A WINTER OF CONTENT. On Dirk Geeraerts, *Theories of Lexical Semantics* Oxford University Press, 2009 xix + 341 pp.

Reviewed by Jacob L. Mey

Some books you feel like reading all over again the moment you're finished. It happened to me with Virginia Woolf's *To the Lighthouse*, and also with a short story by Julio Cortázar ('Clone' – at the end of which the author himself proposes a re-reading from an extended perspective). In both cases I followed my inclination respectively the author's suggestion; however, in the case at hand, Dirk Geeraerts' *Theories of Lexical Semantics*, much as I would love to reenter the author's world of 'words and other wonders' (paraphrasing another of his titles; 2006), I will have to curb my desire, simply because otherwise this review would never see the light of day. Which goes to imply that a re-reading – if it could be done – would be both profitable and highly enjoyable. For one thing, Geeraerts' book is simply too rich in content to be accounted for in a single pass; in addition, it is simply a very good read. However, being a book reviewer, and not reading for pleasure or professional edification, I will just note that the book in all likelihood would deserve a much more thorough and profound reading that I will be able to present here on this first (and so far only) pass.[*]

One of the reasons for my professed inability to come to terms with the entire body of scholarship that is displayed in the book is that Geeraerts' grasp of the topic is so encompassing and his erudition so overwhelming. Almost nothing seems to have escaped his eagle-eyed *tour d'horizon;* among the few exceptions, one might

---

[*]   As to the title of my piece, 'A Winter of Content' (apart from being a take-off on the Bard), it contains a reference to the extreme winter of 2010/11, when I was sitting snow-bound in our Danish house, with Geeraerts' book to keep me company – and contented.

notice the absence of a reference to Jaszczolt's 'Default Semantics' and to the important phenomenon of 'pragmatic intrusion' into semantics, or the rather scant treatment of semantic issues in computational linguistic and artificial intelligence (for more on these matters, see below), but I'm sure the author has had good reasons, either content-motivated or time-related, for these omissions.

Starting out with what he calls 'Historical-Philological Semantics' (chapter 1; 45 pp.), Geeraerts offers us a fascinating perspective on work that has been done in the tradition of the 19th century philologists and semanticists, who were heavily indebted to the spirit of the times: the all-important point of language studies in the 19th century was to answer questions such as 'Where do languages come from?', 'What is their historical development?', and 'How did changes occur?'. The history of language and the history of ideas were not seen as two entirely different avenues of research, and even renowned workers in the field of historical linguistics such as Antoine Meillet were not averse to venting their views on semantic change and the 'life of words'. I recall how, as a beginning student of Indo-European comparative linguistics, I came across a remark by Meillet in his *Introduction à l'étude comparative des langues indoeuropéennes* (1916) about language change possibly being initiated by children deviating from the norms taught by their elders. To me this was pure blasphemy: such speculations had no place in the orderly universe that I was being led into. There, sound laws were the domain of the comparativists, while linguistic structure and development were the linguists' turf; the twain were not supposed to meet, and I scrawled the word 'Rubbish' in the margin of my copy of Meillet's book.

Geeraerts (henceforth G) shows us how – in contrast to such juvenile, compartmentalized thinking – the early comparativists and semanticists did have a decent grasp on the problems that much later came into fashion again. The "sociosemantic approach" à la Meillet (p. 21) preludes on today's pragmatics; likewise, Hermann

Paul, one of the (Greater) Prophets, if not the Moses, of historical linguistics (his 'Bible', the 1888 volume *Prinzipien der Sprachgeschichte* continued to enjoy popularity well into the twenties of the past century) developed what G calls ''a pragmatic, usage-based theory of semantic change'' (p. 16). And in general, as G remarks towards the end of the book, much of what later came to be called 'cognitive semantics' had its precursors already in the last decades of the 19th and the early years of the 20th century: ''cognitive semantics links up with prestructuralist historical-philological semantics … there is a remarkable correspondence between the basic positions of historical -philological and cognitive semantics …'', such that in a sense, ''cognitive semantics is a return to the fundamental positions of historical-philological semantics'' (pp. 276-277).

But let's not go too fast here. In his second chapter, 'Structuralist Semantics' (51 pp.), G sketches out the development of structural semantics in the wake of the 'Saussurean revolution' in linguistics in Europe, and the victorious assault of the Bloomfieldians in the US on what came to be experienced as outdated and sterile, ossified thinking. 'God's truth' in the study of language was replaced by human invention and arbitrary assignment of values, sometimes denigratorily called 'hocus-pocus' linguistics. The influence of the exact sciences, now complemented by psychological incursions into the humanities, resulted in wholly new paradigms of thinking, among which the ones called 'componential analysis' and 'relational semantics' became prominent. The latter direction is mostly associated with the notion of 'lexical field'; the former became prominent through its adoption by various semantic and linguistic traditions, such as the Jakobsonian and later the Chomsky-related schools of linguistic and semantic thinking.

As regards the main protagonists of the 'field' conception, the work of Jost Trier on the German vocabulary of knowledge is duly acknowledged; its far-reaching influence is illustrated by the famous quote attributed to J.R. Firth, the founder of British distributionalist

linguistics: ''You shall know a word by the company it keeps'' (p. 59) – where the emphasis is on *syntagmatic* relations, rather than on field theory's *paradigmatic* ones, as G typifies these directions, following Saussure's famous dichotomy. In this connection, one could perhaps also have expected a reference to the work of the Swiss Romanist Jacob Jud, whose '*Sprache und Sachen*' approach (chiefly in the form of dialect atlases; 1928-1940) antedates much of the work reviewed by G.

Among the European proponents of the componential approach, much attention is given to the work of Eugenio Coseriu, who basically exploited some seminal notions originally propounded by Louis Hjelmslev, the founder of the glossematic (Copenhagen) school of structural linguistics. Partly due to the idiosyncratic way in which Hjelmslev formulated his theories (striving to achieve a 'linguistic algebra'), partly also to the founder's increasingly worse health and untimely death in 1965, as well as to the absence of a living tradition among the younger scholars around him, Hjelmslev's work did not come to fruition in a 'school'; his contributions to the development of semantic theory were never properly recognized in their own right; even the authorship of a basic glossematic notion such as that of 'stratification' (Hjelmslev 1954) was not acknowledged by the protagonists of 'stratificational grammar' until later in the game, in 1963, when I had the opportunity of pointing out to Sidney Lamb that he minimally owed Hjelmslev a (soon to be posthumous) acknowledgment.

