discussing the adequate criteria for delimiting the proposition expressed – as, for example, in the debate over Relevance Theory or Recanati’s Availability Principle, to mention only two. None of these achievements are acknowledged in Borg’s work.

All in all, if one accepts, even for the sake of an intellectual exercise, Borg’s initial assumption that ‘we should *not* expect our semantic theory to tell us very much about successful communication, nor about our epistemic or

metaphysical contact with the world, nor indeed about the kind of thing which *meaning per se* is' (II), then the arguments provided to follow this assumption through are admirably precise and wide-ranging, from the general argument from compositionality to the detailed argument from indexicals. This is not to say that the book settles the issues at hand – the debate is still open. It will take much stronger theoretical and empirical evidence to answer the question what semantics is supposed to do. The task of demonstrating advantages of construing semantics in a minimal way is even harder than that faced by the advocates of pragmatics-rich truth conditions because contextualists have multiple evidence from experimental work that minimally construed propositions do not play a part in the recovery of utterance meaning (but see also Cappelen & Lepore's (2005) arguments in defence of a version of semantic minimalism). Borg would respond that utterance meaning is an entirely different species, but if that is indeed the case, then one had better invent a strong rationale for having a theory of meaning that keeps this species out. Finally, in spite of Borg's conciliatory efforts in chapter 5, entitled 'Minimal semantics and the global art of communication', it is difficult to see how one can defend both positions and claim that from a purely theoretical perspective, it is good to have a formal theory of meaning of sentence-types, while from a more practical angle, it is good to have a theory on how utterance processing works in which semantics has to be given a clear role to play.

To sum up, Borg's defence of semantic minimalism is a welcome contribution to the debate in that it helps shift the balance away from the widely accepted contextualist assumptions, providing a fresh voice in the discussion and making us revisit the basic question of what is the explanandum of a theory of meaning. Her discussion focuses on the pertinent problem of semantic theory and, in view of the fact that many will disagree with her assumptions, it promotes pluralism in the field, which is always a desirable prerequisite for honest, in-depth theorising.

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(Received 13 June 2005)

J. Linguistics 41 (2005). doi:10.1017/S002226705243633
 © 2005 Cambridge University Press

Thomas Ernst, *The syntax of adjuncts* (Cambridge Studies in Linguistics 96).
 Cambridge: Cambridge University Press, 2002. Pp. xii + 555.

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Within recent years, the licensing and distribution of adverbs have been subject to considerable debate. The ‘traditional’ view that adverbs are sentential or Verb Phrase (VP) adjuncts (see, for example, Jackendoff 1972) has been challenged, following Kayne’s (1994) antisymmetric view of syntax, by the proposal that adverbs are unique left-branching specifiers of distinct clausal functional heads (see, for example, Alexiadou 1997, Laenzlinger 1998 and Cinque 1999). In this view, temporal adverbs are licensed only as specifiers of temporal heads, aspectual adverbs are licensed only as specifiers of aspectual heads, and so forth. Since functional heads are hierarchically ordered, the adverbs in their respective specifier positions will be hierarchically ordered with respect to each other. And since there is a strict one-to-one correspondence between syntactic position and meaning, multiple positions for one and the same adverb must give rise to different semantics or, alternatively, they must result from movement (of various elements) across the adverbs.

A central aim in Ernst’s book is to provide an alternative to these ‘feature-based’ systems of adverb licensing and distribution. Rather than unique left-branching specifiers, Ernst assumes adverbs to be XP- and X'-adjuncts, which can branch both to the left and to the right. Instead of postulating strict one-to-one relations with functional heads, he allows adverbs to be fully licensed in ALL positions where their selectional requirements can be satisfied and where their presence does not cause a semantic clash with other elements, such as auxiliaries. Central to Ernst’s system is the idea that adverbs select for specific types of semantic arguments or FACT-EVENT OBJECTS (FEOs), which are constructed according to the rules of the compositional system (the FEO Calculus).

The discussion spreads over nine chapters. Chapter 1, ‘Introduction’, provides an overview of the different licensing theories and classifications of adverbs or, as Ernst calls them, adverbial adjuncts. This chapter also introduces Ernst’s two main claims: (i) the hierarchical positions of adverbial adjuncts are determined by the selectional requirements of individual adjuncts and the set of compositional rules which build up different types of FEOs; and (ii) the linear order of the adverbial adjuncts is determined by their hierarchical positions, together with directionality principles and ‘weight theory’.

The rest of the book is divided into two parts. In the first part, consisting of chapters 2–5, Ernst provides detailed motivation for his system of adjunct

licensing and distribution. In chapter 2, ‘The semantics of predicational adverbs’, he introduces the idea that non-quantificational predicational adverbs select for specific types of FEOs, viz. speech acts, facts, propositions, events and specified events. For example, as illustrated in (1), the adverb *obviously* requires its sister constituent to be a fact, whereas the adverb *possibly* requires it to be a proposition. The difference in selection is shown by the fact that only (1a) entails that Boris actually likes Natasha.

- (1) (a) Boris obviously [_{FACT} likes Natasha]. (42)
 (b) Boris possibly [_{PROPOSITION} likes Natasha].

Another crucial claim in this chapter is that the clausal and manner readings associated with many predicational adverbs, such as *rudely* in *Rudely, she left* and *She left rudely*, are not a result of homonymy (57). Instead, the manner readings of these adverbs are derived by the so-called ‘manner rule’, which applies when adverbs appear in the ‘low’ range, corresponding to the Predicational Phrase (PredP).

In chapter 3, ‘The scopal basis of adverb licensing’, Ernst shows how his system is able to predict a wide range of facts about the positions and relative order of adverbial adjuncts, which are problematic for feature-based theories. One such fact is that one and the same adverb can appear in more than one position, as illustrated in (2).

- (2) (a) Occasionally they could have been passed over for promotions. (I21)
 (b) They occasionally could have been passed over for promotions.
 (c) They could occasionally have been passed over for promotions.
 (d) They could have occasionally been passed over for promotions.
 (e) They could have been occasionally passed over for promotions.
 (f) They could have been passed over for promotions occasionally.

Ernst argues that, in feature-based systems, multiple positions can be explained only by postulating semantic differences or by assuming movement (of various elements) across the adverb. In Ernst’s system, multiple positions are expected, given that adverbs are licensed in ANY position where their selectional, including scopal, requirements are satisfied and where they can receive the right kind of interpretation.

The selectional requirements and compositional rules which build up FEOs also explain why some adjuncts are always hierarchically – and therefore also linearly – ordered with respect to each other. In (3), the predicational adverb *probably* requires its sister constituent to be a proposition, a higher-level FEO, whereas the adverb *tactfully* requires it to be an event, which is a lower FEO. In the well-formed (3a), the selectional requirements of both adverbs are met. However, in (3b), *probably* combines with a proposition, which cannot be converted into a lower-level event. Since *tactfully*

requires a lower- rather than higher-level FEO, its selectional requirements cannot be satisfied and the sentence is ill-formed.

- (3) (a) Gina has probably [_{PROPOSITION} tactfully [_{EVENT} suggested that we leave]]. (131)
 (b) *Gina has tactfully [_{EVENT} probably [_{PROPOSITION} suggested that we leave]].

Ernst further argues that functional (e.g. *often*) and participant (e.g. *also*) adjuncts have somewhat looser selectional requirements than predicational adverbs. This explains their relatively free ordering, cf. (4).

- (4) (a) They also often bought melons. (131)
 (b) They often also bought melons.

In chapter 4, ‘Arguments for right adjunction’, Ernst discusses the linear ordering of specifiers, complements and adverbial adjuncts. He proposes a set of directionality principles which ensure that specifier positions universally appear to the left of their sister constituent. Complements can appear either to the left or to the right of their sister, depending on the setting of the head-parameter (head-final or head-initial). The directionality principles further predict that adjuncts are uniformly preverbal in head-final languages. In head-initial languages they can be either preverbal or postverbal, i.e. they can be either left- or right-adjoined, depending on the adjunct. Generally, predicational adjuncts with clausal readings are preverbal, while functional and participant adjuncts can be either preverbal or postverbal. In addition to the directionality principles, the positions of adverbial adjuncts are further specified by ‘weight theory’, i.e. a system that ensures that at PF, ‘light’ elements are linearised to preverbal positions, and ‘heavy’ elements to postverbal positions.

In chapter 5, ‘Noncanonical orders and the structure of VP’, Ernst examines noncanonical orders of arguments and adjuncts. He proposes that noncanonical orders are the result of ‘heavy shift’ to adjoined positions. In head-initial languages like English, these movement operations can also be to the right. For example, as shown in (5a), an adverbial adjunct cannot occur between a verb and a ‘light’ direct object, but as shown in (5b), it CAN occur between a verb and a clausal direct object.

- (5) (a) The city council blocked (*frequently) their proposals (frequently). (207)
 (b) The CEO told her (immediately) that she was to be promoted.

In Ernst’s analysis, the clausal complement in (5b) has been extraposed across the adjunct *immediately*, in accordance with the rules of weight theory. Ernst argues for this line of analysis to be superior to feature-based systems,

which need to posit a large number of functional projections and movement operations to the left in order to account for these data.

