The FINITE STRING Newsletter

Program of the 1981 ACL/LSA Sessions

The ACL is sponsoring three sessions on "Computer Modeling of Linguistic Theory" in conjunction with the Annual Meeting of the *Linguistic Society of America* which will be held in New York City at the Grand Hyatt Hotel, December 28-30, 1981. All of the ACL sessions will be held on Monday, December 28. Two sessions of contributed papers will be presented, one in the morning and one in the afternoon, and an evening panel session will complete the offering of ACL/LSA sessions.

The program committee for these sessions was cochaired by D. Terence Langendoen, Brooklyn College and CUNY Graduate Center and Stanley Petrick, IBM Thomas J. Watson Research Center. The members of the committee were Lance Miller, IBM Thomas J. Watson Research Center, John Moyne, Queens College and CUNY Graduate Center, and Naomi Sager, NYU Courant Institute of Mathematical Sciences.

MONDAY, DECEMBER 28, 1981 Morning Session Contributed Papers

The Formal Language Theory of Lexical Functional Grammar

Robert C. Berwick, MIT AI Laboratory

Coping with Syntactic Ambiguity, or How to Put the Block in the Box on the Table

Kenneth Church and Ramesh Patil, MIT Laboratory for Computer Science

Neurolinguistically Based Modeling of Natural Language Processing

Helen M. Gigley, University of Mass./Amherst

Phonological Rules and Finite-State Transducers Ronald M. Kaplan and Martin Kay, *Xerox Palo Alto Research Center*

On the Form of the Output of the Human Sentence Parsing Mechanism

D. Terence Langendoen, Brooklyn College and CUNY Graduate Center John A. Moyne, Queens College and CUNY Graduate Center

The Implications of the Word HAVE Rob Milne, *University of Edinburgh*

MONDAY, DECEMBER 28, 1981 Afternoon Session

Contributed Papers

Resolution of Noun Phrase Anaphora Ralph Grishman and Ngo Thanh Nhan, New York University Computer Generation of Topic Paragraphs: Structure and Style

Karen Jensen, *IBM Research* Robert Granville, *MIT AI Laboratory* Ronald Ambrosio, Michael Kluger, and Amy Zwarico, *Hofstra University*

Morphological Analysis of Finnish By Computer Lauri Karttunen, Rebecca Root, and Hans Uszkoreit, University of Texas at Austin

On Friedman et al's Montague Grammar Programs Barbara Partee and Emmon Bach, University of Massachusetts

A Computational Linguistic Approach to

Ungrammaticality Based on Meta-Rules Norman K. Sondheimer, Sperry Univac Ralph M. Weischedel, University of Delaware

A Pattern Matching Directed Parser: PAMPS Kuniaki Uehara and Junichi Toyoda, Osaka University

MONDAY, DECEMBER 28, 1981 8:00-10:30 P.M.

Panel Discussion

Computer Modeling of Linguistic Theory Stanley R. Petrick (Chairman), *IBM Research* Joyce B. Friedman, *University of Michigan* Ralph Grishman, *New York University* Ronald M. Kaplan, *Xerox Palo Alto Research Center* Mitchell M. Marcus, *Bell Laboratories* G. K. Pullum, *Stanford University* Arnold M. Zwicky, *Ohio State University*

ACL to Sponsor Sessions at Third Office Automation Conference

The ACL will sponsor two sessions at the third annual AFIPS Office Automation Conference (OAC), to be held on April 5-7, 1982, in the Moscone Center at San Francisco, California.

Interaction between office systems and their end users ("The Human Connection") will be the primary interest of the OAC as a whole, with special emphasis being placed on usable and practical aspects of office automation systems. Increased participation by industry — including banking, manufacturing and insurance — is expected at the conference. A wide range of equipment will be exhibited.

