

The final critical remark is related to the degree of redundancy. There are many statements that occur time and again throughout the book. The reader often wonders why one is being told things one already knows. It is not as bad as in another recent dissertation from Yale (Hammond 1988), which was recently reviewed in a German AI journal (Hertzberg and Horz 1990). A translated quotation from this review: "If the reader really wants to read the complete book, she is punished and lulled to sleep by the recurrent repetitions. . . . The sentence 'Plans are indexed by the goals they satisfy and by the problems they avoid' is learned by heart just by reading any two chapters. If Hammond is an efficient LaTeX user, he has probably written a macro; at least, it would have been worthwhile." Once more: it is not as bad with Hovy, but it is annoying nevertheless.

My general opinion about the book is that it is necessary reading for anybody working in NL generation. It is profitable reading for anybody engaged in natural language processing. And it is worthwhile reading for linguists specializing in pragmatics, style, or language production. I have stated above those properties that I missed or didn't like. What I did like was Hovy's scientific rigor in advocating the pragmatic basis of text generation. This attitude is significant for an AI-oriented approach to language processing, but this does not imply that it is a scruffy one.

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BRIEFLY NOTED

LEARNABILITY AND LINGUISTIC THEORY

Robert J. Matthews and William Demopoulos, eds.

(Rutgers University and University of Western Ontario)

Dordrecht: Kluwer, 1989, vii + 217 pp.

(Studies in Theoretical Psycholinguistics 9)

Hardbound, ISBN 0-7923-0247-8, Dfl 130.-, \$64.00, £42.00

The ninth volume of Kluwer's Studies in Theoretical Psycholinguistics is, like the previous ones, devoted to what any modern linguistic theory has inevitably to face, namely the logical problem of language acquisition. As before, in most contributed papers the problem is discussed within the parametrized Government-Binding framework. This time, however, issues from formal learnability theory serve as a starting point and as a basis for the subsequent reformulation of the rationalist-empiricist debate on language acquisition. Less general questions are also addressed; as, for example, how children eventually succeed in avoiding overgeneralizations—an intriguing puzzle, given the widely accepted view that not enough negative evidence is directly accessible in the course of first language learning.

No doubt the book may be of interest to cognitive scientists and those computational linguists who deal with modeling natural language acquisition. The idea of having a computer system that gradually learns a language from examples, very much like people do, is an exciting one, and it will surely receive much attention in the foreseeable future. Though the book under consideration does not provide the would-be designers of a computer learning system with algorithms they might immediately employ, it presents a wide selection of topics characteristic of the current literature on modeling natural language acquisition and, consequently, can be used by computational linguists as an important source of information relevant to their research.—Miroslaw Bańko, Institute of Polish Language, Warsaw University

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.-; Paper-

bound, 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.