In the second part of the book (chapters 6–8), Ernst focuses on the licensing of individual adjunct classes. His aim is to show that the system outlined in the earlier chapters correctly predicts their properties and distribution. In chapter 6, ‘Event-internal adjuncts’, Ernst examines the ‘low’ range, i.e. the domain of event-internal modification. He argues that manner, measure and domain adverbs, participant Prepositional Phrases and restitutive *again* are adjoined either to VP or to PredP, i.e. to projections which correspond to internal events, and that these adjuncts branch either to the left or to the right depending on the language (English VP-adjuncts, for example, branch only to the right, as specified by the directionality principles).

In chapter 7, Ernst examines ‘Adjunct licensing in the aux range’, i.e. in the syntactic field between the subject and the main verb. The emphasis lies on functional time-related and quantificational adjuncts, and their interaction with various auxiliaries and negation. Ernst shows that, unlike the feature-based theories, his system is able to predict the relatively free occurrence and ordering of these adjuncts with respect to auxiliaries and negation. Adjuncts are licensed whenever there is no semantic clash. For example, (6a) shows that an adverb like *still* is fully compatible with progressive aspect and can either precede or follow the progressive auxiliary. In turn, (6b) shows that *still* is incompatible with the present perfect. According to Ernst this is caused by a semantic clash between *still* and the end state which ‘results from the event of (iterated) refusals or treatments’ (345).

- (6) (a) They (still) are (still) refusing the treatments. (345)
 (b) *They (still) have (still) refused the treatments.

Chapter 8, ‘Adjuncts in clause-initial projections’, examines clause-initial adjuncts, such as those in (7).

- (7) (a) Obviously this is going to bother you. (386)
 (b) Icily, he spoke to the lieutenant. (421)

Ernst proposes that adjuncts can be either base-generated (as in (7a)) or moved to clause-initial positions (as in (7b)), which he takes to correspond roughly to Rizzi’s (1997) Topic Phrase, Focus Phrase and the like. In the case of movement, the clause-initial adverb has the same interpretation as it does in its original position within the ‘low’ range (consider *He spoke to the lieutenant icily*). Another central concern of this chapter is why some languages allow adverbs in a position between the subject and the finite verb, whereas others do not – as illustrated by the English sentence in (8a) and its French equivalent in (8b).

- (8) (a) Paul probably has accepted. (396)
 (b) *Paul probablement a accepté.

According to Ernst (402f.), languages vary with regard to the types of features found on functional T(ense): English T is marked [+C], allowing adjunction to T'. In contrast, French T is marked [–C] and does not allow adjunction to T'.

Finally, chapter 9, 'Conclusions and prospects', contains a summary of the main proposals. Adverbial adjuncts have a wide range of positions, constrained by their selectional restrictions and the system of compositional rules. Universal Grammar allows multiple adjunction in both directions and both leftward and rightward syntactic movement.

The syntax of adjuncts is a thorough examination of the licensing and distribution of adverbial adjuncts. The proposals are interesting and will serve as a starting point for further discussion. The argumentation is easy to follow even for beginning linguists. Ernst writes well and provides plenty of examples to illustrate his ideas. He carefully introduces relevant previous work and takes the reader through the main arguments. Most sections and subsections have their own introductory and concluding sections where Ernst outlines his intentions and the main results, and there are also plenty of cross-references to other places in the text. At the same time, many readers will probably feel that, at 555 pages, the book is far too long. Sometimes the main ideas get lost in the middle of all the repetition and cross-referencing. I also think that it is pointless to have endnotes in a book this long. One soon stops bothering when after leafing through nearly 500 pages there is only a reference to more literature. Another (slight) drawback is that Ernst almost seems to be on a crusade against feature-based systems. He often devotes nearly as much time and space to arguing AGAINST these systems as he does arguing for his own system. Despite these shortcomings, Ernst's book is a valuable contribution and should be read by anyone working in the field – including the proponents of feature-based systems.

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(Received 27 April 2005)

Carmen Fought (ed.), *Sociolinguistic variation: critical reflections* (Oxford Studies in Sociolinguistics). Oxford: Oxford University Press, 2004. Pp. xvi + 214.

Reviewed by DEBORAH CAMERON, University of Oxford

This volume grew out of a conference Carmen Fought organized at Pitzer College to honor her retiring colleague, the sociolinguist Ronald Macaulay. In it, Macaulay and eleven other distinguished practitioners of variationist sociolinguistics (Guy Bailey & Jan Tillery, Penelope Eckert, Barbara Johnstone, William Labov, Lesley Milroy, Dennis Preston, John Rickford, Gillian Sankoff, Natalie Schilling-Estes, and Walt Wolfram) reflect on themes broadly suggested by Macaulay's work. Fought has organized the material in four sections: 'Sociolinguistic methods', 'The exploration of "place"', 'Influences on adult speech', and 'Attitudes and ideologies'. While these themes can certainly be related to Macaulay's own preoccupations during his thirty-year research career, what seems to me most 'Macaulay-esque' about the book is the interrogative and (self-)critical stance the contributors adopt. In a field where the prototypical paper is organized around the presentation of facts derived from data analysis, it is refreshing to encounter leading variationists in more reflective mode – thinking about unresolved problems, questioning accepted assumptions, considering the impact of new ideas from other disciplines or re-evaluating the implications of their own earlier work. The result is far more than a gracious tribute to an esteemed colleague. It is a thought-provoking volume which can profitably be read by anyone interested in the current state of the art.

The 'Sociolinguistic methods' section contains three chapters, each written from a rather different perspective. In chapter 2, 'Ordinary events', Labov reanalyzes a narrative originally recorded in Ayrshire by Macaulay. Focusing on the creation of suspense in this story about a death, Labov makes the intriguing suggestion that oral narratives work more like film than like literature. The other two chapters in this section are concerned with methods in a more conventional variationist sense. In chapter 1, 'Some sources of divergent data in sociolinguistics', Bailey & Tillery consider the proposition that 'results in sociolinguistic research are sometimes as much a consequence of the methodology used as of the behaviour of informants' (27). After examining a number of cases where findings are skewed by interviewer effects, sampling effects or effects of the way variables were defined, they suggest that current variationist research has not maintained the field's original concern with methodological questions, and that more

research needs to be done specifically on methods so that certain effects can be predicted and controlled for.

In chapter 3, 'Exploring intertextuality in the sociolinguistic interview', by contrast, Schilling-Estes raises a problem that does not seem so amenable to the rigorous positivism Bailey & Tillery are in effect advocating: the intertextuality or polyvocality of the sociolinguistic interview. Drawing on the ideas of Bakhtin, as well as the work of linguists like Chafe, Fillmore and Jackendoff on idiomaticity, Schilling-Estes questions the idea that one can filter out 'alien' influences (such as the interviewer effects discussed by Bailey & Tillery) to arrive at an undistorted, 'authentic' representation of the informant's individual speech patterns. As she demonstrates with examples from her own interview data, informants are constantly recycling in their own speech the words or voices of others, not only people who are present in the immediate speech situation, like the fieldworker or other members of a group whose conversation is being recorded – but also absent others whose speech is evoked in stories about them or aphorisms of which they are the source. Schilling-Estes points out that this may have consequences for an individual's production of particular variant forms. The standard variationist procedure is to count every token of a variable produced by one speaker in calculating that speaker's index score. But if a certain variant occurs most consistently when the informant is evoking someone else's way of speaking (for example, a non-African American produces a high incidence of African American Vernacular English (AAVE) variants while telling a story whose central character is African American, or an AAVE speaker becomes markedly standard when quoting from or alluding to the Bible), will the standard procedure not have a distorting effect, making the individual in question appear 'more/less AAVE' overall than s/he 'really' is? Should tokens be discounted if they show this kind of intertextual influence? Is distinguishing the informant's 'own' voice from other voices feasible in practice, or tenable in theory? Schilling-Estes offers no easy answers to these questions, but as she says, the intertextual/polyvocal quality of interviews – which is often especially marked in those parts which are usually considered to evidence the informant's most 'natural' speech style, such as narratives – is a challenge to traditional methodological assumptions.

The 'Exploration of place' section has more of a consistent thread running through its three chapters. In chapter 4, 'Place, globalization, and linguistic variation', Johnstone gives an account of recent work in humanistic geography, a postmodern, phenomenologically influenced enterprise in which traditional positivist definitions of space in terms of physical features and boundaries have yielded to a more 'emic' notion of space as something actively constructed through the meaning-making activities of its human inhabitants. Johnstone considers how an approach which takes on board new ideas about space as a socially constituted and to some extent 'imagined' category would impact on variationist research, which inherited

from dialectology a traditional approach to space, treating, for example, states and counties as ‘natural’ units of investigation. The issue of how space in both its ‘etic’ and ‘emic’ dimensions affects patterns of linguistic variation is then followed up in the chapters by Wolfram (‘The sociolinguistic construction of remnant dialects’), who considers the notion of a ‘remnant dialect’ (i.e. a variety whose isolation from mainstream trends has led to its retaining features from earlier stages of the language), and Eckert (‘Variation and a sense of place’), who offers some interesting retrospective thoughts about the spatial dimension of her work on ‘jocks and burnouts’ in a suburban high school near Detroit.

