# NOTRE DAME JOURNAL OF FORMAL LOGIC

VOLUME XVII, NUMBER 1 JANUARY 1976



PUBLISHED QUARTERLY BY THE UNIVERSITY OF NOTRE DAME, NOTRE DAME, INDIANA

# NOTRE DAME JOURNAL OF FORMAL LOGIC

# Bolesław Sobociński, Editor

### Ann W. Lauer, Business Manager

### Editorial Board

Ignacio Angelelli	Robert Bull	Marian B. Pour-El
F. Gonzalez Asenjo	John Thomas Canty	Luis Elpidio Sanchis
Nuel D. Belnap, Jr.	George Goe	Wilson E. Singletary
Ivan Boh	Hugues Leblanc	Vito F. Sinisi
William W. Boone	Gerald Massey	Ivo Thomas
Karel L. de Bouvère	Elliott Mendelson	J. Jav Zeman

## Volume XVII, Number 1, January 1976

### CONTENTS

On prosleptic premisses. By <i>Czesław Lejewski</i>	1 19
A note on the axiom of choice in Leśniewski's ontology.  By Charles C. Davis	35
Algebraic semantics for S2° and necessitated extensions.  By R. Routley and H. Montgomery	44
A first-order logic of knowledge and belief with identity. I.  By Scott K. Lehmann	59
By Manfred E. Szabo	78
By Jonathan Broido	79
categorías. By Luis M. Laita	89
By Luisa Iturrioz	119
Über Kongruenzen höherer Operationen. By Günther Frei-Imfeld	
An independent statement about metric spaces. By Maurice Machover	131
Consistent, independent, and distinct propositions. II. By <i>Anjan Shukla</i> An alternative to Brian Skyrms' approach to the Liar.	135
By Paul Vincent Spade	137
By Brian Skyrms	147
On the relation between free description theories and standard quantification theory. By Richard E. Grandy	149
Some notes on "A deduction theorem for restricted generality."  By M. W. Bunder	153
On Nachbin's characterization of Boolean lattice. By William H. Cornish. A patching lemma. By K. K. Hickin and J. M. Plotkin.	

Notre Dame Journal of Formal Logic is published quarterly by the University of Notre Dame in January, April, July and October of each year. The Journal is composed by Beljan, Dexter, Michigan and printed by Cushing-Malloy, Inc., Ann Arbor, Michigan. Second-class postage paid at Notre Dame, Indiana 46556.

Authors should consult the "Guide to authors" for editorial information. Articles and editorial correspondence should be sent to B. Sobociński, Editor, P.O. Box 28, Notre Dame, Indiana 46556, U.S.A.

Subscriptions are \$20.00 per year for institutions and \$15.00 for individuals. All back volumes are available, prices supplied on request. Orders for subscriptions and back volumes (accompanied by payment), and changes of address should be sent to the *Business Manager*, P.O. Box 5, Notre Dame, Indiana 46556, U.S.A.

Copyright ©1976 by the University of Notre Dame. All rights reserved.