Computational Linguistics

Formerly the American Journal of Computational Linguistics

Volume 10, Numbers 3-4 July-December 1984

SPECIAL ISSUE ON MATHEMATICAL PROPERTIES OF GRAMMATICAL FORMALISMS

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COLING84

Microfiche (CL Mf. 99)

Published Quarterly by the Association for Computational Linguistics

Computational Linguistics

Formerly the American Journal of Computational Linguistics

Published quarterly by the *Association for Computational Linguistics.* (ISSN 0362-613X)

Editor
James F. Allen
Computer Science Department
University of Rochester
Rochester, NY 14627 USA
(716) 275-5288; ACL@ROCHESTER.ARPA

Managing Editor
Donald E. Walker
Bell Communications Research
445 South Street
Morristown, NJ 07960 USA
(201) 829-4312; bellcore!walker@berkeley.ARPA

Associate Editor
Michael C. McCord
IBM Thomas J. Watson Research Center
P.O. Box 218
Yorktown Heights, NY 10598 USA
(914) 945-1308; MCCORD.YKTVMX.IBM@RAND-RELAY.ARPA

Book Review Editor
Madeleine Bates
Bolt Beranek and Newman
10 Moulton Street
Cambridge, MA 02238 USA
(617) 497-3634; BATES@BBNG.ARPA

The FINITE STRING Editor
Ralph M. Weischedel
Bolt Beranek and Newman Inc.
10 Moulton Street
Cambridge, MA 02238 USA
(617) 491-1850; WEISCHEDEL@BBNG.ARPA

Production Editor
Cay Dietrich
IBM Thomas J. Watson Research Center
(914) 945-2947; AJCL.YKTVMV.IBM@RAND-RELAY.ARPA

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A Note from the Editor:

At the 21st Annual Meeting of the ACL at MIT in 1983, one of the sessions was devoted to the formal properties of various linguistic formalisms and to the significance of these results. This Special Issue is an aftermath of that session, although the list of participants is somewhat different.

In their 1982 paper "Natural Languages and Context-Free Languages", Geoffrey Pullum and Gerald Gazdar examined all the published claims that natural languages might not be context-free and found them wanting. The contributions by Postal and Langendoen and by Pullum to this issue continue to explore this question. Postal and Langendoen argue in "English and the Class of Context-Free Languages" that English is not context-free by examining the class of sentences exhibiting the sluicing construction, such as *Joe discussed some bourbon hater but it's not known which bourbon hater.* Pullum's paper "On Two Recent Attempts to Show that English Is Not a CFL" attacks the linguistic data on which Postal and Langendoen's argument is based, as well as those underlying a similar claim by James Higginbotham. The second contribution by Langendoen and Postal is a rejoinder to Pullum's paper.

Robert Berwick's "Strong Generative Capacity, Weak Generative Capacity, and Modern Linguistic Theories" is a discussion of some of the formal properties of Lexical Functional Grammar and the Government-Binding (GB) version of transformational grammar. It contains the first published formalization of GB, a proof that GB languages under this formalization are recursive and that they have the arithmetic growth property.

Finally, my contribution to this issue is an expanded version of a survey of formal results about various linguistic theories and a discussion of how these results can be used as lower bounds and as upper bounds on acceptable theories.

C. Raymond Perrault, Guest Editor