There are clear connections between the ‘Place’ chapters and those in the ‘Attitudes and ideologies’ section; it is perhaps a pity that these two sections are not adjacent. Milroy, for instance, argues in chapter 9, ‘Language ideologies and linguistic change’, that although both British and North American sociolinguists have (explicitly or implicitly) used the standard variety as a key reference point for the study of variation and change, these are not only two different varieties linguistically, they are also differently IMAGINED varieties socially and spatially, and the ways in which they are imagined are consequential for the way they are taken up in actual linguistic practice. The English Received Pronunciation (RP) accent is a non-localized pronunciation that indexes elite social class status, whereas the US standard is imaginatively identified with a place – the ‘heartland’ of the Midwest – and this has more to do with race/ethnicity than with class. Milroy agrees with those scholars who argue that the idealization of Midwestern norms was not a reaction against the British-influenced varieties of the major East Coast centers; rather, East Coast varieties lost prestige because of their perceived ‘degeneration’ under the influence of large numbers of foreign immigrants. In contrast to both the East and the South, the Midwest represented an ideal of pure (and white) American-ness.

Macaulay’s chapter, ‘The radical conservatism of Scots’, also insists on the relevance of place for our understanding of the relationship between prestige standard and non-standard varieties. As also pointed out by Milroy, Scotland is very different from England in terms of its attitude to RP: for most Scots speakers, RP is irrelevant as a norm, and as Macaulay notes, many of the working-class speakers among whom the divergence of Scots from English is most marked evince little or no insecurity about their dialects, but are rather proud of their distinctiveness. Rickford’s ‘Spoken soul: the beloved, belittled language of Black America’, on the other hand, documents a loss of pride in the distinctiveness of AAVE since the 1970s. Examining responses to the Ebonics controversy of the mid-1990s, Rickford concludes that while there has always been debate about the role of AAVE in Black American life, the Ebonics debate ‘represent[ed] a dismally new low in terms of the degree of denial and deprecation to which the vernacular was subject’ (206).

'Influences on adult speech' is the shortest and arguably least coherent of the four sections. In chapter 7, 'Adolescents, young adults, and the critical period: two case studies from "Seven up"', Sankoff addresses the question of dialect change after puberty. Using data from the British TV documentary series *Seven up* (in which a group of people have been recorded at seven-year intervals since 1963 when they were seven), Sankoff examines two variables ('broad' *a*, as in *grass*, and 'short' *u* as in *bus*) in the speech of two men originally from the north of England and shows that both have shifted to a significant extent from their initially acquired, northern phonological systems. In chapter 8, 'Three kinds of sociolinguistics: a psycholinguistic perspective', Preston revisits another 'big question' about variation, namely how it can be modelled psycholinguistically, assuming one rejects (as Preston does robustly) Chomsky's contention that each variety in an individual's repertoire should be considered as a different language involving a different switch setting.

Overall, I found *Sociolinguistic variation* a rewarding text to read: the standard of argumentation is high, and so is the quality of the writing. The book is both a fitting tribute to the reflective and critical spirit of Ronald Macaulay and a valuable contribution to ongoing debates in the field.

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(Received 21 May 2005)

J. Linguistics 41 (2005). doi:10.1017/S002226705263636
© 2005 Cambridge University Press

Carlos Gussenhoven, *The phonology of tone and intonation* (Research Surveys in Linguistics). Cambridge: Cambridge University Press, 2004. Pp. xxiv + 355.

Reviewed by PILAR PRIETO, ICREA & Universitat Autònoma de Barcelona

The phonology of tone and intonation is a comprehensive survey of the linguistic uses of pitch variation across languages, which provides an accurately updated review of recent research on tone and intonation. Carlos Gussenhoven, one of the leading scholars in this area, has managed to write a textbook which successfully combines basic explanations of the main concepts in the field with an excellent state-of-the-art research summary and specific discussions of recent investigations. The book is written in a clear and pedagogical style, and it is thus suitable for both graduate students and researchers. Most of the chapters begin with background information on the domain in question and end with a brief summary and conclusion.

The book is divided into two parts. Chapters 1–8 cover a broad range of essential descriptive topics and theoretical issues in intonation research.

More specifically, they deal with the notions of tone, stress and intonation (chapters 2 and 3), the phonological and phonetic aspects of intonation (chapter 4), the universal tendencies of paralinguistic intonational meanings which derive from 'biological codes' (chapter 5), the phenomena of declination and downstep (chapter 6), the autosegmental-metrical model of tone and intonation (chapter 7), and Optimality Theoretical accounts of prosodic phenomena (chapter 8). The second part of the book (chapters 9–15) contains a set of phonological descriptions of the intonational systems of different languages, including Basque, Dutch, Japanese, and English, which illustrate a variety of typological phenomena analysed from different theoretical viewpoints.

Chapter 1, entitled 'Pitch in humans and machines', provides essential information about the phonetic realization of pitch variations. This chapter presents practical guidelines on how to interpret pitch tracks and, in my experience, is well suited for students who want to engage in this area of research. It also shows what to expect about consonantal, vocalic and end-of-utterance effects on pitch tracks and concludes with a small section on the techniques typically used in production and perception experiments.

Chapters 2 and 3, 'Pitch in language I: stress and intonation' and 'Pitch in language II: tone', offer a useful introduction to key concepts in tonal phonology such as stress, tone, accent and intonation. Chapter 2 clarifies historical misconceptions about the relationship between stress and intonation, focusing on the phonetic correlates of stress and the important notion of pitch accent. Chapter 3 argues for a twofold typological distinction between languages with lexical tone (or tone languages) and languages without lexical tone, which is based on how pitch variations are used in different languages but crucially disregards tone density. In this view, both Standard Chinese (with higher tone density) and Swedish (with lower tone density) are classified as tone languages. Chapter 3 further contains an informative discussion about the autosegmental representation of tone and intonation.

Chapter 4, 'Intonation and language', deals with one of the most persistent and difficult issues in intonation research. It aims at providing an explicit formulation of the distinction between linguistic and paralinguistic uses of pitch variation, making use of arguments involving discreteness, duality, and arbitrariness. Gussenhoven puts forward the idea that intonation includes both a linguistic and a non-linguistic part. In addition to discursive or informational meanings, intonation conveys emotional or attitudinal meanings such as friendliness and assertiveness. While the linguistic part of intonation is discrete, grammatical and thus amenable to phonological representation, the non-linguistic part is continuous or gradient and should be represented in the phonetic implementation module. The section in this chapter which reviews the set of experimental techniques for investigating discreteness in intonation is particularly useful. Here, the author discusses and evaluates how these techniques can be used to discover whether certain

intonational features function as discrete phonological contrasts or as gradient phonetic differences.

In chapter 5, 'Paralinguistics: three biological codes', Gussenhoven argues that the paralinguistic meanings of intonation have a common basis across languages and thus a set of universal meanings. Moreover, relying on his own research, he argues that universal meaning in intonation derives from three so-called 'biological codes': the frequency code, the effort code and the production code, which stem directly from those aspects of the speech production mechanism which affect pitch production. Recent research on tonal phonology, however, has convincingly shown that the apparent universality of paralinguistic meaning does not extend to all areas. There are clear language-particular differences, which can be interpreted as grammaticalizations of the universal meaning.

Chapter 6, 'Downtrends', summarizes the research done on downtrend patterns in intonation. Declination is regarded as the natural tendency for pitch to gradually lower along the utterance; reset describes the tendency for the beginning of the utterance to have a high pitch. This chapter clearly shows that downstep, upstep, and phrasal downstep patterns can be viewed as the grammaticalization of declination and reset. One of the conclusions drawn by the author is that speakers have a strict control over phonetic implementation patterns, which should not be regarded as automatic.

The autosegmental-metrical model in tonal phonology is the focus of chapter 7, 'Tonal structures', where Gussenhoven advocates it as a framework which has provided an important division of labor between the level of phonology and the level of phonetic implementation. The main components of autosegmental-metrical theory are carefully summarized: Gussenhoven explains notions such as pitch accent, boundary tone and prosodic level alongside the important concept of association and sketches the historical development of this framework. Finally, the chapter includes a section on the crucial influence of rhythmic alternations on the distribution of pitch accents – a topic which is analyzed in detail for English and French in chapters 13 and 15.

One of the most innovative sections in the first part of the book is chapter 8, 'Intonation in Optimality Theory', which deals with recent Optimality Theoretical analyses of sentence intonation. This chapter gives an account of current work in tonal phonology undertaken within the framework of Optimality Theory, discussing the phenomena of tonal alignment, association with prosodic edges and prosodic phrasing. Without being too technical or including long theoretical discussions, the author succeeds in convincing the reader of the advantages Optimality Theoretical analyses have for our understanding of tonal systems.

The second part of the book (chapters 9–15) contains comprehensive intonational descriptions of a variety of typologically different languages or language families, such as Basque, Japanese, Scandinavian, Franconian,

French, and English. In my opinion, these materials represent one of the clear assets of this textbook. The language descriptions included here serve the purpose of increasing our knowledge of cross-linguistic differences in intonation and our understanding how pitch variations work in typologically diverse languages. In these chapters, Gussenhoven uses the different languages to illustrate different phenomena. Thus, for example, tonal alignment and association figure prominently in the chapters devoted to Franconian, Japanese, and Swedish, whereas the chapters devoted to French and English focus on phrasing.

