Supertagging: Using Complex Lexical Descriptions in Natural Language Processing

Edited by Srinivas Bangalore and Aravind K. Joshi
Contents

Preface ix
List of Figures xi
Contributors xxi

I Creating and Organizing Supertags 33

1 Introduction 1
Srinivas Bangalore and Aravind Joshi

2 From Treebanks to Tree-Adjoining Grammars 35
Fei Xia and Martha Palmer

3 Developing Tree-Adjoining Grammars with Lexical Descriptions 73
Fei Xia, Martha Palmer, and K. Vijay-Shanker

II Supertagging and Parsing 111

4 Complexity of Parsing for Some Lexicalized Formalisms 113
Giorgio Satta

5 Combining Supertagging and Lexicalized Tree-Adjoining Grammar Parsing 133
Anoop Sarkar
Discriminative Learning of Supertagging

LIBIN SHEN

A Nonstatistical Parsing-Based Approach to Supertagging

PIERRE BOULLIER

Nonlexical Chart Parsing for TAG

ALEXIS NASR AND OWEN RAMBOW

Supertags in Related Formalisms

Supertagging for Efficient Wide-Coverage CCG Parsing

STEPHEN CLARK AND JAMES R. CURRAN

Constraint Dependency Grammars: SuperARVs, Language Modeling, and Parsing

MARY P. HARPER AND WEN WANG

Guiding a Constraint Dependency Parser with Supertags

KILIAN FOTH, TOMAS BY, AND WOLFGANG MENZEL

Extraction of Type-Logical Supertags from the Spoken Dutch Corpus

RICHARD MOOT

Extracting Supertags from HPSG-Based Treebanks

GÜNTER NEUMANN AND BERTHOLD CRYSMANN

Probabilistic Context-Free Grammars with Latent Annotations

TAKUYA MATSUZAKI, YUSUKE MIYAO AND JUN'ICHI TSUJI

Computational Paninian Grammar Framework

AKSHAR BHARATI AND RAJEEV SANGAL

Linguistic and Psycholinguistic Issues
16 Lexicalized Syntax and Phonological Merge 373
ROBERT FRANK

17 Constraining the Form of Supertags with the Strong Connectivity Hypothesis 407
ALESSANDRO MAZZEI, VINCENZO LOMBARDO, AND PATRICK STURT

V Applications of Supertagging 429

18 Semantic Labeling and Parsing via Tree-Adjoining Grammars 431
JOHN CHEN

19 Applications of HMM-Based Supertagging 449
KARIN HARBUSCH, JENS BÄCKER, AND SASA HASAN

Author Index 479

Subject Index 485