Similarly, the American development of componential analysis (which originated in anthropological kinship studies) never touched base with the European tradition until rather late, when Roman Jakobson and Morris Halle published their famous monograph *Fundamentals of language* (1971). Halle's closeness to Chomsky and the MIT school was decisive in extending the componential type of semantic thought to the familiar, 'domesticated' approach adopted by the generativists to deal with semantic issues, as G details

in his next chapter (entitled 'Generativist Semantics'). But before I come to that, let me note that one of G's favorite distinctions, that between semasiology and onomasiology, is used here to highlight a striking lack of attention among structuralist semanticists to questions of *use*, rather than *structure*. If semasiology is about how we divide up the semantic realm, while onomasiology is about how we express our semantic distinctions in language, then clearly the user plays a big role in the latter: a pragmatic conception of use is a must in structural semantics, but unfortunately, much of what has been said in this direction looks mostly like 'hand-waving' (I remember how Hjelmslev actually used to wave his hands whenever the talk was of 'usage', as if to consign that kind of ideas to an invisible dustbin). G is aware of this problem, and (later in the book) advocates a "different kind of onomasiology, [one] in which the choices that users make in specific contexts are investigated: … a *pragmatic* [usage-based] onomasiology." (p. 239; my emphasis and additions). Compare also his remark at the end of chapter 2: "a pragmatic, usage-based onomasiology … is still largely waiting for more systematic attention" (p. 97).

The short chapter 3 (21 pages) on 'Generativist Semantics' is a bit of an oddity. The author himself is aware that the interest in the theories expounded here is mostly historical; nobody today takes the debates between the 'Lakovian' generativist and 'Jackendovian' interpretivist approaches seriously any longer, yet they were among the most hotly debated issues in the linguistic environment of the seventies. I remember coming out of an LSA session in San Francisco in 1969, where George Lakoff had victoriously demolished one of his opponents, how on the way to the coffee machine I heard one of the 'Lakovians' crow "The new model is definitely in business!" – the 'new' model being neither more nor less than the latest version of Lakoff's generative semantics. This model marked a clear departure from the half-hearted Chomskyan efforts to have a semantic 'component' within the 'Revised Standard Model', as it

was called (Chomsky 1965), and a prelude on what later became the Katz-Fodor type of componential semantic analysis.

G devotes several pages to the latter model, as a first American try at a linguistically based formalization of grammar (as opposed to later approaches by philosophers and linguists like Richard Montague and David Dowty). G rightly characterizes the Katz-Fodor model as a "passing variant of componential analysis" (p. 101), even though he acknowledges its importance as a trailblazer for formal methods in general. Such efforts at formalization were never appreciated much by the Ordinary Working Linguists crowd (affectionately called 'OWLS'), yet the Katz-Fodor probes in these directions had a steadily increasing influence on the burgeoning field of mathematical and computational linguists, the latter especially in its applied variants, such as the ill-fated programs in Machine Translation of the sixties and seventies, and later the more success-ful, straightforward endeavors to model language directly on the computer, using a conceptual, rather than a symbolic or formal approach. A mention of, or even a chapter on, such new directions (from the eighties onwards) would have been welcome in a book like this; the pioneering formalizing-cum-applied efforts of people like Terry Winograd and his 'SHRDLU', or Roger Schank with his 'Conceptual Dependency' theory, and other, similar efforts would have deserved to be discussed, both for their rise and fall (like the Katz-Fodor model critiqued earlier), and for their final demise and subjection to Google-types of 'semantic' analysis (Schank is given a nod later on, in the chapter on Cognitive Semantics, p. 224).

I recall how a Canadian linguist by the name of Hal Edmundson came to Austin, Texas in the late sixties for a job talk at my univer-sity, and how we grilled him in Emmon Bach's office after the talk. The man didn't get the job, as his views were just too far removed from the then reigning generative-transformationalist paradigm – which was kind of unfortunate, as he actually was able to predict some rather remote developments in formalized linguistics and

its applications. Among other things, he remarked that we were all wrong, practicing a symbolic approach to the human-machine connection. Said he, "just create a large enough dictionary plus an efficient search engine and you will have got it made". So what else (*pace* Google) is new?

Chapter 4, called 'Neostructuralist Semantics' (54 pp.), hearkens back to the "historical lineage of the theories" discussed; as to the chapter's title, the author is aware that that it may be felt to be a misnomer by some of the authors he discusses (p. 126). Mainly, the approaches outlined here fall into two major groups: the 'decompositional' and the 'relational'. The first group is indebted to what earlier was discussed under the heading of 'componential analysis', whereas the second group bases itself within the tradition of relational semantics. Even with the usual leeway given to descriptive labels, the approaches gathered in this chapter present what some might call strange bedfellows: Anna Wierzbicka with James Pustejovsky, or Manfred Bierwisch with representatives of information technology-based and/or distributional approaches, many of which were unwittingly inspired by the earlier quoted Firthian maxim "You shall know a word by the company it keeps" (p. 168). In this sense, the chapter is a *tour de force*: G manages to capture some rather diverging tendencies in recent semantics under one descriptive hat, and – more importantly and also more difficult – he manages to compare and elucidate the various models and paradigms in an intelligent and intelligible fashion.

Anna Wierzbicka's 'Natural Semantic Metalanguage' (NSM) is given the exposure it deserves, given its productivity and growing popularity. Based as it is on natural language (as opposed to some kind of constructivist 'markerese' in the Katzian sense), it provides an immediate appeal to linguists working with all sorts of very different languages. Significantly, Wierzbicka works in an environment where describing 'native' languages is still a major component of a linguist's daily occupation, viz., the Australasian-Pacific continent

and its outlying reaches. The one pillar of Wierzbicka's system is the assumption that all languages share a common fond of irreducible semantic primitives (thought to be around 60 in number, up from the originally postulated 15; p. 134); this assumption is needed because otherwise the theory would end up in circularity. The primitives are then used to define other concepts, all the time relying on a 'neatness' that is supposed to be innate for humans: conceptually we are 'neats', pragmatically we are 'scruffies', to borrow a popular distinction from another field where semantic structuring comes in heavy: Artificial Intelligence (a research tradition not discussed in G's book). "If we can just tap into the clarity that is in our own head, the unclarities of the world need not bother us", as G pithily expresses NSM's leading philosophy on p. 127.

The other pillar of NSM is what G calls "reductive paraphrase" (p. 128), a practice of defining all items in a language's vocabulary using a definitional, universal metalanguage. Since it is assumed that the set of 'semantic primitives' is universally lexicalized across languages in similar or even identical ways (the 'Strong Lexicalization Hypothesis'; Goddard 2008), the paraphrases are 'reductive' in the sense that they may be reduced to very simple constituents, in the same way as mathematical or physical expressions may be reduced to simple axioms and elements, combined according to universal rules and laws. The obvious advantage of such descriptions is that they are based on what many people will perceive as immediately accessible conceptual units, bound together by 'natural', everyday connectives such as 'and',' but', 'before', and so on. But problems arise as soon as we try to tackle more complicated questions, such as how the often complex reductive definitions relate to the real world.