To conclude, *The phonology of tone and intonation* constitutes an excellent overview of recent work on tone and intonation and is to be welcomed as an essential graduate textbook for courses on intonational phonology. Moreover, it offers a wealth of examples from different language varieties. I am confident that it will provide scholars, teachers, students, and other readers with valuable insights in the area of tone and intonation, and that, as the author hopes in the introduction, it will stimulate further interest in this field of study.

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(Received 26 May 2005)

J. Linguistics 41 (2005). doi:10.1017/S0022226705273632
 © 2005 Cambridge University Press

Laurence R. Horn & Gregory Ward (eds.), *The handbook of pragmatics.* Malden, MA & Oxford: Blackwell, 2004. Pp. xix + 842.

Reviewed by PETER GRUNDY, Northumbria University
 & University of Leicester

In advancing 'the fundamental but counterintuitive idea that language forms do not in themselves have core meanings that get modified, adjusted, or expanded through pragmatic elaboration' (666) and in arguing that the assumption of invariant meaning is simplistic (657) and that we should be concerned not with the meaning of expressions but with their meaning potential, Gilles Fauconnier, in his article 'Pragmatics and cognitive linguistics' in *The handbook of pragmatics*, neatly undermines the semantic/pragmatic distinction which lies at the heart of Gricean pragmatics and the 'mainly Anglo-American conception of linguistic and philosophical pragmatics' (xi), to which the present volume deliberately limits itself. Since

we would not expect a cognitive linguist to accept the traditional view of pragmatics as a discrete level, Fauconnier's argument is expectable. Less expectable perhaps is the sense conveyed by many of the other chapters in this important but conservative collection that pragmatics is out of town this week.

The handbook of pragmatics contains 32 chapters, typically 20–25 pages in length, grouped under four headings: 'The domain of pragmatics', 'Pragmatics and discourse structure', 'Pragmatics and its interfaces' and 'Pragmatics and cognition'. In the following review, I will first attempt a judgement of the *Handbook's* 32 chapters and then comment on the place of the *Handbook* in the field and the view of pragmatics presupposed by the collection. Finally, I will return to the issue raised in Fauconnier's chapter and mentioned above.

'The domain of pragmatics' contains six chapters covering the principal areas explored in linguistic philosophy – implicature, presupposition, speech acts, reference, deixis and (in)definiteness. The collection opens with Laurence Horn's 'Implicature', which provides an account of Gricean pragmatics, discussing not only the way in which it constitutes the basis of Relevance Theory but also his own and Levinson's neo-Gricean proposals. This elegantly written chapter is clear and sure-footed – in short, a classic definitive chapter in the rationalistic tradition. It also avoids any temptation to be partial and serves as an excellent reference for what is to follow.

Horn's chapter is followed by Jay Atlas's 'Presupposition', which reviews what might be termed the presupposition wars of the 1970s and 1980s. With the historical roughage out of the way, Atlas convincingly argues for the need for a theory of accommodation, or – as Levinson has recently put it – of presumptive meanings.

Jerrold Sadock's review of speech act theory, entitled 'Speech acts', is a clear, direct and straightforward account, conveying the (perhaps challengeable) impression that little has happened in speech act theory since Levinson's (1983) excellent summary. The next chapter, Gregory Carlson's 'Reference', dwells on Frege, Russell, Strawson and Kripke, and treats reference from a historical, essentially semantic/philosophical perspective. Perhaps the difficulty of achieving a genuinely pragmatic account of reference explains why this area is often skated over in pragmatics textbooks.

In the fifth chapter in this section, 'Deixis', Stephen Levinson sets out to 'pinpoint some of the most tantalizing theoretical and descriptive problems' (97) posed by deixis, here defined as 'linguistic expressions that are semantically insufficient to achieve reference without contextual support' (103). The chapter presents a concise exploration of the problem of identifying the relevant phenomena and clearly distinguishing them from instances of non-deictic reference, before it considers key issues from a contemporary position. The theme running through this outstanding chapter is

the intersection of indexicality and the symbolic system. The chapter has an explanatory dimension lacking in most of the more historically oriented chapters. Put simply, Levinson answers many of the reader's *why*-questions.

In the final chapter in the first section, 'Definiteness and indefiniteness', Barbara Abbott traces out the uniqueness and familiarity accounts of definite reference, discusses identifiability and the givenness hierarchy, considers determiners as quantifiers, and explores the specific/non-specific distinction. Although ultimately Abbott does not nail down definiteness and indefiniteness, and although the pragmatic dimension is more implicitly felt than explicitly discussed, this chapter comes close to being definitive in its review of a wide range of positions. The chapter also transcends the notion of chronologically determined history by re-ordering the phenomena under consideration so as to make a convincing interpretative history.

The second section, 'Pragmatics and discourse structure', explores reference and discourse. Several of the eleven chapters in this section focus principally on the work of the authors themselves (for example, Gregory Ward & Betty Birner, Andrew Kehler, Robert Stainton, Susumu Kuno, Geoffrey Nunberg). Several also seem barely pragmatic, if pragmatics is held to be concerned with the role of non-linguistic context in interpretation. Indeed, many authors in this section are sparing in their use of the term 'pragmatics': Kehler, in 'Discourse coherence', manages with a single mention, and Ward & Birner do not use it at all in their chapter 'Information structure and noncanonical syntax'. For this reader, the outstanding chapters are those of Jeanette Gundel & Thorstein Fretheim on 'Topic and focus' and Diane Blakemore on 'Discourse markers'.

In Gundel & Fretheim's chapter, which explores referential (i.e. semantic) and familiarity (i.e. pragmatic) conditions on givenness/newness, the authors face up squarely to the issue of whether topic and focus are pragmatic phenomena at all. In quoting Reinhart's claim that sentence topics 'are a pragmatic phenomenon which is specifically linguistic' (191), they suggest that there is no context-dependent interpretation and shrewdly observe that 'the fact that topic and focus have pragmatic effects does not in itself make them essentially pragmatic' (192) since all aspects of meaning and form influence our ability to select a context that proves their relevance.

Blakemore's chapter on discourse markers as constraints on interpretation focuses on their non-truth-conditionality and on their role in the organization of discourse. Blakemore also raises, and defends, the status of discourse markers as affecting pragmatic interpretation. The chapter is admirably clear, comprehensive and well-written.

Readers will also find useful Yan Huang's authoritative (and challenging) chapter, 'Anaphora and the pragmatics-syntax interface', which explains how Levinsonian neo-Gricean pragmatics can account for anomalies in existing syntactic and semantic accounts of language. Herbert Clark's chapter,

'Pragmatics of language performance', which describes display and collateral signal strategies, is also valuable, as is Kehler & Ward's detailed exploration of anaphora issues in discourse, entitled 'Constraints on ellipsis and event reference'. The other chapters in this section address old-before-new ordering in English (Ward & Birner), context and discourse (Craig Roberts' 'Context and dynamic interpretation'), discourse coherence (Kehler), the role of non-linguistic context in completing non-sentential utterances (Stainton's 'The pragmatics of non-sentences'), empathy and anomaly (Kuno's 'Empathy and direct discourse perspectives'), and 'deference' (Nunberg's 'Deferred interpretation').

Several chapters in the second section are concerned with pragmatic interfaces, and some more obviously so than some of the chapters in the third section, which is specifically labelled 'Pragmatics and its interfaces' but which sometimes feels more like a 'Pragmatics and ...' section. The section begins with an outstanding paper by Georgia Green, 'Some interactions of pragmatics and syntax', which explores the way in which 'the construction used to say something reflects the speaker's attitude toward and beliefs about the topics and referents in the ongoing discourse' (412). This is interestingly illustrated with Green's view of the utterance in (1) below, which is judged inappropriate rather than ungrammatical, on the grounds that there is a contradiction between what is asserted by the structure as a whole and what is implicated by the inversion in the embedded sentence (423):

(1) She already knows who did I appoint.

According to Green, such inconsistencies are not logical or even linguistic problems, but rather 'a practical sort of problem for a human being who wants to construe the speaker's behaviour in uttering the sentence as rational' (424). Green's chapter is followed by Adele Goldberg's 'Pragmatics and argument structure', which is concerned with the 'conventional' pragmatics of information and argument structures.

The subsequent chapter on the semantics–pragmatics interface should arguably have appeared at the beginning of the *Handbook*. In 'Pragmatics and semantics', François Recanati first distinguishes ideal (Frege, Russell, etc.) and ordinary language philosophers, and then goes on to argue that 'wide' context has a role to play in determining virtually all sentences, and that 'content and truth-conditions are, to a large extent, a matter of pragmatics' (454). This is a chapter that deserves to become a classic account of a crucial issue.

Recanati's chapter is followed by Kent Bach's 'Pragmatics and the philosophy of language'. Bach provides an account of speech acts and implicature, explaining these concepts with a clarity that will be welcomed by those new to the field. Once again, this chapter might be considered a candidate for 'read-me-first status', although for the confirmed pragmaticist/pragmatician, it treads familiar territory in familiar ways.

