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Proceedings of the Conference

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PREFACE

This volume is the official record of the Twenty-Fourth Annual Meeting of the Association for Computational Linguistics. It contains abstracts for the tutorials and panels as well as the texts of the presented papers.

Such a meeting can be a success only through the efforts of a large number of people. We are first indebted to the very many authors who submitted papers. While the great majority of them reported important work, only a third could be included in the program. We are also indebted to the members of the Program Committee who helped make the difficult decisions:

Kenneth W. Church	*AT&T Bell Laboratories*
Michael Dyer	*University of California at Los Angeles*
Carole D. Hafner	*Northeastern University*
George E. Heidorn	*IBM T.J. Watson Research Center*
David D. McDonald	*University of Massachusetts*
Fernando C. N. Pereira	*SRI International*
Candace L. Sidner	*BBN Laboratories*
John S. White	*Siemens Information Systems*

In addition, much credit goes to Bruce W. Ballard who organized the tutorial sessions and to Ralph Grishman and Cecile Paris who organized the demonstrations and exhibits.

On administrative matters, Don Walker published the Call for Papers and this Proceedings, sent out the advertisements and registration packets, and handled countless other problems that most of us never knew existed. Kathy McKeown and Cecile Paris were in charge of the huge task of local arrangements. I am also grateful to the Department of Computer Science at Duke University which provided extensive secretarial support for my correspondence and organizational activities.

Alan W. Biermann, *Duke University*
Chair, Program Committee

CONFERENCE PROGRAM

TUESDAY, 10 JUNE

8:45–12:45 **MORNING TUTORIAL SESSIONS**

Introduction to Computational Linguistics
Ralph Grishman (New York University)

Natural Language Generation
Kathleen McKeown (Columbia University)

Structuring the Lexicon
Robert Ingria (BBN Laboratories)

1:45–5:45 **AFTERNOON TUTORIAL SESSIONS**

Recent Developments in Syntactic Theory and Their Computational Import
Anthony Kroch (University of Pennsylvania)

Current Approaches to Natural Language Semantics
Graeme Hirst (University of Toronto)

Machine Translation
Sergei Nirenburg (Colgate University)

WEDNESDAY MORNING, JUNE 11

9:00–9:15 Opening remarks and announcements

9:15–10:15 **Invited Paper:** *Bringing Natural Language Processing to the Micro-Computer Market: The Story of Q&A*
Gary Hendrix (Symantec)

10:15–10:40 *Time and Tense in English*
Mary P. Harper & Eugene Charniak (Brown University)

11:10–11:35 *Recovering Implicit Information*
Martha S. Palmer, Deborah A. Dahl, Rebecca J. Schiffman, Lynette Hirschman, Marcia Linebarger & John Dowding (SDC–A Burroughs Company)

11:35–12:00 *Semantic Acquisition in TELI: A Transportable, User-Customized Natural Language Processor*
Bruce Ballard & Douglas Stumberger (AT&T Bell Laboratories)

WEDNESDAY AFTERNOON, JUNE 11

1:30–2:00 *Computational Complexity of Current GPSG Theory*
and
Defining Natural Language Grammars in GPSG
Eric Sven Ristad (MIT AI Laboratory & Thinking Machines Corporation)

2:00–2:30 *Constraint Propagation in Kimmo Systems*
and
Computational Complexity in Two-Level Morphology
G. Edward Barton, Jr. (MIT AI Laboratory)

2:30–2:55 *Parsing a Free-Word Order Language: Warlpiri*
Michael B. Kashket (MIT AI Laboratory)

3:25–3:50 *The Relationship Between Tree Adjoining Grammars And Head Grammars*
D. J. Weir, K. Vijay-Shanker, & A. K. Joshi (University of Pennsylvania)

3:50–4:15 *Categorial and Non-Categorial Languages*
Joyce Friedman & Ramarathnam Venkatesan (Boston University)

4:15–4:40 *Parsing Conjunctions Deterministically*
Donald W. Kosy (Carnegie-Mellon University)

4:40–5:05 *Copying in Natural Languages, Context-Freeness, and Queue Grammars*
Alexis Manaster-Ramer (University of Michigan)

7:00–8:00 **Reception**
Levien Lounge, Ferris Booth Hall, 115th & Broadway

8:00–10:00 **Banquet**
Wollman Auditorium, Ferris Booth Hall
Presidential Address: Ralph Weischedel (BBN Laboratories)

THURSDAY MORNING, JUNE 12

9:00–9:25 *A Model of Revision in Natural Language Generation*
Marie M. Vaughan & David D. McDonald (University of Massachusetts)

