

Contents

PREFACE TO THE SECOND EDITION	xvii
PREFACE	xx
INTRODUCTION: THE CHOMSKIAN PERSPECTIVE ON LANGUAGE STUDY	1
Introduction	3
1 Linguistics: the science of language	4
2 The native speaker: grammaticality and acceptability	6
2.1 Descriptive adequacy	6
2.2 Grammaticality and acceptability	7
2.3 The grammar as a system of principles	8
3 Knowledge of language	9
3.1 The poverty of the stimulus	9
3.2 Universal grammar	12
3.3 Parameters and universal grammar	13
3.4 Language learning and language acquisition	16
3.5 The generative linguist	17
4 The new comparative syntax	18
4.1 Principles and parameters: a recapitulation	18
4.2 The <i>pro</i> -drop properties	19
4.3 Relating the properties	21
4.4 Agreement and <i>pro</i> -drop	24
5 Purpose and organization of the book	25
5.1 General purpose	25
5.2 Organization	26
6 Exercises	26
 1 THE LEXICON AND SENTENCE STRUCTURE	 31
Introduction and overview	33
1 The units of syntactic analysis	33

2	Words and phrases	36
3	Predicates and arguments	39
3.1	Subcategorization	40
3.2	Argument structure and thematic structure	42
3.2.1	Argument structure in logic	43
3.2.2	Argument structure in natural language	44
3.2.3	Theta theory	49
4	The projection principle	55
5	The assignment of thematic roles	55
5.1	Clausal arguments	55
5.2	Expletives	60
5.2.1	<i>It</i> and extraposition	60
5.2.2	<i>There</i> and existential sentences	63
5.2.3	Conclusion	65
5.3	Main verbs and auxiliaries	65
6	The extended projection principle (EPP)	68
7	Thematic roles: further discussion	69
7.1	The canonical realization of theta roles	69
7.2	The subject theta role	71
8	Summary	72
9	Exercises	73
2	PHRASE STRUCTURE	81
	Introduction and overview	83
1	Syntactic structure: recapitulation	83
2	The structure of phrases	87
2.1	The verb phrase	87
2.1.1	Layered VPs	87
2.1.2	Parametric variation and word order	95
2.1.3	Extending the proposal	97
2.2	Noun phrases	98
2.3	Adjective phrases	102
2.4	Prepositional phrases	103
2.5	X-bar theory	103
3	The structure of sentences	106
3.1	Introduction	106
3.2	S as a projection of INFL	108
3.2.1	AUX and tense	108
3.2.2	Agreement	110
3.2.3	Infinitival clauses	113
3.2.4	The structure of IP	114

3.3	S' as a projection of C	116
3.3.1	C as the head of CP	116
3.3.2	Head-to-head movement	118
3.3.3	The structure of CP	122
3.4	Summary: X'-theory and functional categories	123
3.5	Small clauses	123
4	Structural relations	126
4.1	Agreement patterns	126
4.2	C-command and government	132
4.2.1	C-command and the first branching node	132
4.2.2	Government	134
4.2.3	M-command and government	135
5	Learnability and binary branching: some discussion	138
6	Features and category labels	145
7	Summary	146
8	Exercises	148
3	CASE THEORY	153
	Introduction and overview	155
1	Morphological and abstract case	155
2	Structural case: NOMINATIVE and ACCUSATIVE	159
2.1	Complements: ACCUSATIVE	159
2.1.1	V and P as case-assigners	159
2.1.2	A note on minimality and government	161
2.2	Subjects: NOMINATIVE and ACCUSATIVE	164
2.2.1	NOMINATIVE subjects	164
2.2.2	The subject of infinitival clauses	165
2.2.2.1	For as a case-marker	165
2.2.2.2	Exceptional case-marking	169
2.2.2.3	Small clauses	171
2.3	Summary	173
3	Adjectives and nouns	173
3.1	Of-insertion	173
3.2	Failure of of-insertion	174
3.3	Inherent case in German: some examples	176
4	Adjacency and case assignment	178
5	Passivization: preliminary discussion	180
5.1	Passivization and argument structure	181
5.2	Case absorption	182
5.3	The properties of passivization	185
5.4	Passive and inherent case	186

