

Contents

R.J. Jorna & B. van Heusden (University of Groningen): Signs, search and communication: Towards an empirical future for semiotics	1
---	---

I SIGNS AND REPRESENTATIONS

J. Pelc (University of Warsaw): Semiosis, cognition, interpretation	25
L. Santaella Braga (University of Sao Paolo): A triadic theory of perception	39
E.M. Barth (University of Groningen): Systems of logical representation and inference: An empiricist approach to cognitive science	48
J.G. Meunier (University of Quebec): Semiotic primitives and conceptual representation of knowledge	66
M.F. Peschl (University of Vienna): Semiotic aspects of neurally based representation of knowledge	90

II ABDUCTION AND REASONING IN EXPERT SYSTEMS

J.C.A van der Lubbe & E. Backer (Technical University of Delft): Human-like reasoning under uncertainty in expert systems	113
A.H. Marostica (California State University, L.A.): Abduction: The creative process	134
G. Luger & C. Stern (University of New Mexico): Expert systems and the abductive circle	151
B.G. Silverman (George Washington University): Can machines compensate for biased human reasoning? Case studies in medical decision making	172
H. Visser (University of Tilburg): Procrustes, or the future of flexibility	201

III COMMUNICATION WITH EXPERT SYSTEMS

R. Posner (Technical University of Berlin): Believing, causing, intending: The basis for a hierarchy of sign concepts in the reconstruction of communication	215
A. Müller (University of Göttingen): On knowledge representing interacting systems	271
J.A. Michon (University of Groningen): Implementing a sense of time in intelligent systems	306
Y. Vogelenzang & J. de Vuyst (University of Groningen): Towards an evaluation tool for natural language interfaces	322
F. Rastier (CNRS - Paris): The linguistic analysis of expert texts	336
M. Chignell (University of Toronto): Cooperative human-machine reasoning: Communication through the user interface	348
Name index	369
Subject index	371
Addresses of the authors	378