

**23rd  
Annual Meeting  
of the  
Association for  
Computational Linguistics**

**Proceedings of the Conference**

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## PREFACE

The conference program and organization have been created through the efforts of a large number of people who have given generously of their time and talents. I especially thank the program committee:

*Applications Panel:*

Tim Finin	University of Pennsylvania
Ralph Grishman	New York University
Beatrice Oshika	System Development Corporation
Gary Simons	Summer Institute of Linguistics
Jonathan Slocum	Microelectronics and Computer Technology Corporation

*Theory Panel:*

Robert Amsler	Bell Communications Research
Rusty Bobrow	Bolt Beranek and Newman
Daniel Chester	University of Delaware
Phil Cohen	SRI International
Ivan Sag	Stanford University

Other energetic contributors include Martha Evens and Victor Yngve, who have made it possible to meet at the University of Chicago; Carole Hafner, who has put together a marvelous collection of exhibits and demonstrations; Lisa Trentham, who has facilitated the necessary communication in a hundred ways; and Norm Sondheimer and Don Walker, whose experience and energy have kept the whole process on course. Now we can all benefit from their generosity.

William C. Mann  
Chair, Program Committee



# CONFERENCE PROGRAM

TUESDAY, 9 JULY

8:45 am - 12:15 pm

*Semantics of Temporal Queries and Temporal Data*  
Carole D. Hafner, Northeastern University

*Temporal Inferences in Medical Texts*  
Klaus K. Obermeier, Battelle's Columbus Laboratories

*Tense, Aspect and the Cognitive Representation of Time*  
Kenneth Man-kam Yip, Massachusetts Institute of Technology

*Classification of Modality Function and Its Application to Japanese Language Analysis*  
Shozo Naito, Akira Shimazu, Hirosato Nomura, Musashino Electrical Communication Laboratories, N.T.T.

*Universality and Individuality: the Interaction of Noun Phrase Determiners in Copular Clauses*  
John C. Mallery, Massachusetts Institute of Technology

*Meinongian Semantics for Propositional Semantic Networks*  
William J. Rapaport, University at Buffalo, State University of New York

1:45 pm - 5:15 pm

**Invited Paper:** *A Survey of Natural Language Research at Japan's Institute for New Generation Computing Technology*  
Fernando Pereira, SRI International

*Speech Acts and Rationality*  
Philip R. Cohen, SRI International; Hector J. Levesque, University of Toronto

*Ontological Promiscuity*  
Jerry R. Hobbs, SRI International

*Reversible Automata and Induction of the English Auxiliary System*  
Samuel F. Pilato, Robert C. Berwick, Massachusetts Institute of Technology

*The Computational Difficulty of ID/LP Parsing*  
G. Edward Barton, Jr., Massachusetts Institute of Technology

*Some Computational Properties of Tree Adjoining Grammars*  
K. Vijay-Shankar, Aravind K. Joshi, University of Pennsylvania

*TAG's as a Grammatical Formalism for Generation*  
David D. McDonald, James D. Pustejovsky, University of Massachusetts

WEDNESDAY, 10 JULY

8:45 am - 12:15 pm

*Modular Logic Grammars*  
Michael C. McCord, IBM Thomas J. Watson Research Center

*New Approaches to Parsing Conjunctions Using Prolog*  
Sandiway Fong, Robert C. Berwick, Massachusetts Institute of Technology

*Parsing with Discontinuous Constituents*  
Mark Johnson, Stanford University

*Structure Sharing with Binary Trees*

Lauri Karttunen, SRI International; Martin Kay, Xerox PARC

*A Structure-Sharing Representation for Unification-Based Grammar Formalisms*

Fernando C. N. Pereira, SRI International

*Using Restriction to Extend Parsing Algorithms for Complex-Feature-Based Formalisms*

