appropriate, with publication of the thesis as a technical report and by University Microfilms sufficing for the few readers who require the gory details.—G.H.

## References

- Sager, Naomi 1981 Natural Language Information Processing. Addison-Wesley, Reading, MA.
- Sager, Naomi; Friedman, Carol; and Lyman, Margaret S. 1987 Medical Language Processing: Computer Management of Narrative Data. Addison-Wesley, Reading, MA.
- Webber, Bonnie Lynn 1978 A Formal Approach to Discourse Anaphora (Outstanding Dissertations in Linguistics). Garland Publishing, New York, NY.

MEANING AND MENTAL REPRESENTATIONS

## Umberto Eco, Marco Santambrogio, and Patrizia Violi (eds.)

Bloomington, IN: Indiana University Press, 1988, 237 pp. ISBN 0-253-33724-0, \$29.95 (hb); ISBN 0-253-20496-8, \$12.95 (sb)

MENTAL REPRESENTATIONS: THE INTERFACE BETWEEN LANGUAGE AND REALITY

Ruth M. Kempson (ed.) (University of London)

Cambridge, England: Cambridge University Press, 1988, viii + 229 pp.

Hardbound, ISBN 0-521-34251-1 (hb)

These two collections exemplify opposite approaches to mental representation and the question of how cognition relates to language and reality. Eco, Santambrogio, and Violi start from European semiotics and try to build a bridge to Anglo-American philosophy of language and artificial intelligence. Kempson, on the other hand, looks at current linguistic theories, including GB and situation semantics, with a heavy leaning towards relevance theory. The papers in the two books are as follows:

- Eco, Santambrogio, and Violi:
  - 'Introduction'', Marco Santambrogio and Patrizia Violi "On the Circumstantial Relation Between Meaning and Content", Jon Barwise
  - "On Truth. A Fiction", Umberto Eco

"Quantification, Roles and Domains", Gilles Fauconnier

"Conceptual Semantics", Ray Jackendoff

"How is Meaning Mentally Represented?", Philip N. Johnson-Laird

"Cognitive Semantics", George Lakoff

"The Analysis of Nominal Compounds", Wendy G. Lehnert

"Identity in Intensional Logic: Subjective Semantics", Bas van Fraasen

"Reference and its Role in Computational Models of Mental Representations", Yorick Wilks

- Kempson:
  - I. Introduction

"The Relation Between Language, Mind, and Reality," Ruth M. Kempson

- II. On the Direct Interpretation of Natural Languages "Contexts, Models, and Meanings: A Note on the Data
- of Semantics", James Higginbotham

"Facts in Situation Theory: Representation, Psychology, or Reality", Robin Cooper

"Relational Interpretation," Elisabet Engdahl III. On the Syntactic Base for Interpretation

"Bound Variable Anaphora", Robert May

- "On Implicit Arguments", Michael Brody and M. Rita Manzini
- IV. On Internal Representations and Natural Language Use
- "Representation and Relevance", Deirdre Wilson and Dan Sperber
- "Implicature, Explicature, and Truth-Theoretic Semantics", Robyn Carston

"So as a Constraint on Relevance", Diane Blakemore V. The Language Faculty and Cognition

"On the Grammar-Cognition Interface: The Principle of Full Interpretation", Ruth M. Kempson

JAPANESE TONE STRUCTURE

Janet B. Pierrehumbert and Mary E. Beckman (AT&T Bell Labs and The Ohio State University)

Cambridge, MA: The MIT Press, 1989, ix + 282 pp. (Linguistic Inquiry Monographs 15) ISBN 0-262-66063-6, \$15.95 (sb)

Japanese tone structure provides a thorough, phonetically grounded description of accent and intonation in Tokyo Japanese, and uses it to develop an explicit account of surface phonological representation.... The authors' broader purpose, however, is to develop a general theory of surface representation that can capture salient facts about prosodic structure in all languages and provide a suitable input to phonetic rules. -From the publisher's announcement

## **BOOKS RECEIVED**

Books listed below that are marked with an asterisk will be reviewed in a future issue.

Readers who wish to review books for the journal should write, outlining their qualifications, to the book review editor, Graeme Hirst, Department of Computer Science, University of Toronto, Toronto, Canada M5S 1A4. Obviously, we cannot promise the availability of books in anyone's exact area of interest.

Authors and publishers who wish their books to be considered for review in Computational Linguistics should send a copy to the book review editor at the address above. All books received will be listed, but not all can be reviewed.

Readings in Distributed Artificial Intelligence by Alan H. Bond and Les Gasser (eds.)

(California Institute of Technology and University of Southern California, resp.)

San Mateo, CA: Morgan Kaufmann Publishers, 1988, xvii+649 pp.

ISBN 0-934613-63-X, \$29.95 (sb)

- Computer Applications in Language Learning by Theo Bongaerts, Pieter de Haan, Sylvia Lobbe, and Herman Wekker (eds.)
  - (University of Nijmegen)

Dordrecht: Foris Publications, 1988, vii+171 pp. ISBN 90-6765-400-0, Dfl 68.50 (sb)

The Artificial Intelligence Debate: False Starts, Real Foundations by Stephen R. Graubard (ed.) Cambridge, MA: The MIT Press, 1988, 311 pp. (Originally published as issue 117(1) of Daedalus, Winter 1988.) ISBN 0-262-57074-2, \$9.95 (sb)

- \*New Directions in Machine Translation (Proceedings of the conference, Budapest, August 1988) by Dan Maxwell, Klaus Schubert, and Toon Witkam (eds.) (BSO Research, Utrecht)
  Dordrecht: Foris Publications, 1988, 259 pp. (Distributed Language Translation 4)
  ISBN 90-6765-378-0 (sb); ISBN 90-6765-377-2 (hb)
- A Dictionary of Speech Therapy by David W. H. Morris (Dundee Royal Infirmary) London: Taylor & Francis, 1988, x+189 pp. ISBN 0-85066-444-6, \$27.00 (sb)
- Artificial Intelligence and Data Bases by John Mylopoulos and Michael L. Brodie (eds.) (University of Toronto and GTE Laboratories) San Mateo, CA: Morgan Kaufmann Publishers, 1989, vii+688 pp. ISBN 0-934613-53-2, \$34.95 (sb)
- Formal Methods in Artificial Intelligence by Allan Ramsay (University of Sussex) Cambridge University Press, 1988, ix+279 pp.

(Cambridge Tracts in Theoretical Computer Science 6) ISBN 0-521-35236-3, \$49.50 (hb)

- \*Applied Natural Language Processing by Stephen C. Shwartz Princeton, NJ: Petrocelli Books, 1987, xxvi+292 pp. ISBN 0-89433-260-0, \$35.95 (sb)
- Annual Review of Computer Science, Vol. 3 by Joseph F. Traub, Barbara J. Grosz, Butler W. Lampson, and Nils J. Nilsson (eds.)
  (Columbia University, Harvard University, Digital Equipment Corporation, and Stanford University)
  Palo Alto: Annual Reviews Inc., 1988, 423 pp. ISBN 0-8243-3203-2, ISSN 8756-7016, \$45.00 (hb)
  Language International: The Magazine for the Language Professions 1:1 (January/February 1989). Geoffrey Kingscott
- fessions 1:1 (January/February 1989), Geoffrey Kingscott (ed.) (Praetorius Ltd.)

Amsterdam: John Benjamins Publishing Co.

(ISSN not yet assigned.)

Private subscriptions: \$45.00, £25.00, Dfl 90.00

Library subscriptions: \$65.00, £37.00, Dfl 130.00