

TABLE OF CONTENTS

PREFACE	v
OBJECTS AND ABSTRACT DATA TYPES IN INFORMATION SYSTEMS E. J. Neuhold	1
MODELING STATIC AND DYNAMIC ASPECTS OF INFORMATION SYSTEMS R. Studer and A. Horndasch	13
ON THE RELATIONSHIP BETWEEN CONCEPTUAL SCHEMATA AND INTEGRITY CONSTRAINTS ON DATABASES C. A Heuser and G. Richter	27
CONCEPTUAL MODELLING BASED ON NET REFINEMENTS G. Lausen	41
CONCEPTUAL MODELS IN PROLOG H. Weigand	59
SEMANTIC AGREEMENT AND THE COMMUNICATION OF KNOWLEDGE D. A. Jardine	71
A DENOTATIONAL SEMANTICS FOR ADMINISTRATIVE DATABASES R. M. Lee	83
CONCEPTUAL MODELING ABSTRACTION MECHANISMS AS PARAMETERIZED THEORIES IN INSTITUTIONS C. Sernadas and A. Sernadas	121
DATABASE SPECIFICATION S. Khosla, T. S. E. Maibaum and M. Sadler	141
ENHANCING THE OPERATIONAL SEMANTICS OF THE ENTITY-RELATIONSHIP MODEL C. Parent and S. Spaccapietra	159
THE REALITIES OF DATA: BASIC PROPERTIES OF DATA RECONSIDERED W. Kent	175
ON EXPERIENCE WITH LARGE-SCALE TEACHING AND USE OF FACT-BASED CONCEPTUAL SCHEMAS IN INDUSTRY AND UNIVERSITY G. M. Nijssen	189
ON STRUCTURAL AND BEHAVIORAL MODELLING OF REALITY A. Solvberg and C. H. Kung	205

TEMPORAL ASPECT OF DATABASES: INTERACTION BETWEEN STATE AND EVENT RELATIONS I. Kobayashi	223
A LOGIC OF SOCIAL NORMS FOR THE SEMANTICS OF BUSINESS INFORMATION R. Stamper	233
A MINIMAL CONCEPTUAL SCHEMA LANGUAGE FOR LIFE, THE UNIVERSE AND EVERYTHING T.B. Steel, Jr.	255
Papers accepted but not presented	
ON THE MEANING OF ENGLISH QUERIES TO DATA BASES A. Amikam	285
UPDATE DEPENDENCIES L. Mark, N. Roussopoulos and B. Chu	303

LIST OF PARTICIPANTS	321