Next comes an important chapter on ‘Pragmatics and the lexicon’, in which Reinhard Blutner presents Optimality Theory (OT) in a commendably clear manner which will appeal to frustrated readers of some of the chapters in Blutner & Zeevat (2004). Blutner’s chapter is important because OT is a new (or apparently new) approach to pragmatics and because the author sets out the formalism of pragmatic strengthening in an extremely accessible and cogent manner, showing how ‘the situated meanings of many words and simple phrases are combinations of their lexical meanings proper and some superimposed conversational implicatures’ (506). If you have not tackled OT in pragmatics yet, this is an excellent place to start.

In the next chapter, ‘Pragmatics and intonation’, Julia Hirschberg argues that intonation is a pragmatic phenomenon ‘since the interpretation of intonational variations is indeed dependent on contextual factors’ (515). As we have seen, this is precisely the argument that Gundel & Fretheim question, so that Hirschberg’s discussion of the ‘standard’ or ‘intrinsic’ meaning of intonation contours is thought-provoking, especially given the infrequent mention of pragmatics in the chapter.

Hirschberg’s chapter is followed by Elizabeth Traugott’s chapter on ‘Historical pragmatics’, which traces the history of the discussions of the role of pragmatics in semantic change. The chapter advances the well-known argument that ‘subjectification is the mechanism whereby meanings tend to become increasingly based in the SP[eaker]/W[riter]’s subjective belief state or attitude toward what is being said and how it is being said’ (550). It includes a useful discussion of metaphorisation and metonymisation as well as an insightful account of how *after all* has come to have both adversative and justificational meanings. This excellent chapter meets the needs of both knowledgeable and less knowledgeable readers wanting to understand historical pragmatics.

The final two chapters in this section are ‘Pragmatics and language acquisition’ by Eve Clark, who evaluates children’s pragmatic knowledge, and ‘Pragmatics and computational linguistics’ by Daniel Jurafsky, who argues for a probabilistic model in which typical lexical, syntactic, prosodic and discourse context cues are associated with particular speech acts.

The final section contains six chapters on ‘Pragmatics and cognition’, which reflect the widely different ways that ‘cognitive’ approaches to linguistics have taken. The section opens with Deirdre Wilson & Dan Sperber’s ‘Relevance Theory’ – a straightforward account of the principles of Relevance Theory. It is followed by an accomplished chapter by Robyn Carston, ‘Relevance theory and the saying/implicating distinction’, who argues that ‘there simply doesn’t seem to be any wholly semantic notion of “what is said”’ (653) and demonstrates how explicature involves both inferential enrichment and, in some cases, loosening. Carston reminds us that recovering meaning involves ‘considering interpretive hypotheses in order of their accessibility and stopping when the criterion of optimal relevance is

satisfied' (638), and somewhat frustratingly refers us to the previous chapter to discover how this is accomplished.

The two relevance-theoretic chapters which open this section are followed by Fauconnier's chapter, mentioned at the start of this review, which contrasts 'the extreme brevity of the linguistic form and the spectacular wealth of the corresponding meaning construction' (658). Fauconnier makes a good fist of drawing attention to the properties of meaning construction that subsume pragmatics. Thus, as stated earlier, it is not just semantics that is the obvious target, implicitly pragmatics too is a questionable level – a theme that the reader will have in mind when considering Paul Kay's example in the following chapter, 'Pragmatic aspects of grammatical constructions' (676):

(2) Fred won't order shrimp, let alone Louise squid.

In what way, one might ask, are all the different meaning constructions that Kay postulates truly pragmatic? Seen from a construction grammar perspective, are they not just possibilities for interpreting the construction?

Following on from Kay, Michael Israel, in 'The pragmatics of polarity', considers the opposition between negation and affirmation, and argues that 'pragmatic entailments' are ordered elements on a scale which reflect our idealised models of the natural world (704), and that 'polarity items consistently come from semantic domains which are somehow inherently similar' (718). This motivates scalar construal which systematically limits the licensing potential of polarity triggers. Finally, Jerry Hobbs, in 'Abductive reasoning and non-monotonic inference', considers implicatures as abductive and as 'the way we do accommodation' (730), so that understanding utterances depends on accepting background assumptions, which in turn comes at a cost.

So much for the chapter-by-chapter approach. How are we to evaluate the volume as a whole? First of all, *The handbook of pragmatics* is an eagerly awaited volume that sits alongside, but is significantly different from, the monumental work of Kasher (1998) and the works of Mey (1998) and Verschueren et al. (1995). In their chapter, Gundel & Fretheim write:

Our primary goals will be to clarify some of the major conceptual and terminological issues, to provide an overview of the phenomena that correlate with topic and focus across languages, and to review recent empirical and theoretical developments. (176)

In a definitive work of this kind, it is certainly appropriate to take stock in such a way, especially at a moment of rapid advances in Relevance Theory and neo-Gricean pragmatics, and with the possibility of a more systematic Optimality-oriented account of inferred meaning. Whilst not every chapter achieves the aims that Gundel & Fretheim set for themselves, the best work in this significant collection certainly does. For scholars in the field,

there is plenty to learn and/or confirm in the *Handbook*, and much of what we already know is put more clearly here than in other places. For non-pragmaticists, this is clearly an important book, with Recanati's chapter especially recommended for an overview of the central issues explored in the volume as a whole. Given that all the chapters are new writing, there are many successes and relatively few disappointments.

Turning to more prosaic matters, the chapters are well-judged in respect of length and helpfully structured in sections. There are several niggles, however. For the scholar wishing to copy a single chapter for research purposes, it would have been useful for the references to have been given at the end of each chapter rather than in 77 pages at the end of the volume, even if this would obviously have led to much duplication. As is perhaps to be expected, duplication of material is frequent and quite often constitutes a source of annoyance to anyone reading the book from cover to cover – although I suspect there will be few such readers. Precisely because there will not be many cover-to-cover readers, the relatively poor index is a great disappointment: for example, when looking up 'given/new' (one of the most repeated themes in the book), the reader will find only two entries. More a sadness than a niggle is the number of chapters written by scholars of considerable seniority in the field – but this is dangerous ground and I'd better say no more on the topic!

The view of pragmatics represented in this rationalistic, Gricean-oriented volume will please those working in the Anglo-American pragmatics tradition, which owes so much to linguistic philosophy. There is also a little for the cognitive linguist here. But overwhelmingly, *The handbook of pragmatics* will be seen as not addressing the issues that, at least in terms of quantity of output, now dominate the field. The wide range of issues that are typically addressed in the leading journals (for example, *Journal of Pragmatics*, *Pragmatics* and *Intercultural Pragmatics*) are not represented at all here. No mention is made of second language acquisition, cross-cultural and intercultural communication, sociolinguistic variation of a pragmatic nature, conversation analysis, metapragmatics, gender, politeness, and so on. The approach taken is entirely rationalistic, and invented examples abound, thus conveying the impression that the study of pragmatic use has no empirical basis in natural language and that utterance interpretation can be studied outside the actual context of real utterances. Once again, this is out of step with the overwhelming proportion of ongoing research in the field. There are schools which are entirely ignored. One obvious oversight is the Chicago School – neither Silverstein nor Briggs is referred to anywhere, and there are a mere two references to the work of Hanks, which seems to confirm the accusation of Pressman (1994) that pragmatics is in the hands of scholars who seek to ignore one of the most important schools in the field. One or two honourable exceptions apart, most authors consider only English data.

So what are we to make of the *Handbook* overall? Judged chapter by chapter, the *Handbook* is definitive, thorough, sometimes even explanatory, and typically non-partisan. But taken as a whole, the collection does not represent the field and is very definitely partisan. It could be argued, following Kopytko (1995, 2001, 2004), who is nowhere referred to in the *Handbook*, that it is excessively Cartesian in its approach and fails to acknowledge that the first task of a pragmaticist is to attempt an adequate representation of data, both linguistic and contextual. To be fair, this issue is raised by Sadock, who writes:

Real-life acts of speech usually involve interpersonal relations of some kind: A speaker does something with respect to an audience by saying certain words to that audience. Thus it would seem that ethnographic studies of such relationships and the study of discourse should be central to speech act theory, but in fact, they are not. Such studies have been carried out rather independently of the concerns of those philosophers and linguists who have devoted their attention to speech acts. This is perhaps not a good thing, as Croft (1994) has argued, but since it is the case, anthropological and discourse-based approaches to speech acts will not be covered in this handbook entry. (54)

This is reminiscent of Leech's classic delimitation of 'general pragmatics' (1983: 10f.), from which it seems we have yet to escape.

The *Handbook* prompts the reader to consider pragmatics from two quite different perspectives. One perspective, as discussed at the beginning of this article, questions whether the phenomena considered are actually pragmatic. It is striking how many of the chapters in this volume (and especially in section 2) implicitly, and sometimes even explicitly, cause the reader to wonder about this. However, this is perhaps not surprising when one considers the second perspective, namely the view that the phenomena considered in most of the chapters in the *Handbook* are so severely delimited and abstracted from actual language and real context as to be effectively decontextualised.

Despite the paradox of a decontextualised, 'general' pragmatics, taken on its own terms, this is a most wantable book. It is pragmatics with a capital P.

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(Received 25 April 2005)

J. Linguistics 41 (2005). doi:10.1017/S002226705283639
© 2005 Cambridge University Press

Bernd Kortmann (ed.), *Dialectology meets typology: dialect grammar from a cross-linguistic perspective* (Trends in Linguistics; Studies and Monographs 153). Berlin & New York: Mouton de Gruyter, 2004. Pp. vi + 541.