G remarks that the definitional paraphrase of the Welsh word for 'green', *gwyrrd*, would not make much sense unless we knew that "the definition of *gwyrrd* is roughly like that of *green*" (p. 133). And he provides a demonstration *ad oculos* that even in a relatively uncomplicated cases like that of 'fruit', determining the characteristics of this

concept may run into empirical difficulties of a rather insurmountable kind (pp. 134-136). As the author remarks, ''the methodological basis for identifying semantic primitives is not yet [sic!] as firm as the Natural Semantic Metalanguage approach would have it'' (p. 134). And indeed, from another (philosophical) angle one is inclined to agree with G that ''the Natural Semantic Metalanguage approach to lexical analysis smacks of idealism''' (p. 137). Also, despite its professed purely semantic orientation, the NSM school of thought cannot avoid forays into what is now called 'cognitive semantics'. The interest here is not so much on the semantic representations as on the way they function in the world of people; the psychological and cognitive realities of the concepts need to be evaluated against a backdrop of user practice – which takes us beyond NSM into the world of cognition, psychology, and in the end, pragmatics. An interesting parallel from the literary world is found in the British author A.S. Byatt's reflections on the ''problem of sufficiency of adjectives'', in particular ''how to find the exact word for the color of … plumskins'' (1978:176), culminating in the rhetorical question: ''Do we have enough words, synonyms, near synonyms for purple?'' (ibid.; see also the discussion in Mey 2001:255).

An investigation of linguistic variability and the way in which it may affect the semantic definitions'' (as G has it on p. 141) is also needed when we deal with other realizations of 'Conceptual Semantics', such as Jackendoff's. Here, the need for 'transgressions' of the kind I noticed above becomes even clearer: language cannot be studied autonomously, ''research into linguistic meaning implies doing cognitive psychology'', as G observes (p. 138). In the same vein, Jackendoff's basic distinction between cognitive and perceptual information (assumed to pertain to two non-overlapping domains) is subject to pertinent criticism by G (p. 142).

One could naturally go a step further, and say that not only are we dealing with two domains of knowledge; but rather, and preferably, we should assume that the domains operate as interacting, but

independent modules. This type of view is often discussed under the label of 'two-level semantics' (*Zwei-Ebenen-Semantik*; p. 143) by researchers such as Manfred Bierwisch and his (East) Berlin colleagues, who aim (in the generativist tradition from which they indirectly hail, belonging to what used to be called 'MIT's East German campus', the *Zentralinstitut für Sprachwissenschaft der Akademie der DDR*) to establish a "parsimonious pragmatization strategy", as G rather felicitously labels it (p. 145). As always, the problem is how to get from *Ebene* to *Ebene*, from level to level, and how to define the collaboration among the individual levels; in addition, there is the general question of how these '*Ebenen*' relate to (or even presuppose) the existence of some kind of world knowledge in the user. Concretely, the question is how to define the notions in terms that make sense to a user; here, the interface between semantics and pragmatics becomes of interest. As G remarks, "pragmatic, context-dependent meanings have to be able to permeate to the level of semantics" (p. 146; cp. also the references elsewhere in the present review to the subject of inter-level 'intrusion').

Semantic modeling often has an implicit, or even professed, computational slant to it. In this connection, one wonders why the work of the Prague group of functional linguists (under the direction of Petr Sgall and Eva Hajičová) is not mentioned in the context of G's discussions; the problems their descriptive efforts have encountered and the ways they have formulated possible solutions, are all couched in the language and thought frame of 'computability', understood as not just an abstract thought experiment, but as a real-time operationalization of the theory. (See many of the articles in the *Prague Bulletin of Mathematical Linguistics*, and the ground-breaking works by Sgall, Hajičová and others from the (neo-)'Prague School'; Sgall et al. 1986).

On the other side of the Atlantic, James Pustejovsky, in his 'Generative Lexicon', has applied the notion of decomposition rigorously in order to create a representational format that likewise is directly

applicable in a computer environment. The semantic orientation of the model is clearly based on the representations of the individual semantic items, but of course situated in a context; the various contextual and grammatical properties of a 'word' are listed in the form of 'information structures': basically n-tuple style, formalized information regarding a particular level of description. Thus, 'event' represents a transition or a state, to be further described on a lower level; 'argument' may be represented as a human or an artifact, and so on (see p. 149). What is new here is that the information is not just listed; it is also 'dynamic' in that it allows for contextual and historical information to be called upon. The next step in the process is either one of '*fiat*': the information matches with what is already available (e.g. that 'beer flows' is unproblematic), or it has to be 'accommodated', sometimes 'coerced', to fit the present context (this is also where metaphor comes in). Sometimes, as critics have remarked, the lexicon has a tendency to over-generate: ''Sydney began a book'' relies on the pre-existing knowledge that books are for reading (but why not writing? a case not foreseen in Pustejovsky's theory); on the other hand, ''Sydney began a sweater'' is difficult to 'accommodate' or even 'coerce' into ''Sydney began wearing a sweater'' (p. 155; so what's wrong with ''Sydney began knitting a sweater''? – after all, there are certain (types of) men who have taken up knitting as a pastime or useful home industry).

G also remarks on the status of 'primitives' in the Generative Lexicon: they seem to run into the same problematic that we encountered earlier, when discussing Wierzbicka's NSM, such as: ''What exactly are 'physical objects'?'' G's answer is very much to the point: they possibly are ''a category that involves a richer type of semantics than the formalism suggests'' (p. 156) – an observation that calls into question the entire business of formalization, supposed to ''achieve greater precision in the description''; but ''how precise are the elementary building blocks of the formalized componential readings?'' (ibid.)

In addition to the various decompositional approaches that characterize neostructuralist semantics, there are the so-called relational ones: those that focus on the types of lexical relations found to occur in a text. Rather than relying on a symbolic representation buttressed by a logical apparatus, the relational approach considers what is 'in the text' (since 'the text is all we have', with a faint echo from literary studies in the formalist vein). As G remarks, during the nineties a veritable explosion occurred in the realm of statistically based lexical studies ('corpus linguistics', as it soon came to be called, with a slight over-simplification); in computational linguistics proper, earlier approaches (such as the much-maligned, 'primitive', Markov chain inspired, finite-state algorithms that were the target of the generativists' early remonstrations; see Chomsky 1957, 1965) saw a renaissance in the form of gigantic databases, where the only suitable and workable criterion was the 'company a word kept'. The success of these approaches in the practical domain has been demonstrated by search engines like Google and by computational linguistic methods, based on 'synonym sets' (as in WordNet) or on lexical functions (as in 'meaning-text theory'; see pp. 159-165 for details and some critique).

