

journal of speech and hearing disorders

EDITOR William H. Perkins
University of Southern California
Los Angeles, California

ASSISTANT TO THE EDITOR Christine Sinrud Shade

ASSOCIATE EDITORS

James L. Aten
Richard F. Curlee
Jeri A. Logemann

Noel D. Matkin
Wayne O. Olsen
John C. Rosenbek

Thomas Shipp
Linda Swisher
Bernd Weinberg

EDITORIAL CONSULTANTS

Martin R. Adams
Elizabeth L. Allen
Jerome G. Alpiner
Charles V. Anderson
William B. Arndt
Godfrey E. Arnold
Carl W. Asp
G. Gale Bachman
Sandie Barrie-Blackley
Suzanne Bennett
Fred H. Bess
Robert C. Bilger
Eric D. Blom
Oliver Bloodstein
Richard M. Boehmler
Rick L. Bollinger
Daniel R. Boone
Friedrich S. Brodnitz
Arthur J. Bronstein
Robert H. Brookshire
Gene J. Brutton
Kenneth W. Burk
Earl C. Butterfield
Margaret C. Byrne
Gerald J. Canter
Diane S. Castle
Michael R. Chial
Robert E. Chubrick
Robert F. Coleman
Raymond H. Colton
Arthur J. Compton
Janis M. Costello
Mary Rose Costello
Richard F. Cromer
David Crystal
Willie Cupples
David A. Daly
G. Albyn Davis
Julia M. Davis
David Ross Dickson
William M. Diedrich

Marshall J. Duguay
Donald E. Egolf
Norman P. Erber
Claire Ernhart
Warren H. Fay
Samuel G. Fletcher
Victor P. Garwood
Jean Glattke
Theodore J. Glattke
Sidney Goda
Susan Goldin-Meadow
Burl B. Gray
Hugo H. Gregory
Barry E. Guitar
Curtis E. Hamre
Wayne R. Hanson
Edward J. Hardick
Dona Lea Hedrick
Nancy A. Helm
Thomas J. Hixon
William R. Hodgson
Audrey L. Holland
Norma T. Hopkinson
Roger J. Ingham
David Ingram
Krzysztof Izdebski
Donnell F. Johns
Anita F. Johnson
Roger N. Kasten
Louise Kent
Kenneth J. Knepllar
Patricia Kuhl
Margaret Lahey
Leonard L. LaPointe
Marsha Zlatin Lauffer
Laurence B. Leonard
Jay W. Lerman
Jacqueline W. Liebergott
David M. Lipscomb
John Locke
Thomas M. Longhurst

Christy L. Ludlow
Harold L. Luper
Jan G. Lyon
A. Damien Martin
Robert M. Mason
Gerald N. McCall
Stephen C. McFarlane
Maurice I. Mendel
John F. Michel
Ernst Moerk
Donald E. Morgan
Donald E. Mowrer
Thomas Murry
Ethel F. Mussen
Diana S. Natalicio
Katherine Nelson
Douglas Noffsinger
J. Douglas Noll
Elmer Owens
John M. Panagos
Sally Jean Peterson-
Falzone
Marilyn H. Pinheiro
Thomas E. Prescott
Stephen P. Quigley
Norma S. Rees
Robert L. Ringel
William F. Rintelmann
Maris Rodgon
Kenneth F. Ruder
Michael Rutter
Bruce P. Ryan
Jacqueline Sachs
Earl D. Schubert
Daniel Schwartz
Cheryl M. Scott
George H. Shames
Donald Shankweiler
Joseph G. Sheehan
Donald P. Shedd
Ralph L. Shelton

Cynthia M. Shewan
Lawrence D. Shriberg
Helen J. Simon
Sadanand Singh
George Sisson
Linda L. Smith
Lee K. Snyder-McLean
Charles E. Speaks
Joseph E. Spradlin
Earl W. Stark
Rachel Stark
C. Woodruff
Starkweather
Dorothy M. Stein
Robert Edward Stone
Courtney Stromsta
Gerald A. Studebaker
Paula Tallal
Loretta Taymans
Henry Tobin
John Torgerson
Allen Toronto
Judith E. Trost
Lawrence J. Turlon
Hanna Ulatowska
Dianne J. van Tasell
Frank R. Vellutino
Hans von Leden
William E. Weidner
Robert Terry Wertz
Joyce F. West
Laura Ann Wilder
Carol N. Wilder
Terry L. Wiley
Ronald Williams
Marcel Edward Wingate
Harris Winitz
George J. Wischner
Martin A. Young
Willard R. Zemlin
Stanley Zerlin
Daniel H. Zwitman

ASHA PUBLICATIONS OFFICE
Rockville, Maryland

Alfred K. Kawana
Director

Nicolet B. Taylor
Editorial Assistant

Kenneth O. Johnson
Business Manager