### **Briefly Noted**

#### Agency in Action: The Practical Rational Agency Machine

S. C. Coval and P. G. Campbell (University of British Columbia)

Dordrecht: Kluwer Academic Publishers (Studies in Cognitive Systems, edited by James H. Fetzer, Volume 11), 1992, xvii + 206 pp. Hardbound, ISBN 0-7923-1661-4, \$89.00,

£53.00, Dfl 150.00

Those of us who study linguistic pragmatic phenomena such as implicature and indirection take very seriously the view that language is action—indeed, is intentional action—and we generally ground our explanations of these phenomena in theories of action and intention. In *Agency in Action*, S. C. Coval and P. G. Campbell develop a philosophical theory of action that is distinguished by its identification of an action with "those and only those properties intended of the event caused by the intentional state of the agent [who performs the event]" (p. 14).

The book is divided into two main parts. In the first part, Chapters 1-4, the authors develop their theory of action. Chapter 1 begins by reviewing the main alternative theories of action, 'grading' each in terms of how well it meets a set of five criteria that the authors feel constitute desiderata for any such theory. For example, they claim that any useful theory of action should model actions as the right type of thing to participate in a causation relation, and should provide a basis for moral appraisal. Not surprisingly, Coval and Campbell find all the alternatives lacking on at least one of the criteria. They then present their main idea---that actions should be seen as objects that explicitly reveal their own intentional cause-and suggest that a theory built around this idea will successfully meet all five criteria. Chapters 2-4 are devoted to the working out of this theory.

The second part of the book consists of a chapter (Chapter 5) that describes a computer program called PRAGMA, the Practical Rational Agency Machine. PRAGMA was designed to test the consistency of the authors' theory. A PRAGMA user inputs the description of "an agency case", i.e., some agent-generated event. PRAGMA guides the user by asking a series of questions about what the agent intended, what actually occurred, what the agent believed about the relationship between what was intended and what occurred, and so on. PRAGMA can then use this information to determine whether, according to Coval and Campbell's theory, the event should be considered to be an (intentional) action, or whether instead it should be considered unintentional or mistaken or inadvertent. The system does this by performing pattern matching using the input information, which it stores in a data structure called an Object Frame, and a set of definitions of mistake, inadvertence, etc., given in terms of the slots of an Object Frame.

Coval and Campbell's prose is often annoyingly turgid, and their convoluted notation for representing actions, intentions, desires, and the relations between these is unlikely to appeal to the computer scientist. In addition, although there remain many difficult and fascinating open questions surrounding linguistic pragmatics, it is not clear that the main theoretical move made in this book, to wit, shifting the boundary between intention and action *simpliciter*, will be of much immediate use in addressing those questions.—Martha E. Pollack, University of Pittsburgh

### Languages of the Mind: Essays on Mental Representation

Ray Jackendoff (Brandeis University)

Cambridge, MA: The MIT Press, 1992, ix + 200 pp. Hardbound, ISBN 0-262-10047-9

This book collects together eight talks and papers that Jackendoff has given or published in the last few years. They are:

"Languages of the mind"

- "What is a concept, that a person may grasp it?"
- "Word meanings and what it takes to learn them: Reflections on the Piaget–Chomsky debate"
- "Is there a faculty of social cognition?"
- "Unconscious information in language and psychodynamics"
- "Spatial language and spatial cognition" (written with Barbara Landau)
- "Musical parsing and musical affect"
- "The problem of reality"

### Working with Foreign Languages and Characters in WordPerfect 5.1 and Word-Perfect for Windows

### Peter Kahrel

(University of Amsterdam)

Philadelphia: John Benjamins, 1992, xxii + 218 pp.

Paperbound, ISBN 90-272-2126-X (Europe), 1-55619-482-X (U.S.), \$29.95, with HD 3.5" MS-DOS diskette

WordPerfect is considered by many workers in the field to be the best word processing software for linguists. And Peter Kahrel gives an in-depth explanation why this is the case. In its latest versions (WordPerfect 5.1 and WordPerfect for Windows), the program supports about 1900 different characters, including characters with diacritics for many Latin-alphabet European languages, the Greek, Hebrew, and Cyrillic alphabets, and two Japanese scripts. Kahrel explains how you can have all these characters at your fingertips. Advanced users will learn how to tailor the keyboard to their needs, how to modify existing fonts, and how to create new ones.

According to Kahrel, WordPerfect offers 20 language modules. This includes four modules for English (American, Australian, British, and Canadian), two modules for German (Standard and Swiss) and Portuguese (Brazil and Portugal). A complete language module contains a hyphenation module, a spelling checker, and a thesaurus. (Some language modules are not complete.) Kahrel not only explains how to use the hyphenation module and the spelling checker, but also how to customize and extend each to personal needs.

The great advantage of the WordPerfect setup is that you need only one copy of the general word processing system, and you can buy the language modules separately. You can even apply different language modules within a single document.