As far as theory goes, the eternal, vexing problem of how to distinguish between a linguistic and an encyclopedic level of conceptual analysis has moved in with the distributional approaches, alongside its original carriers (such as the distinction between metonymy and metaphor). From G's remarks, one may get the impression that much depends on one's initial point of view, and that a distributional way of thinking may lead to a "more dynamic and innovative methodology, based on the statistical analysis of lexical phenomena in larger text corpora" (p. 165). However, here too, the recent popularity of such corpus-based approaches should not lead us to believe that all's new under the sun: due respect and recognition should be paid to the pioneers in the field. Some of them are mentioned by G, like Ross Quillian, whose work on 'Semantic Memory' (1968) was one

of the backbones of the courses in Computational Linguistics I taught at Texas in the sixties (Quillian does get a mention on p. 123 under 'Generative Semantics' – a bit out of place, it seems). Other venerable techniques, such as the KWIC ('keyword in context') indexing method (a computerized version of which has been around since the late fifties) are explained, but their historical importance is not mentioned, and neither is the inventor of KWIC, the German born US engineer Hans Peter Lehn (see Hays 1966:159-167 for references); below, I will have more to say about the 'French School' of distribution-based computational linguistics under the late Maurice Gross.

On a theoretical level, the advantages of distributional analyses are in that they elude the various pitfalls inherent in what is called 'symbolic' language processing; the latter basically entails the need to make decisions on undecidable matters for the purpose of a (more) 'logical' treatment (recall how hard it is to consistently and logically define even the most simple notions such as those of 'cup' or 'chair'; see G pp. 131, 158, and compare my earlier comments on what Byatt called the 'insufficiency' of adjectives). But also, building paradigms in the logical fashion cannot be done without taking syntagmatic information into account: as G remarks, "structuralism [is] a form of decontextualization: taking meaning away from the actual context to the realm of linguistic structure" (p. 177); in contrast, as G also says, distributional analysis rests on a broad empirical basis.

Here, the link to earlier, 19th century semantic studies is reinforced: what those older researchers were able to unearth of valuable semantic information was not based on any kind of structuralist pre-conceived notions, but on honest and hard work with texts (and done without the benefit of modern computerized techniques). Even though I agree with G that analysis by corpus methods is not the last word in lexical semantics, and that it may be necessary to combine the various methods (including statistical ones) with other, experimental data and even psychological insights, it is still the case

that the success of corpus-based linguistics is not to be evaluated in terms of immediate retrieval and innovative shortcuts (as in the much-advertised breakthroughs in 'classic' Machine Translation that in the end went nowhere). Even if we cannot answer G's question whether the contextualizing approach to the lexicon, as demonstrated in corpus linguistics, is a sufficient one? (p. 178), in the affirmative, there is no doubt that corpora represent contexts in (inter)action, and that as such they constitute a necessary, albeit not always sufficient gateway to lexical issues (cp. also G, ibid.)

G's chapter 5, entitled 'Cognitive Semantics' (85 pp.) takes up roughly one third of the book's content (not counting the 15 page 'Conclusion'). The author plausibly argues that this imbalance is in part due to the fact that cognitive semantics is probably the most popular framework for the study of lexical meaning in contemporary linguistics (p. 183) – to which I would add that it is ostensibly also the author's preferred framework; compare that initially, when I started out on this review, I had a feeling that the title of the book might be a bit of a misnomer: shouldn't it really be called 'Theories of Cognitive', rather than 'Lexical Semantics'? In the sequel, though, as I progressed through the chapters, it became clear that G (also given his background) remains, for better or worse, a semanticist; but also, that the cognitive approach to which he devotes so many pages, has a great deal of attraction – even to the point that the author sometimes wavers about where to include a particular research orientation such as Wierzbicka's NSM.

As always in semantic studies, the boundaries are fuzzy and the distinctions not too clear-cut. A case in point is the first topic that G deals with in the present chapter: the prototype model of categorial structure, in the tradition established by Eleanor Rosch and her co-workers. As G remarks, prototypicality is itself a prototypical concept, which entails that it has fuzzy boundaries: some prototypical features are more prototypical than others (a clear example is found in the category of color terms, where (as shown by Brent Berlin

and Paul Kay in early seminal work, 1969) certain terms (like *red*) occur both more often, and earlier in the acquisition phase, than do others (like *mauve*).

Apparently, perceptually based categories do not have sharply defined borders; such categories are organized around certain focal points, viz. the prototypical category members (p. 185). Even so, not every member of the category represents the category in an equal way: ''some birds may be birdier [sic] than others'', says G (p. 191); the category's defining traits tend to gather around a particular 'family' or cluster of features – features that may either belong to the intensional (content, or 'definitional') level or to the extensional level of membership, where 'salience' plays in (pp. 188-189). Moreover, not all relevant prototypical features need to be present for every member at all times. As United States Supreme Court Justice Potter Stewart (1915-1985) expressed it back in 1964, when talking about pornography: ''I can't define it but I know it when I see it!'' And G concludes that ''semantic distinctions that are relevant and distinctive in one context may be neutralized or ignored in another'' (p. 199).

This leads over into a discussion of a major new concept in semasiologic thinking: that of *salience* (already adumbrated in the preceding). The main idea here is that defining relations are not only qualitatively relevant, but in addition may be placed on a quantitative gradient. When very small children call every animal a 'doggie', this is because the dog is onomasiologically salient: a 'basic level' concept, as it is has been called (p. 200). In an evolutionary framework, like Langacker's (1999), this type of salience has been defined as an 'entrenchment', whereby a particular concept takes over and dominates the entire category to which it belongs (p. 201). This is what happens when e.g. 'apple' gets to denote the entire applecart and its inhabitants: Granny Smith, Cox Orange, Philippa, and so on (p. 202), or when some Norwegians use the word *fot* 'foot' to refer to the entire leg, foot and all (for which there otherwise is an

entirely suitable naming candidate in the form of the word *ben*, 'leg'). Which goes to show, says G, that onomasiological structures such as taxonomies underlie the same 'fuzziness' and differences of structural 'weight' as do semasiological distinctions: after all, ''semantic categories remain semantic categories whether they have an infralexical or supralexical status'' (p. 203).

The name of George Lakoff is forever tied to the next development in cognitive semantics that G describes: the phenomenal rise of Conceptual Metaphor Theory from the late seventies on (see Lakoff 1987 for a comprehensive synthesis). The soil was ready for this new development: the general discontent with the place of semantics in the generative network had moved Lakoff to suggest an alternative placement of 'meaning': rather than being introduced through the back door, it was now claimed to be the bedrock on which a grammar should build. Naturally, then, the study of meaning should not be restricted to single words, but should also encompass multi-word expressions and the like: meaning was no longer thought of as residing in isolated lexicalized items, but should be conceived of as more encompassing, dynamic, and above all, usage-oriented.