Reviewed by HORST J. SIMON, Humboldt University Berlin

Both typology and dialectology are concerned with language variation. However, the two fields are very much isolated from each other, not only when it comes to subject matter (variation BETWEEN languages vs. variation WITHIN languages), but also when it comes to methodology and the researchers who work in these two areas. The volume under review brings together for the first time scholars from both camps. It is a collection of eighteen alphabetically arranged papers (together with a brief introduction), many of which were presented at a workshop at the METHODS XI conference in Joensuu, Finland, in August 2002.

The languages covered in this book are primarily West Germanic (English, German and Dutch), which reflects the strong dialectological tradition in this area, but there is also one article each on Scandinavian, Balto-Slavic, Greek and Romani. Curiously, there is no discussion of Romance or, for that matter, any non-Indo-European language. The contributions are primarily concerned with morphosyntax. They will thus provide a most welcome impulse for traditional dialectology, where the majority of research projects are still largely concerned with phonology and lexicology.

The volume opens with a very helpful introductory chapter by Walter Bisang, 'Dialectology and typology – an integrative perspective', which sets the scene for what follows. He briefly discusses the basic assumptions of both fields and highlights the importance of language contact.

Not surprisingly, many of the authors employ the methodological apparatus familiar from standard cross-linguistic typological investigations.

For instance, both Jürg Fleischer, in ‘A typology of relative clauses in German dialects’, and Susanne Wagner, in ‘“Gendered” pronouns in English dialects – a typological perspective’, successfully apply Keenan & Comrie’s (1977) Accessibility Hierarchy. While Fleischer considers different relativisation strategies in German dialects, addressing in particular pronoun choice, resumption and the realisation of case, Wagner examines the loss of gender assignment rules as linked to the mass/count-distinction in two varieties of English. In ‘Local markedness as a heuristic tool in dialectology: the case of *amn’t*’, Lieselotte Anderwald shows that the absence of the negative contraction **amn’t* is a special case of a more general phenomenon involving the marked status of copula present tense forms, which leads to a preference for the contraction of the auxiliary (here: *’m not*). Finally, Yaron Matras, in ‘Typology, dialectology and the structure of complementation in Romani’, uses a large comparative data set from Romani dialects to construct a typology of sentential complementation around the organising categories of ‘factuality’, ‘purposivity’, and ‘identity vs. difference of subject’.

As concerns the proper place of West Germanic in the variational space represented by the languages of the world, Fleischer’s paper mentioned above and Bernd Kortmann’s ‘*Do* as a tense and aspect marker in varieties of English’ take interestingly conflicting views. Fleischer argues that the apparent exceptionality of Standard Average European on a worldwide scale (cf. Haspelmath 2001) is likely due to a systematic skewing of the data which are typically investigated in cross-linguistic samples. As soon as one stops looking at the highly normative standard languages of Western Europe and instead considers their dialects, West Germanic (at least as far as German relativisation strategies are concerned) loses much of its strangeness. In contrast, Kortmann stresses that the grammaticalisation of the verb *do* as an aspect marker in non-standard varieties of English, as well as in English-lexifier creoles, is fairly unusual cross-linguistically, even more so when one takes into account that dialects of Dutch and German also have verbs corresponding to periphrastic *do*, but use them to mark mood and/or tense.

Günter Rohdenburg’s contribution on ‘Comparing grammatical variation phenomena in non-standard English and Low German dialects from a typological perspective’ – half of which is word-by-word identical to an earlier article (Rohdenburg 2002) – provides interesting input to this discussion. The author demonstrates a number of striking parallels between English and Low German varieties, for example in the gender system and in the use of *do*, which he explains by having recourse to universal, functionally motivated principles. However, Rohdenburg uses constructions from apparently randomly chosen sub-dialects; hence, it is not entirely clear whether his findings are of more general relevance.

In ‘Person marking in Dutch dialects’, Gunther de Vogelaer highlights another characteristic of Standard Average European languages, viz. the fact

that they do not allow *pro*-drop. Dutch dialects even show multiple person marking, for example, by having inflected complementisers.

In this context, the general methodological issue concerning the notion of ‘vernacular universals’ becomes relevant. Given the fact that most languages which typologists include in their databases have no written tradition and are thus unconstrained by normative influences, it would be highly desirable to have a list of linguistic characteristics which are typical for such varieties and thus, as J. K. Chambers states in ‘Dynamic typology and vernacular universals’, would ‘appear to be natural outgrowths, so to speak, of the language faculty’ (128). Unfortunately, Chambers adheres to the widespread principle ‘Take any language, say, English’ when investigating universals, so that his short tentative list based entirely on English fails to convince. It includes not only multiple negation and copula absence but also ‘leveling of irregular verb forms [and] subject-verb nonconcord’ (129) – the latter two claims are clearly falsified by many (non-standardised) languages which have more intricate morphology than modern English happens to possess. Tellingly, Peter Auer’s catalogue of features in ‘Non-standard evidence in syntactic typology – methodological remarks on the use of dialect data vs. spoken language data’ overlaps only marginally with Chambers’s. At any rate, Auer expresses reservations about an all too ready use of dialect data in typological research because dialects are often only representative for small areas and ‘do not contribute to the investigation of German as a whole’ (87) – whatever ‘German as a whole’ may be (more on this below). Instead, he recommends the use of spoken varieties, whether standard or not, when investigating the German language. He also considers an ever-relevant problem of comparative linguistics, namely the question of what the units of comparison should be.

One major point of disagreement among the contributors to this volume is the role which is attributed to extra-grammatical factors, such as language contact, in the explanation of linguistic structure. In ‘Population linguistics on a micro-scale: lessons to be learnt from Baltic and Slavic dialects in contact’, Björn Wiemer explores a number of instances of convergence in Lithuanian, Polish and (Byelo)Russian dialects, all spoken in southeastern Lithuania, highlighting the *Sprachbund* characteristics of this region. In his contribution, ‘Problems for typology: perfects and resultatives in spoken and non-standard English and Russian’, Jim Miller points out some uses of the perfect that have largely been ignored in previous research. Peter Siemund’s ‘Substrate, superstrate and universals: perfect constructions in Irish English’ also deals with perfect constructions, focusing in detail on one variety of English. He considers the balance of substratal (Irish Gaelic) and superstratal (Older English) influences on the grammar of the perfect tense in Irish English, drawing attention to those features which cannot be explained by either of these factors.

The chapters by Peter Trudgill, ‘The impact of language contact and social structure on linguistic structure: focus on the dialects of Modern

Greek', and by Raphael Berthele, 'The typology of motion and posture verbs: a variationist account', address the related sociolinguistic issue of whether we can discern any correlations between the structure of a language and the sociological or cultural characteristics of its speech community. To answer this question, Trudgill presents somewhat anecdotal evidence for his well-known claim that smaller, more isolated varieties tend to be more conservative than larger ones, which will be more inclined to linguistic contact. In the larger varieties, child bilingualism will bring about 'complexification', whereas adult language contact will result in simplification.

Berthele takes a different perspective. In his carefully constructed comparison of experimentally collected re-tellings of a story together with a number of picture descriptions, he develops a typology of the coding of spatial relations expressed by motion and posture verbs in French, Standard German and a rural dialect of Swiss German. Perhaps the most interesting of his findings is that the Swiss German dialect is, despite its obvious genealogical affiliation, to some extent structurally closer to French than to Standard German. Yet, Berthele cautions against overly hasty conclusions about the role of language contact. Instead, he proposes to employ a more fine-grained typology for the interplay between verbs and prepositions than previously used. What is interesting in the light of Auer's spoken language proposal mentioned above is that Berthele connects the most conspicuous dialectal features, such as redundancy of expression and lexical elaboration, to the fact that dialects typically belong to the sphere of what has been called the 'language of closeness' in 'conceptional orality' (119–121).

It has been the hallmark of traditional dialect-geographical research to consider patterns in the synchronic diatopic distribution of features to be indicative of diachronic developments. In this volume, only a minority of the contributions make reference to geographical facts per se. Östen Dahl shows in 'Definite articles in Scandinavian: competing grammaticalization processes in standard and non-standard varieties' that the remarkable phenomenon of double determination in Swedish noun phrases can be interpreted as a kind of grammaticalised 'cumulation' of two distinct coding strategies in Mainland Scandinavian dialects. The geographic distributions of these two strategies appear to be more or less mirror images of each other, with an area of overlap between them. A similar line of reasoning is employed in 'Jespersen's cycle and the interaction of predicate and quantifier negation in Flemish' by Johan van der Auwera & Annemie Neuckermans. The authors claim that the triple negation pattern in East Flemish represents an intermediate stage in one particular type of the diachronic Jespersen cycles which they identify. Their argumentation is weakened by the lack of discussion of any historical data (a fact which may not have escaped the authors themselves, judging by their frequent use of epistemic modals and other hedges).

Guido Seiler's 'On three types of dialect variation and their implications for linguistic theory: evidence from verb clusters in Swiss German dialects' uses geography in a more innovative way. In this study, Seiler, who draws on a large database collected for the Swiss German syntax atlas, accounts for word order differences in clause-final verb clusters by using the formal grammatical model of Stochastic Optimality Theory. He explains preferential nuances by relaxing the strict domination hierarchy of constraints and replacing it with partially overlapping constraint rankings. This way, optionality is the natural product of each single 'variable output grammar' (385). Crucially, the continuum of preferences seen across the Swiss German dialect area is the major indicator of fine-grained microvariation found between the various systems. The present scarcity of sound empirical studies in the framework of Stochastic Optimality Theory makes Seiler's careful discussion all the more stimulating.