Stuart M. Shieber, SRI International

1:45 pm - 5:15 pm

**Invited Paper:** *Knowledge and Language: A New Frontier*

William Woods

*Semantic Caseframe Parsing and Syntactic Generality*

Philip J. Hayes, Peggy M. Andersen, Scott Safier, Carnegie Group Incorporated

*Movement in Active Production Networks*

Mark A. Jones, Alan S. Driscoll, AT&T Bell Laboratories

*Parsing Head-Driven Phrase Structure Grammar*

Derek Proudian, Carl Pollard, Hewlett-Packard Laboratories

*A Computational Semantics for Natural Language*

Lewis G. Creary, Carl J. Pollard, Hewlett-Packard Laboratories

*Analysis of Conjunctions in A Rule-Based Parser*

Leonardo Lesmo, Pietro Torasso, Universita di Torino

5:30 pm - 6:30 pm ACL Business Meeting

*NOMINATIONS FOR ACL OFFICES FOR 1986*

*President:* Ralph Weischedel, Bolt Beranek and Newman

*Vice President:* William Mann, USC/Information Science Institute

*Secretary/Treasurer:* Donald Walker, Bell Communications Research

*Executive Committee (1986-1988):* Barbara Grosz, SRI International

*Nominating Committee (1986-1988):* Madeleine Bates, Bolt Beranek and Newman

7:30 pm - 10:30 pm Reception and Banquet

Hutchinson Commons, 5706 S. University

Presidential address, Madeleine Bates, Bolt Beranek and Newman

THURSDAY, 11 JULY

8:45 am - 12:15 pm

**Invited Paper:** *The Structures of Discourse Structures*

Barbara Grosz

*The Dynamic Discourse Model: A Formal Approach to Discourse Segmentation*

Remko Scha, Livia Polanyi, Bolt Beranek and Newman

*A Pragmatics-Based Approach to Understanding Intersentential Ellipsis*

Sandra Carberry, University of Delaware

*Some Pragmatic Issues in the Planning of Definite and Indefinite Noun Phrases*

Douglas E. Appelt, SRI International

*Repairing Reference Identification Failures by Relaxation*

Bradley A. Goodman, BBN Laboratories

1:45 pm - 5:15 pm

**Invited Paper: Questions and Responses**  
Bonnie Webber, University of Pennsylvania

*Anaphora Resolution: Short-Term Memory and Focusing*  
Raymonde Guindon, Microelectronics and Computer Technology Corporation

*Link-Dependent Message Generation in XSEL*  
Karen Kukich, Carnegie-Mellon University

*Description Strategies for Naive and Expert Users*  
Cecile L. Paris, Columbia University

*Stress Assignment in Letter to Sound Rules for Speech Synthesis*  
Kenneth Church, AT&T Bell Laboratories

*An Eclectic Approach to Building Natural Language Interfaces*  
Brian Phillips, Michael J. Freiling, James H. Alexander, Steven L. Messick, Steve Rehfuss, Sheldon Nicholl, Tektronix

## FRIDAY, 12 JULY

8:45 am - 12:15 pm

*Structure-Sharing in Lexical Representation*  
Daniel Flickinger, Carl Pollard, Thomas Wasow, Hewlett-Packard Laboratories

*A Tool Kit for Lexicon Building*  
Thomas E. Ahlswede, Illinois Institute of Technology

*Using an On-Line Dictionary to Find Rhyming Words and Pronunciations for Unknown Words*  
Roy J. Byrd, Martin S. Chodorow, IBM T.J. Watson Research Center

*Towards a Self-Extending Lexicon*  
Uri Zernik, Michael G. Dyer, University of California

*Grammatical Analysis by Computer of the Lancaster-Oslo/Bergen (LOB) Corpus of British English Texts*

Andrew David Beale, Bowland College, University of Lancaster, England

*Extracting Semantic Hierarchies from a Large On-Line Dictionary*  
Martin S. Chodorow, Roy J. Byrd, George E. Heidorn, IBM T.J. Watson Research Center

1:45 pm - 3:45 pm

**Invited Paper: Dictionaries of the Mind**  
George A. Miller, Princeton University

*The Use of Syntactic Clues in Discourse Processing*  
Nan Decker, Cincinnati, Ohio

*Grammar Viewed as a Functioning Part of a Cognitive System*  
Helen M. Gigley, University of New Hampshire

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