Computational Linguistics

Volume 16, Number 1 March 1990

Categorial Semantics and Scoping 1
Fernando C. N. Pereira

An Interpretation of Negation in Feature Structure Descriptions 11
Anuj Dawar and K. Vijay-Shanker

Word Association Norms, Mutual Information, and Lexicography. 22
Kenneth Ward Church and Patrick Hanks

Semantic-Head-Driven Generation 30
Stuart M. Shieber, Gertjan van Noord, Fernando C. N. Pereira, and Robert C. Moore

Letter to the Editor 43
Michael B. Kac

Book Reviews

Interpreting Anaphors in Natural Language Texts 44
David M. Carter
Reviewed by Deborah Dahl

Phonological Parsing in Speech Recognition. 45
Kenneth W. Church
Reviewed by Kimmo Koskenniemi

Prosody and Speech Recognition 46
Alex Waibel
Reviewed by Joan Bachenko

From Syntax to Semantics: Insights from Machine Translation 47
Erich Steiner, Paul Schmidt, and Cornelia Zelinsky-Wibbelt (eds.)
Reviewed by Harold Somers

Studies in Computer-Aided Lexicology 50
Martin Gellerstam (ed.)
Reviewed by Martha Evens

Computational Linguistics: An Introduction 51
Ralph Grishman
Reviewed by John Roach

Speaking: From Intention to Articulation 52
Willem J. M. Levelt
Reviewed by M. Martin Taylor and Insup Taylor

Briefly Noted 56

Books Received 58

Abstracts of Current Literature 60

Published Quarterly by the MIT Press
for the Association for Computational Linguistics

Computational Linguistics

ISSN 0891-2017

Formerly the American Journal of Computational Linguistics

Published four times a year by the MIT Press for the *Association for Computational Linguistics*

Editor

James F. Allen
Computer Science Department
University of Rochester
Rochester, NY 14627, USA
(+1 716) 275-5288; INTERNET:acl@cs.rochester.edu

Managing Editor

Donald E. Walker
Bellcore, MRE 2A379
445 South Street, Box 1910
Morristown, NJ 17960-1910, USA
(+1 201) 829-4312; INTERNET:walker@flash.bellcore.com

Associate Editor

Robert C. Berwick
Artificial Intelligence Laboratory
Massachusetts Institute of Technology
Cambridge, MA 02139, USA
(+1 617) 253-8918; INTERNET:berwick@ai.mit.edu

Book Review Editor

Graeme Hirst
Department of Computer Science
University of Toronto
Toronto, CANADA M5S 1A4
(+1 416) 978-8747; INTERNET:gh@ai.toronto.edu

The FINITE STRING Editor

Ralph M. Weischedel
BBN Systems & Technologies Corporation
10 Moulton Street
Cambridge, MA 02238, USA
(+1 617) 491-1850; INTERNET:weischedel@bbn.com

Editorial Board Members

1988–90:
Eugene Charniak, Brown University
Erhard Hinrichs, University of Illinois
Bente Maegaard, University of Copenhagen
Carl Pollard, Carnegie Mellon University
Hozumi Tanaka, Tokyo Institute of Technology
Robert Wilensky, University of California at Berkeley

1989–91:
Robert J.P. Ingria, BBN Systems & Technologies Corporation
Christopher S. Mellish, University of Edinburgh
Jeffrey Pelletier, University of Alberta
Martha Pollack, SRI International
Patti Jo Price, SRI International
Masaru Tomita, Carnegie Mellon University
Mary McGee Wood, University of Manchester

1990–92:
Susan Warwick, University of Geneva
James Pustejovsky, Brandeis University
Stuart Shieber, Harvard University
Kenneth Church, AT&T Bell Laboratories
Robert Moore, SRI International
Julia Hirschberg, AT&T Bell Laboratories

Copyright © 1990 by the Association for Computational Linguistics. The following code 0891-2017/90 $3.00, indicates the copyright owners' consent that a single copy of an article may be made for personal use. The consent is given, however, on the condition that the copier pay the stated per-copy fee of $3.00 through the Copyright Clearance Center, Inc., 21 Congress Street, Salem, MA 01970, for copying beyond that permitted by Sections 107 and 108 of the U.S. Copyright Law. This consent does not extend to other kinds of copying, such as copying for general distribution, for advertising or promotional purposes, for creating new collective works, or for resale. Such permission requests and other permission inquiries should be addressed to the Managing Editor at the address given above.

Individual Subscriptions to *Computational Linguistics* are available only with membership in the Association for Computational Linguistics (ACL). Annual Membership Dues are as follows: regular, $25.00; full-time student with current student ID, $15.00; joint for couples with one subscription, $30.00. A membership application together with an order form for back issues and conference proceedings is included at the end of this issue. Send membership applications and address changes to Dr. Donald E. Walker (ACL), Bellcore, MRE 2A379, 445 South Street, Box 1910, Morristown, NJ 07960-1910, USA. However, note on the application that it is possible to pay through banks in Switzerland and Japan.

Institutional Subscriptions are $60.00. Outside the U.S. and Canada, add $12.00 surface mail or $18.00 airmail postage. They should be ordered through the MIT Press. Send institutional subscription orders and address changes to MIT Press Journals, 55 Hayward Street, Cambridge, MA 02142-1399, USA. To be honored free of charge, claims for missing copies must be made immediately upon receipt of the next published issue. Institutions should order back issues (before 1988) and all proceedings from the ACL at the address above.

Computational Linguistics is abstracted and/or indexed in the following publications: *Annual Review of Information Science and Technology, Computing Reviews, Knowledge Engineering Review, Language and Language Behavior Abstracts, Linguistic Abstracts, Linguistic Bibliography,* and *Science Abstracts* (INSPEC Section C).

Beginning with Volume 14, *Computational Linguistics* is available on microfilm through University Microfilms International, 300 North Zeeb Road, Ann Arbor, MI 48106, USA.