

# TABLE OF CONTENTS

PREFACE	ix
CHAPTER I. INTRODUCTION	1
I.1 The Study of Language	6
I.2 The Competence-Performance Distinction	8
I.3 The Universal Parser	11
I.4 A Programme of Research	12
I.5 Organisation of Chapters	15
CHAPTER II. PERSPECTIVES ON SENTENCE PROCESSING	17
II.1 Modularity in Language Processing	19
II.2 The Nature of the Empirical Evidence	24
II.2.1 Ambiguity in Language	25
II.2.2 Relative Complexity and Semantic Interaction	27
II.2.3 Constraint-Based Approaches	30
II.2.4 Evidence from ERPs	32
II.2.5 Summary	33
II.3 Extant Theories of Linguistic Performance	33
II.3.1 Computationally Based Theories	35
II.3.2 Strategy Based Theories	37
II.3.3 Grammar Based Theories	44
II.4 Conclusions	52

<b>CHAPTER III. PRINCIPLES, PARAMETERS AND REPRESENTATIONS</b>	<b>59</b>
III.1 Explanation in Universal Grammar	60
III.2 The Transformational Model	62
III.2.1 $\overline{X}$ -theory and Lexical Selection	64
III.2.2 Types of Movement	69
III.2.3 Case Theory	72
III.2.4 Command Relations and Government	75
III.2.5 Bounding Theory	76
III.3 Representations: Types <i>vs.</i> Levels	79
III.3.1 A Representational Model	80
III.3.2 Phrase Structure	84
III.3.3 Chains	89
III.3.4 Thematic Structure	92
III.3.5 Coindexation	94
III.4 Summary and Discussion	94
<b>CHAPTER IV. A PRINCIPLE-BASED THEORY OF PERFORMANCE</b>	<b>103</b>
IV.1 The Foundations of the Processing Model	105
IV.2 The Nature of Processing Complexity	108
IV.3 Modularity in the Syntactic Processor	110
IV.3.1 Incrementality in the Syntactic Processor	112
IV.3.2 The Nature of Modularity	113
IV.4 The Phrase Structure Module	115
IV.4.1 The Use of Lexical Information in the PS Module	116
IV.4.2 Attachment Preferences in English	117
IV.4.3 Processing Head-Final Languages	120
IV.4.4 Summary	128
IV.5 The Thematic Module	129
IV.6 The Chain Module: Recovering Antecedent-Trace Relations	131
IV.6.1 Processing Chains in a Modular Model	133
IV.6.2 Against the use of Lexical Preference	135
IV.6.3 Processing Gaps in the 2 <sup>nd</sup> Dimension	137
IV.6.4 Summary	144
IV.7 Summary	145

<b>CHAPTER V. A LOGICAL MODEL OF COMPUTATION</b>	<b>149</b>
V.1 Principle-Based Parsing	152
V.2 A Logical Model of Performance	154
V.2.1 Parsing as Deduction	155
V.2.2 Deductive Parsing: Rules vs. Principles	157
V.2.3 Deduction in a Modular System	164
V.3 Control in the Syntactic Processor	167
V.4 Summary and Discussion	171
<b>CHAPTER VI. THE SPECIFICATION OF MODULES</b>	<b>173</b>
VI.1 The Phrase Structure Module	176
VI.1.1 Representations and Grammatical Knowledge	176
VI.1.2 The Phrase Structure Interpreter	179
VI.1.3 Discussion	182
VI.2 The Chain Module	183
VI.2.1 Representations and Grammatical Knowledge	183
VI.2.2 The Chain Interpreter	186
VI.2.3 Discussion	190
VI.3 The Thematic Module	191
VI.3.1 The Thematic Interpreter	192
VI.3.2 Discussion	196
VI.4 Summary	197
<b>CHAPTER VII. SUMMARY AND DISCUSSION</b>	<b>201</b>
VII.1 A Summary of the Theory	203
VII.1.1 The Modular Syntactic Processor	204
VII.1.2 A Concentric Theory of Complexity	206
VII.2 Computational Properties of the Model	210
VII.2.1 The Role of Meta-interpretation	211
VII.2.2 Decomposition and Parallelism	212
VII.2.3 Must Representations be Explicitly Constructed?	213
VII.3 The Innate Sentence Processor	215
VII.3.1 Acquisition in the Deductive Sentence Processor	217
VII.3.2 Against Parameterisation of the HSPM	218
<b>CHAPTER VIII. CONCLUSIONS</b>	<b>223</b>

BIBLIOGRAPHY	227
INDEX OF AUTHORS	239
INDEX OF SUBJECTS	243