5.4.1	German	186
5.4.2	The double object construction in English: discussion	187
6	Visibility	188
6.1	Explaining the case filter	188
6.2	Movement and chains (introduction)	189
6.3	Case and NP-licensing	192
7	Summary	193
8	Exercises	194
4	ANAPHORIC RELATIONS AND OVERT NPs	201
	Introduction and overview	203
1	Reflexives	206
1.1	Binding and antecedent	206
1.2	Locality constraints	208
1.3	Structural relations between antecedent and reflexive	210
1.4	The domain of reflexive binding	212
1.4.1	Governors	212
1.4.2	Subjects	213
1.4.3	Complete functional complex	214
1.4.4	Subject and big SUBJECT	216
1.4.5	Accessible SUBJECT and the <i>i</i> -within- <i>i</i> filter	219
1.5	Reflexive interpretation: summary	222
2	Anaphors: reflexives and reciprocals	222
3	Pronouns	224
4	Referential expressions	226
5	The binding theory	228
6	Discussion section: problems in the binding theory	229
6.1	Implicit arguments	229
6.2	Possessive pronouns and anaphors	231
7	NP types and features	233
7.1	NPs as feature complexes	233
7.2	The binding theory in terms of features	234
7.3	The last NP	235
8	Appendix: circularity	236
9	Summary	240
10	Exercises	242
5	NON-OVERT CATEGORIES: PRO AND CONTROL	251
	Introduction and overview	253
1	The non-overt subject of infinitivals	253

1.1	Theta roles and understood arguments	253
1.2	The extended projection principle	255
1.3	Local relations	258
1.3.1	Purpose clauses	259
1.3.2	<i>Together</i>	260
1.3.3	Predicates	261
1.3.4	Binding	261
2	The features of PRO	262
2.1	[+Anaphoric] and [+Pronominal]	262
2.2	Nominal features	264
3	The distribution of PRO	267
3.1	The data	267
3.2	PRO and overt NPs	269
3.3	PRO must be ungoverned: the PRO theorem	272
3.4	Other non-finite clauses and PRO	275
4	Properties of control	276
4.1	Obligatory control and optional control	277
4.2	Subject control vs. object control	277
4.3	C-command and obligatory control	278
4.4	The controller: argument control	279
5	Control patterns: further examples	279
5.1	PRO in complement clauses	280
5.2	Passivization and control	281
5.3	PRO in adjunct clauses	283
5.4	PRO in subject clauses	283
5.5	Obligatory control is not a lexical feature	284
6	Summary	285
7	Exercises	286
6	TRANSFORMATIONS: NP-MOVEMENT	293
	Introduction and overview	295
1	Movement transformations	295
1.1	Passivization: recapitulation	295
1.2	Questions	297
1.2.1	Survey	297
1.2.2	<i>Yes-no</i> questions	300
1.2.3	Echo questions	302
1.2.4	<i>Wh</i> -questions	303
1.3	Syntactic representations	304
2	NP-movement	306
2.1	Introduction: passive and raising	306
2.2	Traces	309

2.2.1	Theta theory	310
2.2.2	The extended projection principle	311
2.2.3	Local relations	311
2.3	Some properties of NP-movement	313
2.3.1	Properties of A-chains	313
2.3.2	C-command	318
2.4	Raising adjectives	319
3	Burzio's generalization	320
3.1	Case-marking and argument structure	320
3.2	Unaccusatives in Italian	323
3.2.1	<i>Ne</i> -cliticization	323
3.2.1.1	Introduction: extraction from objects	323
3.2.1.2	Transitive sentences and free inversion	325
3.2.1.3	Post-verbal subjects of passive verbs	326
3.2.1.4	Post-verbal subjects and one-argument verbs	327
3.2.1.5	Conclusion	329
3.2.2	Auxiliary selection	330
3.3	One-argument verbs in English	331
3.3.1	Raising predicates	331
3.3.2	Verbs of movement and (change of) state	332
3.3.3	Ergative-causative pairs	334
4	Levels of representation and principles of the grammar	337
4.1	The structure preserving principle	337
4.2	The theta criterion	339
4.3	The extended projection principle	339
4.4	The case filter	340
4.5	The binding theory	341
4.5.1	Level of application	341
4.5.2	The feature composition of NP-traces	345
4.6	Chains and movement	348
4.6.1	Chains	348
4.6.2	Derivational conception vs. representational conception of chains	351
5	Subjects and derived subjects	353
6	Summary	360
7	Exercises	360
7	WH-MOVEMENT	369
	Introduction and overview	371
1	<i>Wh</i> -movement: some examples	371