9:25–9:50 *The ROMPER System: Responding to Object-Related Misconceptions using Perspective*
Kathleen F. McCoy (University of Delaware)

9:50–10:15 *Encoding and Acquiring Meanings for Figurative Phrases*
Michael G. Dyer & Uri Zernik (University of California at Los Angeles)

10:45–11:10 *Semantically Significant Patterns in Dictionary Definitions*
Judith Markowitz (De Paul University), Thomas Ahlswede, & Martha Evens (Illinois Institute of Technology)

11:10–11:35 *Computer Methods for Morphological Analysis*
Roy J. Byrd, Judith L. Klavans (IBM T.J. Watson Research Center), Mark Aronoff, & Frank Anshen (SUNY Stonybrook)

11:35–12:00 *Bulk Processing of Text on a Massively Parallel Computer*
Gary Sabot (Thinking Machines Corporation)

THURSDAY AFTERNOON, JUNE 12

1:30–1:55 *The Intonational Structuring of Discourse*
Julia Hirschberg & Janet B. Pierrehumbert (AT&T Bell Laboratories)

1:55–2:20 *The Contribution of Parsing to Prosodic Phrasing in an Experimental Text-to-Speech System*
Joan Bachenko, Eileen Fitzpatrick, & C. E. Wright (AT&T Bell Laboratories)

2:20–2:45 *Morphological Decomposition and Stress Assignment for Speech Synthesis*
Ken Church (AT&T Bell Laboratories)

3:15–3:40 *A Sentence Analysis Method For a Japanese Book Reading Machine For the Blind*
Yukata Ohyama, Toshikazu Fukushima, Tomoki Shutoh, & Masamichi Shutoh (NEC Corporation)

3:40–4:05 *Japanese Prosodic Phrasing and Intonation Synthesis*
Mary E. Beckman & Janet B. Pierrehumbert (AT&T Bell Laboratories)

4:05–5:05 **Forum on Connectionism**
Moderator: Mark Y. Liberman (AT&T Bell Laboratories)
Panelists: Terrence J. Sejnowski (Johns Hopkins University)
David Waltz (Thinking Machines Corporation & Brandeis University)

FRIDAY MORNING, JUNE 13

9:00–9:25 *Donnellan's Distinction and a Computational Model of Reference*
Amichai Kronfeld (SRI International & Stanford University)

9:25–9:50 *The Detection and Representation of Ambiguities of Intension and Description*
Brenda Fawcett & Graeme Hirst (University of Toronto)

9:50–10:15 *A Property-Sharing Constraint in Centering*
Megumi Kameyama (University of Pennsylvania)

10:45–11:10 *A Model of Plan Inference that Distinguishes Between the Beliefs of Actors and Observers*
Martha E. Pollack (SRI International)

11:10–11:35 *Linguistic Coherence: A Plan-Based Alternative*
Diane J. Litman (AT&T Bell Laboratories)

11:35–12:00 *The Structure of User-Adviser Dialogues: Is there Method in their Madness?*
Raymonde Guindon (MCC), Paul Sladky (University of Texas & MCC), Hans Brunner (Honeywell), & Joyce Conner (MCC)

FRIDAY AFTERNOON, JUNE 13

1:15–2:00 **BUSINESS MEETING AND ELECTIONS**

Nominations for ACL Offices for 1987
President: William Mann (USC/Information Sciences Institute)
Vice President: Alan Biermann (Duke University)
Secretary-Treasurer: Donald Walker (Bell Communications Research)
Executive Committee (1987-1989): Karen Sparck Jones (Cambridge University)
Nominating Committee (1987-1989): Ralph Weischedel (BBN Laboratories)

2:00–2:25 *Commonsense Metaphysics and Lexical Semantics*
Jerry R. Hobbs, William Croft, Todd Davies, Douglas Edwards, & Kenneth Laws (SRI International)

2:25–2:50 *A Terminological Simplification Transformation for Natural Language Question-Answering Systems*
David G. Stallard (BBN Laboratories)

2:50–3:15 *Some Uses of Higher-Order Logic in Computational Linguistics*
Dale A. Miller & Gopalan Nadathur (University of Pennsylvania)

3:45–4:10 *A Logical Semantics for Feature Structures*
Robert Kasper & William Rounds (University of Michigan)

4:10–5:10 **Forum on Machine Translation**
Moderator: John S. White (Siemens Information Systems)
Panelists: Martin Kay (Xerox PARC)
Margaret King (ISSCO)

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