

**METATAXIS IN PRACTICE: DEPENDENCY SYNTAX FOR MULTILINGUAL MACHINE TRANSLATION**

**Dan Maxwell and Klaus Schubert, eds.**  
(BSO/Research, Utrecht)

Dordrecht: Foris, 1989, 323 pp., (Distributed Language Translation 6)

Hardbound, ISBN 90-6765-422-1, \$55.00, Dfl 110.-;

Paperbound, ISBN 90-6765-421-3, \$26.00, Dfl 52.-.

Tesnière's term *métataxe* refers to structural change in translation. In this book, a product of the DLT machine translation project, *metataxis* refers to the rules required to link the dependency syntaxes of two different languages for translation. The book gives dependency syntaxes for a variety of languages—German, Danish, Polish, Bengali, Finnish, Hungarian, Japanese, and Esperanto—and metataxes for Esperanto to French and English to Esperanto (Esperanto being the interlingua of the DLT system). The emphasis is on the practical details of the grammars.

**SPEECH INPUT AND OUTPUT ASSESSMENT: MULTILINGUAL METHODS AND STANDARDS**

**A. J. Fourcin, G. Harland, W. Barry, and V. Hazan, eds.**  
(University College London)

Chichester, England: Ellis Horwood, 1989, 290 pp.

(Ellis Horwood Books in Information Technology)

Distributed by John Wiley & Sons

Hardbound, ISBN 0-7458-0651-1 and 0-470-21439-2, \$67.95

This book reviews the methodology used in the assessment of speech recognition and synthesis systems. The text is based on a report that was prepared as part of the ESPRIT (European Strategic Program for Research and Development of Information Technology) program. Thus, although the editors are all from the University College London, the authors of the various chapters represent a broad sample of the major speech research centers in Europe.

The book is composed of six major chapters, with an introduction and a final note on future developments. An extensive bibliography is included at the end, along with a glossary, an index, and an appendix listing the project partners. The four major chapters cover assessment of speech recognition systems (Chapter 2), assessment of text-to-speech synthesis systems (Chapter 3), speech databases (Chapter 4), and transcription and labeling of speech data (Chapter 5). The last two chapters discuss applied issues relating to tools that are useful in the development of speech systems and management of large databases. The coverage in the four major chapters is generally very complete. Chapter 3 on text-to-speech is excellent.

The worst aspect of the book is its appearance; particularly the typesetting and page formatting. The typesetting is so poor it leads one to wonder if these people should try speech input/output. Of course, speech I/O would obviate the typesetting problem. The best aspect of the book is its technical content. Any serious developer or consumer of speech technology can gain by careful study of this book. Furthermore, the multilingual mission of this ESPRIT project forced the authors to confront a number of

difficult questions, for which this book offers some good practical starting points.—*Jared Bernstein, SRI International*

**BOOKS RECEIVED**

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

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 below. All books received will be listed, but not all can be reviewed.

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.

**†Functional Grammar and the Computer**

John H. Connolly and Simon C. Dik (eds.)

Dordrecht: Foris, 1989, viii + 322 pp.

(Functional Grammar series 10)

Paperbound, ISBN 90-6765-433-7

**Theoretical Perspectives on Language Deficits**

Yosef Grodzinsky

(Tel Aviv University)

Cambridge, MA: The MIT Press, 1990, xviii + 192 pp.

(Series in Issues in Biology of Language and Cognition)

Hardbound, ISBN 0-262-07123-1, \$25.00

**†Working with Analogical Semantics: Disambiguation Techniques in DLT**

Victor Sadler

(BSO/Research, Utrecht)

Dordrecht: Foris, 1989, 256 pp.

(Distributed Language Translation 5)

Hardbound, ISBN 90-6765-429-9, \$60.00, Dfl 120.-; Paperbound, ISBN 90-6765-428-0, \$33.00, Dfl 67.-.

**ERRATUM**

Harold Somer's review of *From Syntax to Semantics* (Erich Steiner et al., eds.) in *Computational Linguistics* 16(1) March 1990, was marred by typographical errors that, ironically, occurred just at the point where the reviewer was quoting an example of bad typography in the book under review. Hence, errors of this journal appeared to be attributed to the book.

The paragraph in question, which appeared near the top of page 48, should have read as follows:

Apart from jargon and unobtainable references, other problems with the book include some disastrous typesetting; notably, for example, the use of slash, bold slash, backslash, and vertical bar in one of the formalisms (pp. 120ff), and the nonuse of superscripts and subscripts from time to time, as in this example:

$$X_{n\text{bar}} \rightarrow (C_1 \dots C_m) X_{n-1\text{bar}} (C_m + 1 \dots C_n)$$

(where each  $C_i$  is a maximal projection or a lexical formative)

The MIT Press apologizes for the error.