And indeed, if one looks at what words 'really' mean, it becomes clear that their meaning is extremely dependent on the context and on the origin from which they sprang. From the oldest times, the classical Greek philosophers' and rhetoricians' study of meaning has also encompassed what was called the 'tropes', or 'figures of speech'. Nothing more natural, then, than to investigate the ways the particular 'figures' shape our language and our consciousness. In particular, metaphors are seen as bridging 'domains' of experience: by appealing to one domain, called the 'source', they serve to explain and elucidate phenomena occurring in another domain, called the 'target'. By linking elements from the source (say, a 'journey') to elements in the target (e.g. 'love'), we create a mapping where the lovers are seen as 'travelers', and their trajectory as containing the events and disturbances often encountered in love's 'journey' (com-

pare locutions like 'the course of true love has ne'er run straight', or 'we're hitting a rough patch', as opposed to Frank Sinatra's glorious ''trip to the moon on gossamer wings'').

An important aspect of this way of conceiving of a linguistic expression is that it is firmly anchored in our corporeal experiences; as G remarks (p. 209), the notion of experiential grounding leads to the more general concept of 'embodiment', by which entire areas of experience are 'rounded up' in what Lakoff (1987) calls 'image schemas', or experiential 'gestalts'. Interesting in this connection is G's perspicacious observation that prototypical meanings of metaphors may become expressions in their own rights; in other words, when metaphors or metaphorical expressions 'die' (as when 'to make hay while the sun shines' is taken to mean ''just seize the instant time/ you never will/with water that is once past/ impel the mill''; Bishop R.C. Trench, 1857). But the dead metaphor may start a life of its own: this new life is then non-metaphoric and does not necessarily relate to the mental pictures associated with the original metaphor. No city dweller who uses the expression 'Make hay while the sun shines' is really thinking of a substance called 'hay' (which he or she may never have touched or seen), or be aware of the pressing need to get the hay in before the rain hits the ground and the hay gets wet and moldy. As G expresses it, the 'foot of the mountain' need not refer to a metaphor involving a person with legs; it can just as well be conceived of as ''an extension of the semasiological structure of *foot*''(p. 210).

The notion of 'image schema' provides a natural transition to a further extension of conceptual metaphoric thinking, viz., the theory of mental spaces and 'blending', mostly associated with the work of Gilles Fauconnier and his group. Blending involves the interaction and cognitive mixing of several source domains, resulting in a more encompassing and often more dramatic approach to the target. G discusses the blended metaphor of the 'grim reaper' at some length (pp. 210-215) and manages to show how, despite the immediate ap-

peal of the concept, blending is in reality no more than ''a refinement and expansion or Conceptual Metaphor Theory'' (p. 215). Along with its appeal of combining several traits into one (the reaper is a killer of sorts, and carries this feature over to the target, which now may be more comprehensive than just the grass to be mowed – in fact, we prefer to use the 'grim' feature exclusively when it comes to human death –, there are also conceptual and practical disadvantages to the use of blending. Restrictions and unwarranted extensions may be more frequent in the case of blending than in the original metaphoric usage, as G also remarks (ibid.). Thus, in the case of the harvesting reaper, the norm is to wait until the plants have attained maturity; in contrast, the real ('combined') reaper is the ''wanton death who takes no proper aim'', cutting down youngsters in the middle of their play, while sparing the old people (as the Dutch 17th century poet Vondel has it; his own daughter Sara was cruelly taken away from him at age 5 by ''*de felle dood die nu geen wit mag zien*'', as the original Dutch has it).

Metaphor and metonymy have traditionally been among the most popular figures of speech, both among users of rhetoric and its theoreticians. G follows up his extensive discussion of metaphoric matters with an equally encompassing and thorough treatment of metonymy. The most recent and best known account of the difference between the two, popularized mainly through the work of Lakoff and his associates, rests on the idea that metaphor is a two- (or even multiple-) domain affair, whereas in metonymy we are dealing with only one conceptual domain, comprising both source and target (p. 215). But this seemingly innocuous and clear distinction poses some serious problems once we start applying it to actual cases. How are, e.g., the French Ministry of Foreign Affairs and the Paris location called 'Quai d'Orsay' related in terms of 'common domain', the one entity being a public institution, the other a mere toponymic label? Or how to explain the well-known case of the 'ham sandwich that walked' – meaning that the person

who had ordered the ham sandwich (a case of metonymy) has left the restaurant without paying the bill (a case of metaphor)?

Similar considerations seem to favor retaining at least part of the traditional definition of metonymy in terms of 'contiguity' (the French Ministry is locally contiguous with its address (or rather, the building at Nr. 38 of the street in question), or of 'cause/effect' ('ordering a ham sandwich generates a bill, to be paid by the consumer'). These and other difficulties have led to a revision of the domain concept itself; various solutions have been proposed, among these the creation of 'sub-domains' or 'domain matrixes': complex conceptual territories where local highlighting is possible, and where source and target may enter complex relationships: source-in-target or target-in-source. In a case like *The red shirts won the match*, "the source is a subdomain of the target: the gaudily colored shirts are a distinctive characteristic in the field of football players" (p. 216). But note that this case could equally well be handled by appealing to the classical notion of 'contiguity': shirts usually sit on the backs of players (except when torn off by rabid fans).

As G remarks, very much to the point, "contiguity is probably as vague a notion as 'domain'" (p. 217); consequently, he proposes a "prototype-based analysis of contiguity" (ibid.). In the case at hand, a likely candidate for the prototype is "spatial or material contiguity" (ibid.). Three dimensions along which this notion can be expanded are then provided: 'strength of contact' (e.g. containment vs. constituency), 'domain shift' (abstract vs. concrete), and 'boundedness' (e.g. constituent parts vs. parts 'carved out' of unbound masses; p. 219). In this way, new light may be shed on the old notion of contiguity, provided we base ourselves on "spatial, material constituency", with "part-whole relations as the core of the concept" (p. 220).

A final consideration has to do with the complex relationship between metaphor and metonymy themselves. Here, the Belgian linguist Louis Goossens, as early as a couple of decades ago, has described the interaction between the two speech figures and called

the resulting phenomenon 'metaphtonymy'. Unfortunately, his perspicacious and pertinent observations on the subject have not caught on in the community as they should have, presumably on account of the overwhelming influence of the popular, Lakovian-based thinking. Therefore it is a pleasure to read G's account of Goossens theoretical innovations, which still have a lot to say in the current debates. Goossens distinguishes between two cases: one is where metonymy over time develops metaphorically: 'metaphor from metonymy'; as an example, consider ''Oh dear, she smiled nervously'', where the metonymical 'smiled' (from 'saying while smiling') turns into a metaphor ('smiling' for 'saying'). The other case concerns such instances as 'to catch someone's ear' (for 'getting hold of a person's attention'), where 'catching' is a metaphor taken from the domain of 'hunting'. 'Ear' is then used metonymically for 'a person's attention', a kind of *pars pro toto* in the classical tradition; what we have here is metonymy from metaphor.