The book is a must for every linguist working with WordPerfect. It presupposes basic knowledge about the software, but it will certainly give the novice a good taste of what WordPerfect offers to authors of multilingual documents. It will provide the experienced WordPerfect user with many insights into the linguistic aspects of the software.

With the book comes a disk containing

the WordPerfect macros that are introduced in the book. I tested two of them. The first changes all footnotes and endnotes of a document to regular text, appending it at the end of the file. The macro did not work properly on my computer, but I could fix it within minutes. (Readers who need the fix may write to me at volk@informatik.unikoblenz.de.) The second macro transliterates Greek texts into Latin texts, and it worked nicely.—Martin Volk, University of Koblenz-Landau

# Lexical Semantics and Knowledge Representation

## James Pustejovsky and Sabine Bergler (editors)

(Brandeis University and Concordia University)

Berlin: Springer-Verlag (Lecture Notes in Artificial Intelligence, edited by Jörg Siekmann, Volume 627), 1992, xii + 381 pp. Paperbound, ISBN 3-540-55801-2 and 0-387-55801-2, no price listed

This book contains revised versions of most of the papers held at the first workshop of the ACL's Special Interest Group on the Lexicon (SIGLEX) at Berkeley in June 1992. The contents are the following:

"Introduction" by James Pustejovsky

- "Syntax-driven and ontology-driven lexical semantics" by Sergei Nirenburg and Lori Levin
- "Knowledge management for terminology-intensive applications: Needs and tools" by Ingrid Meyer
- "Logical structures in the lexicon" by John F. Sowa
- "Conventional metaphor and the lexicon" by James H. Martin
- "Representation of semantic knowledge with term subsumption languages" by Gerrit Burkert and Peter Forster
- "Predictable meaning shift: Some linguistic properties of lexical implication rules" by Nicholas Ostler and B.T.S. Atkins
- "Lexical operations in a unification-based framework" by Ann Copestake and Ted Briscoe
- "Lexical structures for linguistic inference" by Peter Anick and Sabine Bergler
- "In so many words: Knowledge as a lexical phenomenon" by Willem Meijs and Piek Vossen

"Redefining the 'level' of the 'word' " by Mellisa Macpherson

- "Lexical and world knowledge: Theoretical and applied viewpoints" by John S. White
- "Aspectual requirements of temporal connectives: Evidence for a two-level approach to semantics" by Michael Herweg
- "A model for the interaction of lexical and non-lexical knowledge in the determination of word meaning" by Peter Gerstl
- "For the lexicon that has everything" by Martha Evens *et al*
- "Acquiring and representing semantic information in a lexical knowledge base" by Nicoletta Calzolari
- "General lexical representation for an effect predicate" by Martha Palmer
- "The autonomy of shallow lexical knowledge" by Kathleen Dahlgren
- "A two-level knowledge representation for machine translation: Lexical semantics and tense/aspect" by Bonnie J. Dorr
- "Lexicon, ontology, and text meaning" by Boyan A. Onyshkevych and Sergei Nirenburg
- "Development of the Concept Dictionary—Implementation of lexical knowledge" by Tomoyoshi Matsukawa and Eiji Yokota
- "Presuppositions and default reasoning: A study in lexical pragmatics" by Robert Mercer

# Word Order in Categorial Grammar/L'ordre des mots dans les grammaires catégorielles

Alain Lecomte (editor)

(Université Blaise-Pascal-Clermont II)

Paris: Éditions Adosa (Langues naturelles et traitement de l'information 3, edited by Gabriel G. Bès), 1992, 269 pp. Paperbound, ISBN 2-86639-006-7, FF 300.-

This book contains the papers and discussion from a conference on word order in categorial grammar that was held in Clermont-Ferrand in May 1990. The contents are the following:

- "Topicalization: Categorial analysis and applicative grammar" by Jean-Pierre Desclès and Frédérique Segond
- "Dependency and constituency in categorial grammar" by Guy Barry and Martin Pickering
- "Between L and LP: A theory of word order in categorial grammar" by John C. Foster
- "The logical school and the categorial grammar" by Glyn Morrill

- "Filtres dans une grammaire categorielle" by Gabriel G. Bès and Karine Baschung
- "Categorial grammar with type-raising and composition" by Marie-Ange Légeret
- "Orbits" by Pierre-François Jurie
- "Connection grammars: A graph-oriented interpretation of categorial grammar" by Alain Lecomte
- "Proof nets for Lambek calculus" by Dirk Roorda
- "Chart parsing and the treatment of word order by hypothetical reasoning" by Esther König
- "A unification-based treatment of Spanish clitics" by John L. Beaven
- "Catalan clitics" by Glyn Morrill and Anna Gavarró
- "Les verbes supports dans une grammaire categorielle" by Martine Émorine
- "Questions for discussion" by Anna Szabolcsi
- "Why combinators?" by Jean-Pierre Desclès
- "Writing grammars and writing programs" by Glyn Morrill
- "Getting rid of syntax" by Michael Moortgat
- "Control of grammars" by Gabriel G. Bès

