

Semantic Information Processing

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Preface

How can one make machines understand things? This body is a collection of studies in *artificial intelligence*, the science of making machines do things that would require intelligence if done by men.

Most of the chapters are slightly edited Ph.D. theses, and the book is to serve two purposes: to make the results of these dissertations more available to scientists, and to exhibit the work to students searching for new problems in this area. Abbreviated versions of such studies, as usually presented in scientific journals, rarely suffice as a basis either for further work or for critical evaluation. Besides, the uncompressed original dissertations are usually easier to read and understand.

Each of the projects described in this book has already inspired more ambitious attacks. I hope to collect reports of those that succeed into a second volume within the next year or two.

In the long introduction that is Chapter 1, there are scattered remarks about contributors to this work. I want to acknowledge explicitly the influence of my own collaborators, John McCarthy and Seymour Papert, on the work that was done at M.I.T., and the support of that work, in its early years, by the M.I.T. Research Laboratory of Electronics and the M.I.T. Computation Center and, in recent years, by the Advanced Research Projects Agency through M.I.T.'s Project MAC. I want also to thank Edmund C. Berkeley for demanding and helping to get the papers collected and published.

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Contents

r	eface		v
١.	Intro	duction, Marvin L. Minsky	1
	1.1	Survey 1	
	1.2	Organization of the Book 3	
	1.3	Artificial Intelligence and its Cybernetic Background 6	
	1.4	The Period between 1955 and 1962 8	
	1.5	Formality 11	
		Generality 13	
	1.7	Learning 13	
		Knowledge 17	
	1.9	Grammar, Syntax, and Parsing Programs 20	
		Machine Translation of Languages 24	
	1.11	How Much Semantic? 25	
		Relevance and Structure 26	
	1.13	Practical Problems of Mechanizing Large Models 27	
2.	SIR:	A Computer Program for Semantic Information Retrieval,	
	Bertr	am Raphael	33
	2.1	Introduction 33	
	2.2	Semantic Information Retrieval Systems 37	
	2.3	Representations for Semantic Information 48	
	2.4	SIR Treatment of Restricted Natural Language 58	
	2.5	Behavior and Operation of SIR 64	
	2.6	Formalization and Generalization of SIR 90	
		Conclusions 110	
3.	Natu	ral Language Input for a Computer Problem-Solving System,	
	Danie	el G. Bobrow	146
	3.1	Introduction 146	

viii

CONTENTS

3.2 Semantic Generation and Analysis of Discourse 155			
3.3 Programming Formalisms, and Language Manipulation 167			
3.4 Transformation of English to the STUDENT Deductive Model	172		
3.5 Storage of Global Information 195			
3.6 Solution of Simultaneous Equations 197			
3.7 Conclusion 201			
4. Semantic Memory, M. Ross Quillian	227		
4.1 The Role of Semantic Memory 227			
4.2 The Memory Model 234			
4.3 Use of the Memory Model in a Simulation Program 246			
4.4 The Memory Model as Basis for a Theory of How People			
Comprehend Language 256			
4.5 Some Final Implications and Relations to Linguistic Theory 2	50		
5. A Program for the Solution of Geometric-Analogy Intelligence			
Questions, Thomas G. Evans	271		
5.1 Introduction 271	271		
5.0. The Co. 17 C.1.0. P.			
5.2 The Complete Solution Process: Two Examples 288 5.3 Analogy: Part 1 297			
5.4 Analogy: Part 2 317			
5.5 Results and Discussion 327			
5.6 Conclusions 341			
6. A Deductive Question-Answering System, Fischer Black	354		
6.1 Introduction 354			
6.2 Statement, Question, and Answer 357			
6.3 Deduction 363			
6.4 Stopping Endless Deduction 371			
6.5 Avoiding Endless Deduction 378			
6.6 Examples 384 6.7 Efficiency 391			
7. Programs with Common Sense, John McCarthy	403		
7.1 The Advice Taker 403			
7.2 Situation, Actions, and Causal Laws 410			
8. Descriptive Languages and Problem Solving, Marvin L. Minsky	419		
8.1 Introduction 419			
8.2 The Need for Analysis 420			
8.3 Conclusion 423			
9. Matter, Mind, and Models, Marvin L. Minsky	425		
9.1 Introduction 425	.25		
9.2 Knowledge and Models 425			
9.3 Models of Models 426			
9.4 Dimorphism of our World Models 427			
9.5 The Central Argument: Belief in Dualism 428			
9.6 Heuristic Value of Quasi-Separate Models 428			
9.7 Interpreters 430			
9.8 Free Will 431			
9.9 Conclusion 431			
Subject Index 433			
Name Index			