One of the important advantages of this way of looking at the interaction of metaphor and metonymy is that is provides us with an explanation of certain historical developments. As already noted, metaphoric expressions can lose their original 'contiguity' (as in the case of the 'foot' of a mountain). In fact, as G observes, ''a number of alleged metaphors may in fact have a metonymic origin, with the metaphor as a reinterpretation of the initial metonymy'' (p. 221). And of course, the inverse may also happen: 'dead' metaphors may come to life again and be interpreted by reference to the original contiguity. Shakespeare's famous 'winter of our discontent' (taken from *Richard III* and eponymously modified for titling the present article) combines metaphor and metonymy, potentially extending the original metaphor far beyond its metonymically contiguous, seasonal domain, as evidenced by the expression's continuous, living use in contemporary literature: both by developing the original creation as well as a (more or less successfully) adapting it to the modern purposes of authors like Freud, Steinbeck, and beyond.

The discussion of the various figures of speech has often initiated a controversy about what counts as admissible linguistic evidence, vs. what should be relegated to the domain of 'world knowledge' (in principle not accessible by linguistic means). What is needed in lexical semantics is a framework that encompasses both domains, in what G calls a ''maximalist perspective on meaning'' (p. 222). In such a framework, the difference between linguistic and encyclopedic knowledge plays a minor role; G even advocates the abolition of the distinction between semantics and pragmatics (the latter here understood as *linguistic* pragmatics, i.e. a pragmatics that is basically an extension of semantics in various ways). The problem is that the encyclopedic knowledge never comes alone, in the form of what G calls 'items'; the 'inter-item' relations that characterize the lexicon have to be seen as happening on the background of human experience, which is not 'itemized', but rather comes in 'chunks'.

One of the major efforts to capture such a structure (often referred to as an 'idealized cognitive model' or 'frame'; pp. 222-223) is due to Charles Fillmore, whose frames rest on a conception of various conceptual 'roles' (in a commercial transaction frame, such roles would comprise those of 'buyer', 'seller', and so on; p. 226); these roles are basically semantic, but are then linked to certain grammatical forms of expression (p. 227). In the Berkeley FrameNet project they are then united in a 'dictionary', linking words to frames (rather than words to words, as in earlier, 'combinatorial dictionaries' like Mel'čuk's; p. 229).

While the link to computational models of language and to computational lexical semantics is clearly indicated in this case (p. 229), other efforts at 'pragmatizing' semantics (or 'lexicalizing' pragmatics) could have deserved more attention. As to the first, one may think of the 'frame' concept developed by Schank and Abelson as early as the late seventies, but mentioned only in passing on p. 224; the massive efforts both at Yale and (later) at Northwestern University that have gone into building an Artificial Intelligence-based model

of human linguistic (more specifically: learning) behavior, and its various spin-offs in the fields of language acquisition and learning theory could profitably have been discussed at this point.

On the other side of the fence, so to speak, we have the heroic (some unkind persons might say: herostratic) approach to the 'outside world' problem and its lexical consequences that has been practiced by the French group of linguists/lexicologists under the direction of the late Maurice Gross at LADL ('Laboratoire d'automatique documentaire et linguistique', University of Paris 7 and CNRS; see Gross 1967-1986 and Silberztein 1993). Gross and his people were among the very few to have taken Zellig Harris' (1951) strictly formal-distributional theory of the fifties seriously in their language-modeling activities, achieving no mean successes with their electronic dictionaries for French, exclusively based on co-occurrence features (the verb classes generated in his way number over five hundred!) Irrespective of how one evaluates Gross' handling of the problem, here, as elsewhere, one may say, with G, that the value of making things formal is that they also show where, and if, a computational approach makes sense; in the case of the French group, it certainly did, even though the direct effects of their modeling have been limited to the lexicography of one particular language. (But notice also that Gross' insistence on using the simplest model of computa-tion, the often neglected finite state grammar, has been vindicated by recent successful ventures in the field of popular search engines à la Google, quite as the earlier quoted Hal Edmundson had predicted already in the sixties of the past century.)

G devotes a special section to what he calls 'usage and change' (pp. 239ff). Here, the potential of a cognitive semantics to 'predict' and explain historical changes (in 'diachronic semantics') hearkens back to the early approaches to semantics that G so aptly describes in the initial sections of his book. In the present section, he deepens this understanding by appealing to processes of conventionalization and grammaticalization, as well as to the mechanisms and regularities

that characterize these diachronic processes. In particular, typological developments can be shown to have semantically-oriented preferences that are in part based on users' subjective choices, but more generally follow 'concrete acts' (p. 237), assumed to be more or less universally valid (like ''putting things together ('with') on top of each other ('on, upon')'') (ibid.) In this way, we can perceive the outlines of what G calls a ''pragmatic onomasiology'' (p. 239), in which lexicogenetic mechanisms are connected in and through the ''onomasiological choices that language users make in specific usage contexts'' (ibid.). Rather than appealing to an 'invisible hand' (p. 239; see also p. 232f), however, I would argue that we are facing a normal pragmatic development in which the users, rather than the linguists, call the tunes.

Continuing along these lines, G offers some further reflections on the place of a cognitive semantics in a larger, 'pragmatic' (as I would call it) context. The way he does this is by querying how one of the two 'cornerstones' of cognitive semantics, metaphor (the other one is prototypicality; p. 240) has been treated by neighboring disciplines, first of all psychology and psycholinguistics in their study of 'meaning in the mind' (p. 240ff). An important issue here is the so-called 'conventionalization' of metaphors: metaphoric readings may establish themselves in a new, stable meaning (alongside the original one, which recedes more and more into the background). When this happens, the psychological mechanisms of retrieving the metaphor do not rest on recognizing a particular structure, but on establishing a connection to a superordinate category, including both source and target (p. 243); the example provided is 'shark', a category comprising both predatory animals and ditto lawyers.

Psychological evidence shows that in some cases, the metaphors are really 'dead', while in others a certain degree of 'salience' (Giora's expression; 2003) can be identified, given the right kind of 'priming'. Salience is of course relative: conventional metaphors are processed

more easily and quickly than are novel ones, where the computation has to be done 'on the spot'.

As to the other 'pillar', prototypicality, this enters into the picture mainly though the study of 'network models'. Earlier research, mainly by Elizabeth Loftus and her associates (1979), had already shown that 'priming', in the form of targeted stimuli, may spread through a semantic network via (weighted) links: 'can' is such a link ('birds can sing'), but 'have' is another one ('birds have feathers'). In various contexts, and depending on priming, the weight placed on individual links results in different processing times, or even in wrong processing, or none at all. Thus, in a weighted context, subjects may swear that they have seen a 'stop' sign, where in reality they were confronted with a 'yield' (Loftus' example).

