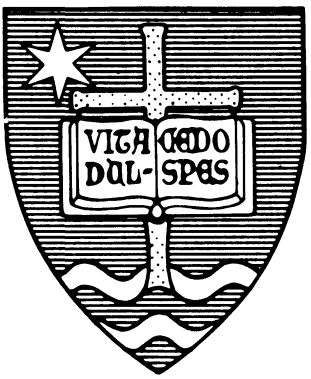
Notre Dame
JOURNAL OF FORMAL LOGIC



VOLUME 28, NUMBER 3
JULY 1987

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

NOTRE DAME JOURNAL OF FORMAL LOGIC

Editors:
Michael Detlefsen
Kit Fine
Mark E. Nadel
Howard K. Wettstein

Associate Editors:
Ernest LePore
Penelope Maddy

Consulting Editors:
Elliott Mendelson
V. Frederick Rickey
Paul Young

Business Manager:
Michele Daugherty

VOLUME 28, NUMBER 3, JULY 1987

CONTENTS

On the equivalence of proofs involving identity. By *Glen Helman* 297
Quantifier responsiveness. By *Lawrence Powers* 322
Quantified modal logic and self-reference. By *C. Smoryński* 356
A simplified natural deduction approach to certain modal systems. By *Bangs L. Tapscott* 371
Modal trees: Correction to a decision procedure for S5 (and T). By *A. Burrieza* and *Juan C. León* 385
More on trees and finite satisfiability: The taming of terms. By *Miodrag Kapetanović* and *Aleksandar Krapež* 392
Reduced models for relevant logics without WI. By *John K. Slaney* 395
A first-order logic with no logical constants. By *Charles B. Daniels* 408
Do we need models? By *Philip Hugly* and *Charles Sayward* 414
Other and *Else*: Restrictions on quantifier domains in game-theoretical semantics. By *Michael Hand* 423
A system of predicate logic with trans-atomic units. By *Richard Butrick* 431
The distribution of terms: A defense of the traditional doctrine. By *Fred Wilson* 439
A rationale for Aristotle's notion of perfect syllogisms. By *Kevin L. Flannery* 455

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, Ltd., Dexter, Michigan and printed by Cushing-Malloy, Inc., Ann Arbor, Michigan. Second-class postage paid at Notre Dame, Indiana 46556.

Subscriptions are $40.00 per year for institutions and $20.00 for individuals. Back volumes are $20.00 each for Volumes 1–10 and $35.00 each for Volumes 11–27. 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 © 1987 by the University of Notre Dame. All rights reserved.

Coden: NDJFAM.

Notre Dame Journal of Formal Logic ..... (ISSN 0029-4527)