

Briefly Noted

Flexibility Principles in Boolean Semantics: The Interpretation of Coordination, Plurality, and Scope in Natural Language

Yoad Winter

(Technion, Israel Institute of Technology)

Cambridge, MA: The MIT Press (Current studies in linguistics, edited by Samuel Jay Keyser, volume 37), 2001, xi+297 pp; hardbound, ISBN 0-262-23218-9, \$45.00

"Since the early work of Montague, Boolean semantics and its subfield of generalized quantifier theory have become the model-theoretic foundation for the study of meaning in natural languages. This book uses this framework to develop a new semantic theory of central linguistic phenomena involving coordination, plurality, and scope. The proposed theory makes use of the standard Boolean interpretation of conjunction, a choice-function account of indefinites, and a novel semantics of plurals that is not based on the distributive/collective distinction. The key to unifying these mechanisms is a version of Montagovian semantics that is augmented by flexibility principles: semantic operations that have no counterpart in phonology.

"This is the first book to cover these areas in a way that is both linguistically comprehensive and formally explicit. On one hand, it addresses questions of primarily linguistic concern: the semantic functions of words like *and* and *or* in different languages, the interpretation of indefinites and their scope, and the semantic typology of noun phrases and predicates. On the other hand, it addresses formal questions that are motivated by the treatment of these linguistic problems: the use of Boolean algebras in linguistics, the proper formalization of choice functions within generalized quantifier theory, and the extension of this theory to the domain of plurality. While primarily intended for readers with a background in theoretical linguistics, the book will also be of interest to researchers and advanced students in logic, computational linguistics, philosophy of language, and artificial intelligence."—*From the publisher's announcement*

Spatial Language: Cognitive and Computational Perspectives

Kenny R. Coventry and Patrick Olivier

(University of Plymouth and University of York)

Dordrecht: Kluwer Academic Publishers, 2002, xi+283 pp; hardbound, ISBN 1-4020-0208-4, \$100.00, £69.00, €110.00

"The chapters in the present volume reflect a commitment to the development of cognitively informed computational treatments of spatial language and spatial representation. Therefore the chapters present computational work, empirical work, or a combination of both."—*From the publisher's announcement*

The contents of the volume are as follows:

- "Reasoning about shape using the tangential axis transform or the shape's 'grain'" by Geoffrey Edwards
- "A conceptual model for representing verbal expressions used in route descriptions" by Agnès Gryl, Bernard Moulin, and Driss Kettani
- "Resolving ambiguous descriptions through visual information" by Ingo Duwe, Klaus Kessler, and Hans Strohner
- "An anthropomorphic agent for the use of spatial language" by Tanja Jörding and Ipke Wachsmuth
- "Gesture, thought, and spatial language" by Karen Emmorey and Shannon Casey
- "Organization of temporal situations" by Nancy Franklin and Todd Federico
- "Grounding meaning in visual knowledge. A case study: Dimensional adjectives" by Anna Goy
- "Understanding how we think about space" by Christina Manning, Maria D. Sera, and Herbert L. Pick, Jr.
- "The real story of 'over?'" by Kenny R. Coventry and Gayna Mather
- "Generating spatial descriptions from a cognitive point of view" by Robert Porzel, Martin Jansche, and Ralf Meyer-Klabunde
- "Multiple frames of reference in interpreting complex projective terms" by Carola Eschenbach, Christopher Habel, and Annette Leßmöllmann
- "Goal-directed effects on processing a spatial environment. Indications from

memory and language" by Holly A. Taylor and Susan J. Naylor
 "Memory for text and memory for space. Two concurrent memory systems?" by Monika Wagoner-Wender

Corpus Linguistics at Work

Elena Tognini-Bonelli
 (University of Lecce and the Tuscan Word Center)

Amsterdam: John Benjamins Publishing Company (Studies in corpus linguistics, edited by Elena Tognini-Bonelli, volume 6), 2001, xi+223 pp; hardbound, ISBN 1-58811-061-3 and 90-272-2276-2, \$57.00, €63.00

"The book offers a combined discussion of the main theoretical, methodological and application issues related to corpus work. Thus, starting from the definition of what is a corpus and why reading a corpus calls for a different methodology from reading a text, the underlying assumptions behind corpus work are discussed. The two main approaches to corpus work are discussed as the 'corpus-based' and the 'corpus-driven' approach and the theoretical positions underlying them explored in detail. The book adopts and exemplifies the parameters of the corpus-driven approach and posits a new unit of linguistic description defined systematically in the light of corpus evidence. The applications where the corpus-driven approach is exemplified are language teaching and contrastive linguistics. Alternating between practical examples and theoretical evaluation, the reader is led step-by-step to a detailed understand-

ing of the issues involved in corpus work and, at the same time, tempted to explore for himself some of the major applications where a corpus-driven methodology can reveal unprecedented insights into linguistic patterning."—*From the publisher's announcement*

Phrase Structure Composition and Syntactic Dependencies

Robert Frank
 (Johns Hopkins University)

Cambridge, MA: The MIT Press (Current studies in linguistics, edited by Samuel Jay Keyser, volume 34), 2002, xiv+324 pp; hardbound, ISBN 0-232-06229-1, \$40.00

"In *Phrase Structure Composition and Syntactic Dependencies*, Robert Frank explores an approach to syntactic theory that weds Tree Adjoining Grammar (TAG) formalism with the minimalist framework. TAG has been extensively studied both for its mathematical properties and for its usefulness in computational linguistics applications. Frank shows that incorporating TAG's formally restrictive operations for structure building considerably simplifies the model of grammatical competence, particularly in the components concerned with syntactic movement and locality. The empirical advantages of the resulting model, illustrated with extensive case studies of subject-raising constructions and *wh*-questions, point toward a conception of grammar that is sharply limited in its computational power."—*From the publisher's announcement*