Generally, G. concludes, the interaction between linguistics and cognitive semantics on the one hand, and psychological and psycholinguistic theorizing on the other is beneficial to both; where cognitive semantics seems more inclined to formulate ''bold theories'', psychological research is characterized by carefully planned experimenting and thorough testing of hypotheses. And even if the two disciplines are not ''perfectly aligned'', and their results cannot always be matched up, ''increased interaction'' between the two is starting ''to take shape'' (p. 248-249).

As to the importance of cultural factors in the genesis and uses of metaphor, it should be clear that the 'universalist' perspective ('embodiment' seen as a universal human condition) needs to be supplemented by a perspective that deals with the cultural and social variations in human language use. As Gibbs expresses it, ''image schemas are not simply given by the body, but constructed out of culturally governed interactions'' (1999:154; quoted p. 249). The reason is that all bodily experience is situated in a cultural and social context, and as such not directly translatable to other cultures and social contests. Consequently, as G remarks, a ''purely physiological interpretation [of metaphor] needs to be interpreted along cultural

and historical lines'' (p. 252). And this is where 'conventionalization' comes in, understood as (in the case of prototypicality) the way we consider some birds to be more 'birdy' than others: the prototypical bird is presumably a quite different kind of animal for those who live in Northern Europe than it is for the Aborigines of Northern Australia. In general, semantic knowledge is unevenly distributed among the members even of the same community, based on their different experiences and social contexts; still, as G points out, ''the social interpretation is largely ignored'' (p. 255).

In order to get a grip on this kind of variation, one naturally needs to turn to the actual usage that occurs in a community of language users, where ''usage events define and continuously redefine the language system in a dynamic way'' (p. 259) – even dialectically, as among others, Langacker (1999) has observed. When it comes to metaphor research, one has to ''take the step from the relative isolation of abstracted linguistic structures to the contextualized level of actual language use'' (p. 259); in other words, we have to study ''the role and function of metaphor in discourse'' (p. 260).

A 'Metaphor Identification Procedure' (MIP) has been established by a group of workers gathered under the acronym of 'Pragglejaz' (perhaps echoing the name of Roman Jakobson's illustrious working group on poetic language in the early decades of the past century, *Opojaz*, but in reality an acronym on the group members' first names[**]). But even with agreed-on, spelled-out techniques (see the MIP procedure, outlined in four main, and several sub-steps on p. 260), reaching agreement on what is a metaphor in a concrete context, and how it should be categorized, turns out to be hard; ''subjective differences will occur'', says G, much to the point (p. 261). Even automating the procedure, while certainly of great value when collecting the material, does not by itself generate sufficient

---

[**]   Among these Elena Semino, whom I have to thank for revealing this arcane knowledge to me.

decision criteria. On the other hand, information on occurrence may help us establish heuristic procedures both for accepting and rejecting certain identifications on the basis of frequency, and for deciding whether a given metaphor is more than just a ''dead relic'' (p. 263).

Interestingly, as G remarks, the European tradition has always been more geared to corpus-based research than were the American studies, the latter being ''predominantly introspective'' (p. 264; in the present reviewer's view, the same seems to hold for much of American theoretical linguistics, in contrast to e.g. anthropologically and application-oriented research). Overall, the tendency in European corpus linguistics is clearly towards what G calls a ''pragmatic onomasiology'' (p. 264), i.e. a study that orients itself to actual usage of the conceptualizations emerging in and through metaphor and prototypicality research (cp. what G had to say earlier, on p. 97, on the need for such research, which is ''still largely waiting for more systematic attention''). Furthermore, the use of statistical methods in dealing with corpora of different linguistic provenience may lead to a metric of distance between language varieties: a ''lexical socio-lectometry'', as G calls it (using a tongue-twisting, but descriptively accurate terminology; p. 265) – a method which ''is likely to generate much new research'' (p. 266), thereby confirming what the author says a few lines down on the page: ''there is plenty of room of the further development of a usage-based methodology''. The present reviewer couldn't agree more.

Having come to the end of G's book, I should really do as I said in the beginning: start all over again and savor the richness of the content, the impeccable style, and the interesting sidelights that accompany the magisterial exposition that are characteristic for G's work. Going on this *tour d'horizon* with the author (as he himself calls it; p. 287) has this in common with taking a trip into well- (or even only partly) known territory: when one is on a guided tourist junket, not all the places one is taken to are equally interesting, and

one would perhaps prefer to linger some other places than those the guide apparently finds of interest. But on the whole, one is satisfied and has obtained new insights, not to say inspiration, regarding facts, thoughts, and persons that one thought were pretty much commonplace.

Taking this metaphor a bit further, I would say that G's main merit as a guide is that, in writing this book, he manages to take us to many places that we normally either only have heard of, or are familiar with through others' experiences; in addition, he succeeds in imbuing familiar locations with his own voice and place them in a fresh perspective. Of course, being a guide always imposes certain limitations on the perspective that can be offered; and the voices we're hearing in all those places are filtered through, and sometimes overlaid by, the master narrative that is the guide's own, as it comes to the fore in his choice of places and the weight he has put on each of them in his successive visits. But the overall feeling one is left with on completing G's guided tour is one of deep satisfaction.

In the final part of my review, I want to briefly recapitulate the points on which I scored a definite plus, that is were I felt that my own experience had been enriched through the medium of G's exposition. First, then, there is the link that G manages to pose between the 'first modern' semanticists (the likes of Bréal in the nineteenth century) and modern, cognitivist tendencies, where, as he says in his *Conclusion*, certain patterns of metaphor and metonymy research ''may sometimes be found almost literally in the older literature'' (p. 277). This 'respect for the elderly' and their work is indeed a refreshing change from the contemporary frenzy to have things labeled 'All New', from toothpaste brands to linguistic encyclopedias.

Second, the amount of reading and digesting the current and past literature that has gone into this work is truly astounding. With a few exceptions (most of them noted above), G's coverage of the subject is not only total, but in addition also 'holistic': that is to say, not only does he cover the whole field, but he does this in a 'whole'

fashion, by giving everybody his/her dues, and not slighting or de-monizing tendencies that may not have his officially pronounced interest. As an example, let me mention G's treatment of the 'NSM' movement, with which he clearly has some bones to pick (as has the present reviewer); but the coverage he provides is consistently fair, and is presented *sine ira et studio*: the bones are picked in the most gentlemanly fashion of upscale dining rooms.

In addition to these positive qualities of presentation, let me now say something about the eminently pedagogical way in which G presents his findings and opinions. G is the incarnate teacher – not contented with 'telling it like it is' just once: he goes around the block and comes back with new, attractive wordings, then seals the deal by giving us a short formula to keep in our memory file. As instances, I could mention the author's outlay of a method on p. 25, where he talks about 'classification', or the masterly presentation of an important distinction (semasiological vs. onomasiological) on the preceding p. 23; here, the entire first paragraph could stand as an exemplary illustration of how to present things in ways that stick.