The two ACL-sponsored, 90-minute panel discussions are being organized by Lance Miller, *IBM Research*. They will address automated natural language processing in the office and the impact which such processing has on user interface, usability, and function. A short description of each session follows:

Session 1: Processing the Natural Language Content of Office Text. The office traditionally is the focal point in any business organization for the receipt of quantities of incoming documents and for the generation of comparable amounts of outgoing text. In the future these two roles are expected to continue, but under much more trying circumstances: the volume of incoming and outgoing text — hardcopy or electronic - will increase, but the availability of people to perform the necessary processing will decrease. Secretaries will be asked to do more tasks for more people, using more complex equipment, and may very likely find this occupation less rewarding, leaving the office principals to fend more and more for themselves. This session will highlight new ways in which computers can assist principals in the intelligent processing of text, ranging from document abstracting to sophisticated critiquing of new material.

The session will be chaired by Lance Miller. The participants will be:

Karen Jensen, *IBM Research* Nina McDonald, *Bell Labs* Brian Phillips *Texas Instruments* Don Walker, *SRI International*

Session 2: Controlling Office Systems via Natural Language. Office principals traditionally have had little difficulty in expressing what they wanted done to those who were to do it. Styles vary, but - terse or expansive, formal or informal - the method of communication was in some "natural" language. As the role of machines in the office increases, particularly that of computers, the problem of the communication language becomes more acute. The offhand request to "Please pull the files on the Smith Account," once simply stated and forgotten until the documents appeared on the desk, now must be laboriously and precisely fashioned in a quite unnatural and unfamiliar tongue. However, it appears to be increasingly possible to overlay the formal computer-ese with more natural means of communication. This session will discuss systems and techniques for providing natural language interfaces to office systems.

The session will be chaired by George Heidorn, *IBM Research*. The participants will be:

Alan Biermann, *Duke University* Jaime Carbonell, *Carnegie-Mellon University* Gary Hendrix, *Machine Intelligence Corp.* Fred Thompson, *Calif. Inst. of Technology*

For further information about the OAC contact:

Lance A. Miller IBM Thomas J. Watson Research Center P.O. Box 218 Yorktown Heights, New York 10598 (914) 945-1670

Call for Papers - 1982 ACL Meeting

The 20th Annual Meeting of the Association for Computational Linguistics will be held at the University of Toronto, Toronto, Ontario, Canada, from Wednesday, June 16, through Friday, June 18, 1982. Papers are being solicited on linguistically and computationally significant topics, including but not limited to the following:

- syntax, parsing, and language generation,
- computational semantics (including logic, reference, anaphora, and metaphor),
- discourse analysis and speech acts,
- representation of knowledge, deduction, and planning as related to language understanding or production,
- speech analysis and synthesis,
- machine translation, machine-aided translation, and automated dictionaries,
- mathematical and theoretical foundations of computational linguistics,
- linguistic theories and their computational applications, and
- software tools for computational linguistics.

An author wishing to present a paper should submit six copies of a 5 to 8 page summary, double-spaced, by February 1, 1982 to: Madeleine Bates, Bolt Beranek and Newman Inc., 50 Moulton Street, Cambridge, Mass. 02138, USA [phone: (617) 497-3634; ARPA-NET: bates@bbnd].

It is important that the summary identify the new ideas and clearly indicate to what extent the work is complete and to what extent it has been implemented. It should contain sufficient information to allow the program committee to determine the scope of the work and its relation to relevant literature.

All submissions will be read by the program committee, which is chaired by Madeleine Bates, *BBN*, and consists of Jonathan Allen, *MIT*, Robert Berwick, *MIT*, Barbara Grosz, *SRI International*, Chris Riesbeck, *Yale University*, and Stuart Shapiro, *SUNY Buffalo*.

Authors will be notified of the acceptance of their papers by March 8, 1982. Full-length versions of accepted papers submitted by April 19, 1982 will be included in the Proceedings of the Conference.

Local arrangements are being handled by Ray Perrault, Department of Computer Science, University of Toronto, Toronto, Canada M5S 1A7 [phone: (416) 284-3194; ARPANET: rperrault@bbna].

For other information regarding the annual meeting, contact: Don Walker, Artificial Intelligence Center, SRI International, Menlo Park, Calif. 94025, USA [phone: (415) 859-3071; ARPANET: walker@sri-ai].