2	<i>Wh</i> -phrases	373
3	The landing site of <i>wh</i> -movement	376
3.1	Long vs. short movement	376
3.2	C-command	381
3.3	<i>Wh</i> -movement and substitution	382
3.4	The doubly filled COMP filter	382
3.5	Adjunction	384
3.5.1	General discussion	384
3.5.2	<i>Wh</i> -movement as adjunction?	388
3.5.3	A note on some alternative proposals	390
3.6	Movement of maximal projections: A-movement vs. A'-movement	392
4	Traces and <i>wh</i> -movement	393
4.1	Theta theory and the projection principle	393
4.2	Agreement and binding	393
4.3	Case	395
4.3.1	<i>Wh</i> -pronouns and case	395
4.3.2	<i>Wh</i> -trace vs. NP-trace: more contrasts	396
4.4	Adjunct traces	397
5	Subject movement	397
5.1	Vacuous movement	397
5.2	The <i>that</i> -trace filter	398
6	Bounding theory	400
6.1	Island constraints: the data	400
6.1.1	The complex NP constraint	401
6.1.2	<i>Wh</i> -islands	401
6.1.3	Islands	402
6.2	Subjacency	402
6.2.1	The subjacency condition on movement	402
6.2.2	The complex NP constraint	404
6.2.3	<i>Wh</i> -islands	404
6.3	Subjacency as a diagnostic for movement	406
6.3.1	Left dislocation: movement and copying?	406
6.3.2	Relative clauses and <i>wh</i> -movement	407
6.3.3	Relative clauses and resumptive pronouns	409
6.3.4	NP-movement	410
6.4	The subjacency parameter	411
7	Binding theory and traces of <i>wh</i> -movement	413
7.1	Typology of NPs	413
7.2	Crossover	417
8	Movement to the right in English	418
8.1	Heavy NP-shift	418

8.2	PP-extrapolation from NP	422
8.3	Conclusion	422
9	Summary	423
10	Exercises	424
8	AN INVENTORY OF EMPTY CATEGORIES	431
	Introduction and overview	433
1	Null elements in English: recapitulation	433
1.1	D-structure representations	434
1.2	Identification of null elements	435
1.3	Government	435
1.4	The binding theory and the typology of NPs	436
1.5	NP-trace and PRO	436
1.5.1	Chain formation	436
1.5.2	Antecedents	438
1.6	Traces	440
2	Null elements in a grammar	440
2.1	Formal licensing: the empty category principle	441
2.2	Subjacency and ECP	445
2.3	Some problems	446
2.3.1	Adjunct movement and the ECP	446
2.3.2	Subject movement	450
3	Non-overt subjects: the <i>pro</i> -drop parameter	450
3.1	The gap in the paradigm: <i>pro</i>	450
3.1.1	Null subjects in Italian	450
3.1.2	Inflection and <i>pro</i>	452
3.1.3	The typology of null elements: some discussion	452
3.2	Cross-linguistic variation: the <i>pro</i> -drop parameter	454
3.3	Licensing of <i>pro</i>	457
3.4	Null objects in Italian	458
3.4.1	The data	458
3.4.2	Control by the understood object	459
3.4.3	Constraints on the interpretation of the non-overt object	459
3.4.4	The identification of the empty category	460
4	Non-overt antecedents of <i>wh</i> -movement	463
4.1	Relative clauses	463
4.1.1	Empty operators and object relatives	463
4.1.2	Subject relatives	465
4.2	Null operators in infinitivals	468
4.2.1	Infinitival relatives	468

4.2.2	Infinitival adjuncts	469
4.2.3	Principle C and operator binding	470
4.3	Null objects in Portuguese	471
5	Parasitic gaps	473
5.1	Description	473
5.2	The PRO hypothesis	474
5.3	Parasitic gaps are traces	476
5.4	Conclusion	478
6	Summary	478
7	Exercises	479
9	LOGICAL FORM	485
Introduction and overview		487
1	The interpretation of quantifiers	488
1.1	Some concepts from logic	488
1.2	Quantifier movement and Logical Form	491
2	<i>Wh</i> -phrases and LF movement	494
2.1	<i>Wh</i> -phrases as operators	494
2.2	<i>Wh</i> -raising	495
2.3	Multiple <i>wh</i> -movement	501
2.3.1	<i>Wh-in situ</i> and multiple questions in English	501
2.3.2	Multiple movement	503
2.3.3	Earliness vs. Procrastinate: some discussion	505
2.3.4	A note on parasitic gaps	507
3	The ECP	507
3.1	ECP effects at LF	507
3.1.1	Subject-object asymmetries	507
3.1.2	Argument vs. non-argument and the ECP	510
3.1.3	Subject-object asymmetries and operators	511
3.2	The application of the ECP	513
3.2.1	<i>That</i> -trace effects	513
3.2.2	Two assumptions	514
3.2.2.1	Assumption I	514
3.2.2.2	Assumption II	515
3.2.3	Applying the proposal	515
3.3	Intermediate traces and the ECP	519
3.3.1	The problem	519
3.3.2	Intermediate traces and antecedent-government	519
3.3.3	Intermediate traces must be antecedent-governed	521
4	Reconstruction	523
4.1	The binding theory and reconstruction	523