The book is a pleasure to read also because of its footloose, yet always precise language. (I grinned when I heard G come onto the stage on p. 77 with his 'Come to think of it…'; that for sure makes for a feeling of dialogue!). His habit of giving us the original quota-tions (with translations) is highly commendable; and the translations are usually very accurate (some gripes are listed below). The 40-page bibliography is near-flawless (I noticed a misspelling: *Gothenberg*, and a missing capital in the German *versuch*). The two indexes (Author and Subject) are excellent: complete and very helpful. And best of all, there are no footnotes! (Something a footnote-junkie like the present writer should take heed of.) To compensate for this 'loss', every chapter concludes with an extremely rich subsec-tion, called 'Further sources for Chapter <N>', where the author discusses additional literature and guides the reader to 'hot spots' in the literature.

Unavoidably, even given the author's massive erudition, there will be things that jar certain readers. G's grasp of historical linguistics is a bit loose; thus he unwittingly (p. 3) subscribes to the common erroneous identification of the Greek *theous* (sic! in the accusative) with Latin *deus* (but Greek *th* never corresponds to Latin *d*; *deus* does have a Greek counterpart in *dios* 'radiant', cognate with other Latin expressions such as *dies* 'day' or even *Iuppiter* 'father of light'). There are also quite a few slips in the German quotes: I noted *grosser Hitze* (p. 4; read *grosse*), *hohe Alter* (ibid.; read *hohes*), *königlichen* (p. 294, excess final -*n*); the umlaut is consistently missing on German *dünn*; and so on and so forth. The word *subway* does occur in British English (as 'underground passageway'; p. 84); and the banana on p. 191 is scarcely a 'wood plant'. Some regular typos do occur (but there are very few of them!): on p. 22, German *sowhol* for *sowohl*; p. 30, *paued* (for *paved*), *dralogous* (for *analogous* (ibid.); and so on.

On the content side, I missed (as already noted) a reference to Kasia Jaszczolt's work on 'semantic default' and pragmatic 'intrusion' into semantics; Stephen Levinson's contribution to this complex issue (cp. in his 2000 book) is not mentioned either. G's notion of 'pragmatics' is definitely a restricted, lexically oriented one, and thus one isn't too surprised that not many of the 'canonical' pragmaticists have found a niche in his pantheon: Searle and Grice are not mentioned at all, Horn just once, while Levinson tops the list with three spots.

Sometimes G's references are a bit obscure: thus, on p. 144, the 'lambda operator' is introduced without explanation, and the same goes for the conceptual pair 'telic-atelic' (which I presume is not readily found in the usual OWL vocabulary). In contrast, I was very pleased to find my old choir coach Anton Reichling resuscitated (albeit just in a short paragraph on p. 93); I never had the pleasure of attending Reichling's Amsterdam University lectures, and I only used to know him as the intransigent coach for the soprano section of our High School choir, when we rehearsed Palestrina and Johann Strauss at the Jesuit College of St. Ignatius. Later, there was his semi-

nal treatise, *Het Woord*, unfortunately written in Dutch and never translated, but so far ahead of its times and so well-written; a book I opened again, to much joy, upon having read G's short eulogy.

Renate Bartsch's seminal work on semantic flexibility likewise deserves to be unearthed (p. 257ff); thanks are due to G for performing this service to the community. Against this backdrop, I still cannot quite see why 'the two Jerry's' (Fodor and Katz) had to be honored with an entire chapter; surely there are no deader horses around in the whole semantic floggopticon (cp. G's critical remarks on p. 112-113, where – to his honor – he refrains from administering any cheap kicks).

Let me finish on a (re)commendatory note. I wish for everybody who wants to be *au courant* with modern semantics and its development from, and continuity with, earlier stages, to get acquainted with this truly monumental treatise. Let it be read, quoted, and commented on, bringing the author the credit he deserves for having done the linguistic community such a great service. *Proficiat,* Dirk!

Institut for Sprog og Kommunikation
Syddansk Universitet
Campusvej 55
DK-5230 Odense M

References

Byatt, Antonia S. 1991. *Still Life*. New York: Macmillan/Collier.
Berlin, Brent & Paul Kay. 1969. *Basic Color Terms: Their Universality and Evolution.* Berkeley: University of California Press.
Chomsky, Noam A. 1957. *Syntactic Structures.* The Hague: Mouton.

Chomsky, Noam A. 1965. *Aspects of the Theory of Syntax.* Cambridge, Mass.: MIT Press.

Gibbs, Jr., Raymond W. 1999. *Intentions in the Experience of Meaning*. Cambridge: Cambridge University Press.

Giora, Rachel. 2003. *On Our Mind: Salience, Context and Figurative Language.* New York: Oxford University Press.

Goddard, Cliff. 2008. *Cross-linguistic Semantics*. Amsterdam: Benjamins.

Gross, Maurice. 1967-86. *Grammaire transformationnelle du français*. Vol. 1-3. Paris: Larousse.

Jackendoff, Ray. 2002. *Foundations of Language*. Oxford: Oxford University Press.

Jakobson, Roman & Morris Halle. 1971. *Fundamentals of Language*. The Hague: Mouton.

Harris, Zellig S. 1951. *Methods in Structural Linguistics*. Chicago: University of Chicago Press.

Hays, David G. (ed.). 1966. *Readings in Automated Language Processing*. New York: American Elsevier.

Hjelmslev, Louis. 1954. 'La stratification du langage'. *Word* 10: 163-188.

Jud, Jakob. 1928-1940. *Sprach-und Sachatlas Italiens und der Südschweiz.* Zofingen: Verlagsanstalt Ringier.

Lakoff, George. 1987. *Women, fire and dangerous things*: *What Categories Reveal About the Mind.* Chicago: University of Chicago Press.

Langacker, Ronald W. 1999. 'A dynamic usage-based model'. In: Ronald W. Langacker (ed.), *Grammar and Conceptualization*. Berlin: Mouton de Gruyter. pp. 91-145.

Levinson, Stephen C. 2000. *Presumptive Meanings*. Cambridge, Mass.: MIT Press.

Loftus, Elizabeth F. 1979. *Eyewitness Testimony*. Cambridge, Mass.: Harvard University Press.

Mey, Jacob L. 2001. *When Voices Clash: A Study in Literary Pragmatics*. Berlin: Mouton de Gruyter.

Quillian, M. Ross. 1968. *Semantic Memory*. In: Marvin Minsky (ed.), *Semantic Information Processing*, Cambridge, Mass.: MIT Press. pp. 227-270.

Sgall, Petr, Eva Hajičová & Jarmila Panevová. 1986. *The Meaning of the Sentence in its Semantic and Pragmatic Aspects.* Dordrecht: Kluwer & Prague: Academia.

Silberztein, Max. 1993. *Dictionnaires électroniques et analyse automatique de textes. Le système INTEX.* Paris: Masson.

Wierzbicka, Anna. 1996. *Semantics. Primes and Universals*. Oxford: Oxford University Press.