### New Directions in English Language Corpora: Methodology, Results, Software Developments

Gerhard Leitner (editor) (Free University of Berlin)

Berlin: Mouton de Gruyter (Topics in English Linguistics 9, edited by Jan Svartvik and Herman Wekker), 1992, ix + 368 pp. Hardbound, ISBN 0-11-013201-X, DM 178.–

This book contains papers from the 11th conference of the International Computer Archive of Modern English, Berlin, 1990. The contents are the following:

Part I: Corpus design and text encoding "The optimum corpus sample size?" by

- Pieter de Haan
- "Corpus sampling" by Jeremy Clear
- "International Corpus of English: Corpus design—problems and suggested solutions" by Gerhard Leitner
- "The Northern Ireland transcribed corpus of speech" by John Kirk
- "Problems in the compilation of a corpus of standard Caribbean English: A pilot study" by Christian Mair
- "The Text Encoding Initiative: A progress report" by Lou Burnard

<sup>&</sup>quot;Semantics and phonology in categorial grammar" by Elisabet Engdahl

Part II: Automated syntactic and semantic text analysis

- "Pinpointing problematic tagging decisions" by Nancy Belmore
- "Inferences and lexical relations" by Willem Meijs
- "Tracing cohesive relations in corpora samples using a machine-readable dictionary" by Sylvia Janssen
- "Developing a scheme for annotating text to show anaphoric relations" by Steve Fligelstone
- "SUSANNE—A deeply analysed corpus of American English" by Geoffrey Sampson
- "Information retrieval and corpora" by Stephen Sutton and Anthony McEnery
- Part III: Corpora in language description "Relative infinitives in spoken and written English" by Christer Geisler
- *"Who(m)*? Case marking of *wh*-pronouns in written British and American English" by Edgar W. Schneider
- "Discourse category and text type classification: Procedural discourse in the Brown and the LOB corpora" by Kay Wikberg
- "Opaque and transparent features of Indian English" by S.V. Shastri
- "Computer analysis of spelling variants in Chaucer's Canterbury Tales" by Geoff Barnbrook
- "Pitch contours and tones in the Lancaster/IBM spoken English corpus" by Gerry Knowles
- "What do you think of that: A pilot study of the phraseology of the core words in English" by Antoinette Renouf
- "Sequences of spatial and temporal adverbials in spoken and written English" by Hilde Hasselgård
- "Grammatical or native like?" by Göran Kjellmer
- "Collocation and bilingual text" by Jacques Noël

### Directions in Corpus Linguistics: Proceedings of Nobel Symposium 82, Stockholm, 4–8 August 1991

Jan Svartvik (editor) (Lund University)

Berlin: Mouton de Gruyter (Trends in Linguistics: Studies and Monographs 65, edited by Werner Winter), 1992, xii + 487 pp. Hardbound, ISBN 3-11-012826-8, DM 218.–

This book contains papers from the Nobel Symposium on Corpus Linguistics, Stockholm, August 1991. The contents are the following:

- "Opening address" by Sture Allén
- "Corpus linguistics comes of age" by Jan Svartvik
- "Language corpora B.C." by W. Nelson Francis
- "'Corpus linguistics' or 'Computer-aided armchair linguistics' " by Charles J. Fillmore
- "Language as system and language as instance: The corpus as a theoretical construct" by M. A. K. Halliday
- "The importance of corpus linguistics to understanding the nature of language" by Wallace Chafe; with comments by Christian Mair
- "Corpora and theories of linguistic performance" by Geoffrey Leech; with comments by Bengt Sigurd
- "Design principles in the transcription of spoken discourse" by Jane A. Edwards; with comments by Gösta Bruce
- "Modern Swedish text corpora" by Martin Gellerstam; with comments by Gunnel Engwall
- "A new corpus of English: ICE" by Sidney Greenbaum; with comments by Jan Aarts
- "The diachronic corpus as a window to the history of English" by Matti Rissanen; with comments by Gunnel Tottie
- "Using computer-based text corpora to analyze the referential strategies of spoken and written texts" by Douglas Biber; with comments by Bengt Altenberg
- "Rationality in everyday talk: From process to system" by Ruqaiya Hasan; with comments by Donald Hindle
- "Using corpus data in the Swedish Academy grammar" by Staffan Hellberg; with comments by Stig Johansson
- "Preferred ways of putting things with implications for language teaching" by Graeme Kennedy; with comments by Göran Kjellmer
- "The automatic analysis of corpora" by John M. Sinclair; with comments by Fred Karlsson
- "The odd couple: The linguist and the software engineer. The struggle for high quality computerized language aids" by Henry Kučera; with comments by Magnus Ljung
- "Probabilistic parsing" by Geoffrey Sampson; with comments by Benny Brodda
- "On corpus principles and design" by Randolph Quirk