Contents

Preface xiii

PART 1

Chapter 1 The Nature of the Problem 3
A. The Isolated Sentence and Beyond 4
B. Discourse as a Contract 8
C. Towards a Process-model of Comprehension 11
Chapter 2 Approaches to the Knowledge-Base 14
A. Word Meaning 15
1. Semantic components 15
2. The nature of primitives and procedural semantics 18
3. Summary and conclusions 19
B. Structural Aspects of Knowledge Representation 20
1. Semantic networks and the distinction between implicit and explicit knowledge 20
2. Cognitive economy in human beings 23
3. The advantages and limitations of hierarchies 25
4. Linking knowledge clusters 27
C. Situational Knowledge and Frames 30
1. Acting and expecting 30
2. Minsky's concept of the frame 31
3. Varieties of frames 33
4. The organization of frame systems 34
D. An Appraisal of the Knowledge Problem 36
Chapter 3 Relating Discourse to Knowledge: Background Considerations 38
A. Representing Simple Actions and Events 39
B. Representing Events and Verbs More Fully 44
1. Aspects of verb meaning 44
2. The Norman, Rumelhart, and LNR system 46
3. Conceptual dependency primitives (Schank, 1973) 48
4. Questions of 'How much' and 'When' 51
5. From sentences to fuller discourse 52
C. Using Knowledge to Understand Episodes 53
1. Predictable sequences of behaviour 53
2. Understanding beyond scripts and without scripts 57

D. Summary, and Problems in Producing Mental Representations of Discourse 60
1. Summary 60
2. Gist and detail 60
3. The nature of on-line processing in human comprehension 61
Chapter 4 The Nature of Text Representation in Human Memory 63
A. Some Phenomena of Text Memory 63
1. Meaning and surface structure 63
2. Memory, gist, and representation 67
B. Texts as Hierarchies of Propositions 69
1. Kintsch's (1974) theory 69
2. Limitations of Kintsch's theory 71
C. Story- and Text-Grammars 73
1. A sample story-grammar 74
2. Story-frames and the comprehension process 78
D. Schema-Based Theories of Comprehension and Memory 80
E. Kintsch and van Dijk's Model 82
F. Summary: The Relationship of Memory and Comprehension 84

PART 2

Introduction 89
Chapter 5 Reference Resolution and On-Line Processing 91
A. Given and New Information 92
B. Clark and Haviland's Theory of Bridging 93
C. Alternatives to Clark's System 98
D. Context-Motivated Bridging Processes 101
E. Summary and Conclusions 107
Chapter 6 Scenarios and the Domain of Reference 109
A. Scenarios: Implications for Human Comprehension 111
1. Scenarios and the domain of reference 111
2. Entities and relationships 114
B. Scenario Selection and Specificity of Description 118
1. The choice of noun-phrase 118
2. Specificity and ease of reference 120
3. Specificity and scenarios 125
C. Scenarios: Their Nature and Some Problems 127
1. Appropriateness and cues for selection 127
2. Discourse-based constraints on selection 129
D. Summary 131
Chapter 7 Dynamic Aspects of Text-Processing 133
A. Working Memory and Text Integration 134
1. Chafe's concept of foregrounding 135
2. Topic and emphasis 136
3. Reference experiments and the operation of working memory 137
4. Some additional factors in pronoun assignment 140
5. Does mapping precede interpretation? 143

B. The Status of Individuals and the Dynamics of Scenarios 145
1. Principal actors and scenario-dependent entities 145
2. Indirect scenario switches: time and space constraints 146
3. An empirical investigation of indirect scenario switches 147
4. The distinction between implicit and explicit focus 153
Chapter 8 Focus, Mapping, and Memory: a Processing Framework 155
A. Memory Partitions and the Active Processor 155
B. Retrieving from and Constructing in Memory 160
1. The nature of focus 160
2. Forms of addressing focus 162
3. Addressing outside of focus 167
4. Matching problems in reference resolution 171
5. Event resolution and scenario mismatches 174
C. Focus in Action — An Example 175
D. The Focus System and Long-term Memory Representation of Text .. 181
1. Explicit focus and memory 181
2. Evaluating a focus-based theory of text memory 186
E. Concluding Remarks 187
Chapter 9 Goals and Constraints in Readers and Writers 188
A. Conversation and the Reader–Writer Gap 188
1. Dialogue, models, and intentions 189
2. Writing 191
B. Some Local Problems of Discourse Structure 193
1. Two minor but recurrent problems in inconsiderate discourse 193
2. Inconsiderate discourse and accounts of processing 196
3. Paragraph structure and writer intentions 198
C. Reading and the Reader 203
1. Strategies in reading 203
2. Limitations in reader skill 206
D. Summary 208
Chapter 10 Postscript 210
References 214
Author Index 221
Subject Index 223