Closely connected to geographical issues is the crux of the debate in variational linguistics – what exactly is it that varies? Or, put differently, how can we define the notion of 'language' or 'system' in this context? And at what level of abstraction should (variational) linguists really apply their models? As is so often the case, the authors are not very explicit on this issue. However, at least two opposing positions can be identified: while Auer seems to have in mind something like an abstract metagrammar for 'the German language', which is perhaps reminiscent of the old idea of a 'diasystem' (Moulton 1960), Seiler works with a vast array of minutely differing grammars which are, at least in principle, independent of each other. It is to be hoped that the discussions in this book will provide a new angle for studying these problems.

While most chapters are excellently edited, there are also some disturbing blunders which sometimes make it hard to follow the line of reasoning. For instance, in Dahl's contribution, references to the tables have become confused (it should read 'table 2' on page 162, and 'table 1' on page 168), the symbols on his maps are not explained, and the author even refers to isoglosses which are nowhere to be found (175). Most irritating is perhaps the mismatch of endnote numbering in the main text and in the notes section of Auer's contribution: what is marked as '2' in the main text corresponds to endnote 4, '3' refers to note 5, etc. Finally, Wiemer's article is in places redundant, as for example when an entire sentence is repeated one page after its first occurrence and introduced by 'let me add here that' (509). These flaws might sometimes affect the readability but not the content of the book.

To sum up, this book is a highly innovative collection of papers on the interrelationship of dialectology and typology which will prove relevant for researchers from both fields. On the one hand, it can be inspiring for dialectologists because of the methodological notions and descriptive concepts which are applied. On the other hand, it can help to establish 'microtypologies' and, most importantly, it can lead to a reconsideration of the

type of data used by typologists, since it may be the case that these data systematically distort the general picture. Finally, anyone interested in an adequate modelling of grammatical variation will find plenty of fascinating data which demonstrate the rich, and systematic, small-scale variability of human language. *Dialectology meets typology* is an excellent illustration of the benefits of looking across the fence and getting inspiration from another linguistic subdiscipline. Taken as a whole, this book opens up an entirely new research paradigm.

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(Received 20 June 2005)

J. Linguistics 41 (2005). doi:10.1017/S0022226705293635
© 2005 Cambridge University Press

François Recanati, *Literal meaning*. Cambridge: Cambridge University Press, 2004. Pp. viii + 179.

Reviewed by ALESSANDRO CAPONE, University of Messina

François Recanati's *Literal meaning* should perhaps be entitled *Against literal meaning* to better reflect its aims. Following a discussion of Grice's basic ideas on communication, the author makes his position clear, stating:

There is much that is correct in this description, but there is also something which I think must be rejected, namely the contrast between literal truth-conditions and speaker's meaning. (4)

Recanati calls the approach to which he is committed 'contextualism'. Accordingly, he believes that

The distinguishing characteristic of sentence meaning (the linguistic meaning of the sentence type) is that it is conventional and context-independent.

Moreover, in general at least, it falls short of constituting a complete proposition, that is, something truth-evaluable. In contrast, both ‘what is said’ and ‘what is implicated’ are context-dependent and propositional. ...

What is said results from fleshing out the meaning of the sentence (which is like a semantic ‘skeleton’) so as to make it propositional. (6)

The examples given to support this position are those standardly used in the semantics/pragmatics debate, cf. (1)–(5) (Recanati’s (1)–(5), page 8).

- (1) I’ve had breakfast.
- (2) You are not going to die.
- (3) It’s raining.
- (4) The table is covered with books.
- (5) Everybody went to Paris.

Let us start by discussing (1). In reply to the question ‘Do you want something to eat?’, (1) conveys not only what its bare semantics expresses, i.e. that there is a time prior to the time of utterance at which the speaker has had breakfast, but also that the event of having breakfast is confined to a time interval which coincides with the morning when the utterance is produced. Recanati concedes that ‘we can easily imagine contexts in which a speaker would use the same sentence to assert the minimal proposition and nothing more’ (8).

Recanati’s discussion of (3) is, in my view, more controversial. Here, he argues against the idea that the verb *to rain* denotes a dyadic relation, i.e. a relation between times and places, and that the locational argument must be contextually supplied for the utterance to express a complete proposition. Of course, Recanati does not deny that some pragmatic process is at work in fleshing out the full truth-evaluable proposition, but he rejects the idea that at logical form there is a hidden variable which is to be saturated through contextual knowledge. The argument is illustrated by means of the following imaginary situation:

[R]ain has become extremely rare and important, and rain detectors have been disposed all over the territory (whatever the territory – possibly the whole Earth). In the imagined scenario, each detector triggers an alarm bell in the Monitoring Room when it detects rain. ... Hearing it, the weatherman ... shouts: ‘It’s raining!’ His utterance is true, iff it is raining (at the time of utterance) in some place or other. (9)

Recanati takes this to show that the provision of a place is a pragmatic process and that the locational argument need not be present at logical form. But I think that Recanati’s scenario merely shows that in some cases the locational argument need not be conceived of as a single point, but may coincide with a wide region – sometimes as wide as the whole Earth. To resolve this thorny issue, it may be worth asking whether one can think of

rain without thinking of a place where it rains. Note that it will not do to imagine a situation in which it rains, but the drops of water evaporate before touching the ground. If one could place a container in mid-air, it might be possible to collect some rain, and thus, there would be a place where it rains after all.

Recanati believes that what is said must be available. He writes:

The view that ‘saying’ is a variety of non-natural meaning entails that what is said ... *must* be available – it must be open to the public view. That is so because non-natural meaning is essentially a matter of intention-recognition. On this view what is said by uttering a sentence depends upon, and can hardly be severed from, the speaker’s publicly recognizable intentions. (14)

This position seemingly clashes with Recanati’s later statement that

Unconscious, sub-personal inferences are characterised by the fact that the availability condition is *not* satisfied. Now it is my contention that, if primary pragmatic processes are indeed ‘inferential’ (in the liberal sense), the inferences at issue are unconscious and sub-personal. The interpreter is not aware that his judgement, to the effect that the speaker has said that *p*, is inferentially derived from a prior judgement. (43)

The reader has to wait until page 79 for the resolution of the apparent clash:

the interpretation of utterances is something that is bound to be available to the language users who do the interpreting ... This applies both to the primary meaning of the utterance – what is said – and to the secondary meaning that, in some cases, can be derived from it. Both I take to be available to the speakers/users (in a normal situation of communication). What is *not* available, according to me, is the sub-personal machinery – the processes through which the primary meaning is computed.

The book dismisses the idea that the truth conditions of a sentence are determined by the semantic rules of the language (with respect to the context at hand), INDEPENDENTLY of the speaker’s meaning – a view which Recanati takes to be a modern form of Literalism. Literalism is rejected because of semantic underdeterminacy (85). As Recanati puts it:

There is, I claimed, no such thing as ‘what the sentence says’ in the literalist sense, that is, no such thing as a complete proposition autonomously determined by the rules of the language with respect to the context but independent of speaker’s meaning. (59)

The examples motivating Recanati’s conclusion are in (6)–(13).

- (6) John finished the book.
- (7) Bring me the lion’s sword.

- (8) The ATM swallowed my credit card.
- (9) Bill cut the grass.
- (10) Sally cut the cake.
- (11) John opened the door.
- (12) That car is red.
- (13) I heard the piano.

These examples illustrate underdeterminacy as follows: (6) can mean both 'John finished reading the book' or 'John finished writing the book'; in (7), *lion* can refer to an animal or to the warrior who has a shield with a lion depicted on it; in (8), one immediately understands that the credit card was taken by the machine; (9) and (10) refer to different ways of cutting; in (11) one understands the door as being opened in a normal way, not by using a scalpel (unlike our understanding of the sentence *He opened the wound*); (12) means that the outside parts of the car are red (but not necessarily all of them); and (13) means that I heard someone play the piano.

The most interesting part of Recanati's book is the part which deals with sense MODULATION, although this is also the part which needs to be defended in greater detail. Recanati writes:

The picture that emerges is this. As words are applied, in context, to specific situations, their meaning is adjusted. Depending on whether the conventional meaning is fully or only partially schematic for the situation talked about, adjustment will take one of two forms: sense elaboration (enrichment); or sense extension (loosening). In sense elaboration the meaning carried by the words is made more specific through the interaction with contextual factors. In sense extension, those dimensions of meaning which stand in conflict to the specifications of the target are filtered out. (77)

I find it persuasive that this approach to language does not result in a static picture but immediately takes account of the instability of the language system, in which for every word new senses tend to accrue to the original basic ones. When one aims to express a new concept which is not yet encoded in the system, one has available similar concepts which already do exist in the system, and contextual factors can be relied on to explicate what the speaker has in mind when using those concepts.

But is this enough to prove that there is no literal meaning? I would like to confront Recanati with some baffling data. Suppose you want to use some electrical device, say, a lawnmower, on a carpet. Would it be possible to use the sentence in (14)? And if so, what meaning would (14) convey?