4.2	VP fronting and reconstruction	529
4.3	Reconstruction and idioms	532
5	Two notes on scope interactions between <i>wh</i> -operators and quantifiers	533
5.1	VP-adjunction of quantifiers	533
5.2	Scope reconstruction	536
6	Expletive replacement and full interpretation	538
7	Summary	539
8	Exercises	540
10	BARRIERS	547
	Introduction and overview	549
1	Maximal projections: transparent or opaque?	549
1.1	Case-marking and proper government	550
1.1.1	Infinitival IP	550
1.1.2	Finite IP	551
1.1.3	Transparent CP	551
1.1.4	Transparent small clauses	551
1.1.5	Conclusion	552
1.2	PRO	552
1.2.1	Opaque small clauses	552
1.2.2	Opaque CP	553
1.3	Conclusion: maximal projections may or may not be barriers	554
1.4	Defining barriers	554
1.4.1	L-marking	555
1.4.2	Inheritance	556
1.5	Unifying subjacency and government	557
2	Subjacency and barriers	557
2.1	Movement and adjunction	558
2.1.1	Short movement and long movement	558
2.1.2	VP-adjunction	559
2.1.2.1	Heavy NP shift	559
2.1.2.2	VP-adjunction and quantifier raising	560
2.1.2.3	VP-adjunction and <i>wh</i> -movement	561
2.2	Island violations	563
3	ECP and barriers	565
3.1	Degree of grammaticality: subjacency and ECP	565
3.1.1	Example 1: extraction from a relative clause	565
3.1.2	Example 2: extraction from an adjunct	568
3.1.3	Example 3: extraction from a subject clause	569
3.1.4	Extraction from complements	571
3.2	Extraction: summary	574

4	Discussion section: further data	574
4.1	Subjects and the vacuous movement hypothesis	574
4.2	Noun complement clause	576
5	A-chains	578
6	Summary	580
7	Exercises	581
11	FUNCTIONAL HEADS AND HEAD MOVEMENT	583
	Introduction and overview	585
1	Head movement in English: a first survey	586
2	The split INFL hypothesis	592
3	Functional projections and the clausal domain	602
4	Head movement and the ECP	605
5	Functional categories and the projection of N: the DP hypothesis	607
6	Extended projections	611
7	V-movement in the Minimalist Program	615
7.1	The Minimalist Program: a sketch	615
7.2	V-movement in the Minimalist Program	617
8	Summary	620
9	Exercises	621
12	RELATIVIZED MINIMALITY	625
	Introduction and overview	627
1	Locality in syntax: some examples	628
1.1	Head-government and locality	628
1.2	A-movement	630
1.3	<i>Wh</i> -movement of adjuncts	633
1.4	Summary: locality relations and interventions	635
1.5	Further illustrations	636
1.5.1	Negation and Relativized Minimality	636
1.5.2	Non-referential complements	639
1.5.3	Idiom chunks	642
1.6	Arguments	643
2	The ECP	644
2.1	Some problems	644
2.1.1	A disjunctive ECP: theta-government or antecedent-government	644
2.1.2	Subject extraction and <i>that</i> -trace effects	645
2.1.2.1	Head-government and antecedent-government	645

2.1.2.2	Extended chains and antecedent-government	646
2.1.2.3	Overt C^0 vs. non-overt C^0	646
2.1.3	Adjunct movement and <i>that</i> -trace effects	648
2.1.4	Adjuncts and Relativized Minimality	648
2.2	A new formulation of the ECP	649
2.2.1	Formal licensing and identification	649
2.2.2	Formal licensing: head-government	650
2.2.3	Identification	654
2.2.3.1	Theta government or antecedent-government	654
2.2.3.2	Referential indices	655
2.2.3.3	The ECP as a formal licensing condition	657
2.2.4	Summary	658
2.3	A-chains	659
3	Further problems	661
3.1	Long head movement	661
3.2	A-positions and A'-positions	663
3.2.1	Introduction	663
3.2.2	The canonical subject position is an A-position	664
3.2.3	A-positions	666
3.2.4	A'-positions	667
3.2.5	Conclusion	668
4	Summary	669
5	Exercises	671
BIBLIOGRAPHY		673
INDEX		691