- (14) Alessandro is cutting the carpet.

Eliminate all contextual knowledge of what I am doing. Is it possible that the hearer might, by guessing, arrive at my intended interpretation? And if not,

why not? Perhaps the lesson to be drawn from this example is that while modulation can be used to extend our concepts to some extent, it cannot completely and arbitrarily modify them. And if this is so, then an element of convention enters into the picture which Recanati is painting. Modulating the senses of words is subject to severe constraints, and the question arises of where these constraints come from and whether they are derived from the words' literal meanings.

To conclude, I believe that this book has managed to push forward the frontiers of pragmatics. Perhaps the most important and original idea is that of modulation, which I am sure will be taken up by historical linguistics. It would be interesting to see how the material in this book can be integrated with recent proposals, such as those in Gross (2001) and Capone (2003).

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(Received 10 May 2005)

J. Linguistics 41 (2005). doi:10.1017/S00222670530363X
© 2005 Cambridge University Press

Susan Rothstein, *Structuring events: a study in the semantics of lexical aspect* (Explorations in Semantics 2). Malden, MA & Oxford: Blackwell, 2004. Pp. x + 206.

Reviewed by MARY DALRYMPLE, University of Oxford

This book presents a theory of event structure and its relation to lexical aspect and the compositional semantics of the verb phrase. One of its central claims is that an interesting new view of the structure of events emerges from the recognition that certain events are singular and countable but not atomic. The distinction between atomic and non-atomic countable events parallels a distinction in the nominal domain between nouns like *dog* and nouns like *fence*: combining one dog with another dog yields two dogs, not a single large dog, but combining two fences can in certain contexts produce a single large fence. In the same way, some events are countable and atomic (thus having dog-like properties), whereas others are countable and cumulative (thus having fence-like properties). Being atomic in the event domain is the hallmark of a telic predicate, while being cumulative constitutes atelicity.

Atomicity and telicity can be enforced by certain modifiers and certain kinds of verbal arguments.

The book is the second volume in the Blackwell series *Explorations in Semantics*, which is intended to present new research in the field of semantics, offering 'a pedagogical component designed to introduce the topics addressed and situate the new research in the context of the field and previous research' (ii). Unfortunately, this book does not succeed very well as an exemplar of this ideal. There is no coherent 'road map' for researchers making their way through the book: analyses that are presented early on are revised a number of times in the course of the exposition, and it is never really clear when the final version of an analysis has been attained. The book is densely written and uses terminology and notation which will probably not be familiar or easy to follow for students and researchers who do not have a strong background in formal semantics and an ability to cope with fairly complicated logical formulas. Even foundational terms are sometimes not fully defined. For example, it does not seem to me to be appropriate in a pedagogically oriented introduction to introduce the term 'imperfective paradox' without any definition or explanation. Furthermore, the formulas presented in the book have not always been checked very carefully. There are many typos and inconsistencies, and too often the formulas contain unfamiliar symbols which are never explained. For these reasons, the book may not be appropriate as an introduction to the field of lexical aspect even for advanced students.

Chapter 1, 'Verb classes and aspectual classification', is the introductory, scene-setting chapter. It introduces the foundational work of Vendler and Dowty and its relation to the theory presented in the book. The book begins, as do most works on lexical aspect, with the four main aspectual classes of verbs: states, activities, accomplishments, and achievements. These are divided into four lexical classes on the basis of the features [+/-telic] and [+/-stages]. Achievements and accomplishments have an endpoint and are [+telic], while states and activities are [-telic]. Activities and accomplishments have complex internal structure and are [+stages], while states and achievements have homogeneous internal structure or no internal structure at all and are [-stages]. Some further assumptions and definitions are introduced, whose importance becomes clear over the course of the book (though in some cases not until almost the end of the book): most importantly, that events are individuable and countable, that telicity is a property of the Verb Phrase (VP) and not the verb, and that aspectual shift operations transform verbs from one aspectual category into another. The book concentrates on accomplishments as a case study and exemplar of the theory.

Chapter 2, 'Progressive achievements', and chapter 3, 'Resultative predication', analyze two cases in which non-accomplishment verbs head a telic VP which resembles a lexical accomplishment in crucial respects. For progressive achievements like *Dafna is finding her shoes*, Rothstein suggests that

when an achievement verb like *find* heads a progressive VP, it undergoes aspectual shift by a rule which adds a preparatory, contextually defined activity which culminates in the event denoted by the achievement. Since the preparatory activity is contextually given rather than lexically specified, it must lead immediately to the achievement, which explains several differences between accomplishments and progressive achievements. For instance, accomplishments, unlike progressive achievements, can be interrupted: if Dafna is sitting on a bench, we can say *Dafna is walking to the station; she is just taking a rest*, but not *Dafna is arriving at the station; she is just taking a rest*.

For depictive and resultative predication, the idea is that the event denoted by the main verb and the event denoted by the depictive or resultative predicate are summed into a complex event in which the two subevents must be simultaneous and must share a participant. In a depictive construction like *John drove the car drunk*, the shared participant is John, and the driving event is required to be simultaneous with an event of John's being drunk. In a resultative like *John painted the house red*, the shared participant is the house, and the culmination of the painting event is required to be simultaneous with an event of the house being red. For cases of activity verbs in resultative predication, Rothstein invokes another shift rule, which adds a culmination to an activity like *sing* in *sing the baby to sleep*. Chapter 3 is one of the more difficult chapters, since a number of questions seem to remain open at this point. Why can the shift rule not derive accomplishments without adding a resultative predication to get *Dafna sang the baby*? Why can't we use the aspectual shift rule which forms an accomplishment from an achievement to get *Dafna is arriving at the station tired*, meaning that she is arriving at the station and as a result she is tired? It turns out that these questions are addressed in the following chapters, when the initial analyses presented in chapters 2 and 3 are revised and refined, but at this stage things are left somewhat unclear.

Chapter 4, 'The structure of accomplishments', presents the full theory of accomplishments in light of the findings of the previous chapters. Accomplishments include a gradual BECOME event which is simultaneous with the associated activity and specifies the change to the argument bearing the theme role over the course of the activity. The aim is to subsume (in some cases) and supplant (in others) the view in which the accomplishment event is measured by the denotation or extent of the theme. Rothstein argues that it is actually the degree to which the gradual BECOME process has happened to the theme that measures the progress of the accomplishment. An additional shift operation is introduced, which shifts an accomplishment to an activity by stripping off the BECOME predicate and leaving only the associated activity; this allows a sentence like *Dafna read the book for half an hour*, which lacks the entailment that Dafna finished the book, to be interpreted.

The next chapters revisit the issues discussed in the first chapters of the book in light of the revised theory of accomplishments in chapter 4. Chapter 5, 'The interpretation of derived accomplishments', once again considers progressive achievements and resultatives. Rothstein defines new shift relations, redefines shift relations for creating accomplishments given earlier, and discusses why resultatives have a resultative and not simply a depictive reading. Chapter 6, 'Quantization, telicity, and change', is concerned with the role of the object in determining the telicity of the VP and the question of how characteristics of the object (for instance, whether it is a bare plural or a mass term) affect the telicity of a VP headed by an accomplishment verb.

Chapter 7, 'Telicity and atomicity', contains the central claims of the book and makes the most interesting and most novel contributions. Verbs denote events that are countable but not necessarily atomic. Cumulative, non-atomic events, i.e. states or activities, are atelic, while atomic events are telic. An achievement denotes a prototypical telic, atomic event: it is a change from a state where $\neg\phi$ holds to a state where ϕ holds. An accomplishment is atomic only if its BECOME event is telic. Whether or not the BECOME event is telic depends on a number of factors, for example whether certain modifiers (e.g. *to the store*) are present. The definition of the meaning of a temporal modifier like *in an hour* entails that it modifies only telic VPs, whereas *for three hours* modifies an atelic VP and makes it telic. This chapter nicely brings together the assumptions made in the book so far.

Chapter 8, 'Event structure and aspectual classification', wraps up the discussion and addresses some remaining issues. Semelfactives like *blink (once)* or *cough (once)* are argued to be the atomic parts of some activities. While *blink repeatedly* is an atelic activity without a specific endpoint, *blink once* is the smallest bounded, telic piece of such an activity. The discussion concludes by clarifying the relation between the semantic templates proposed for each aspectual class and the [+/-telic] and [+/-stages] features which have been assumed from the beginning.

This is an ambitious book, which aims to pull together cutting-edge research in formal semantics, lexical aspect, and event structure. Given this, the bibliography is surprisingly slim. I would have liked to see the author discuss and compare her approach to work by other researchers in the fields of lexical aspect and event structure. The work of Dowty and Krifka rightly receives considerable attention, and while some related work by Filip, Jackendoff, Piñon, Ramchand, Rappaport Hovav and Levin, and Tenny is cited and discussed, much more discussion and comparison with a wider range of work by these and other authors would have been very welcome.

This book is a very interesting but somewhat flawed effort. It is not an easy read, and it does not situate itself clearly with respect to related literature.

REVIEWS

I recommend it for serious researchers in lexical aspect and the formal semantics of telicity, but not for students and researchers who are new to the field.

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(Received 21 April 2005)