



William O'Grady

John Archibald

Mark Aronoff

Janie Rees-Miller

# Contemporary Linguistics

Fifth Edition

AN INTRODUCTION



*Contemporary Linguistics* is the gold standard of introductory linguistics textbooks. Meticulously prepared, it is one of the most comprehensive, up-to-date introductory resources available. The book's extensive examples and exercises help students master the course material, and its lucid writing style makes complex concepts easy to understand. The fifth edition, thoroughly updated and revised, features the following:

- a new chapter on *sign language* authored by two leading scholars in the field
- a completely updated chapter on *computational linguistics*
- *advanced material* now available on the Web site for students who want to accelerate beyond core concepts
- an expanded, interactive *Web site* with audio and video supplements, plus links to related sites, at [bedfordstmartins.com/linguistics](http://bedfordstmartins.com/linguistics)
- an accompanying *Study Guide* to help students master key concepts from core chapters (1-7)

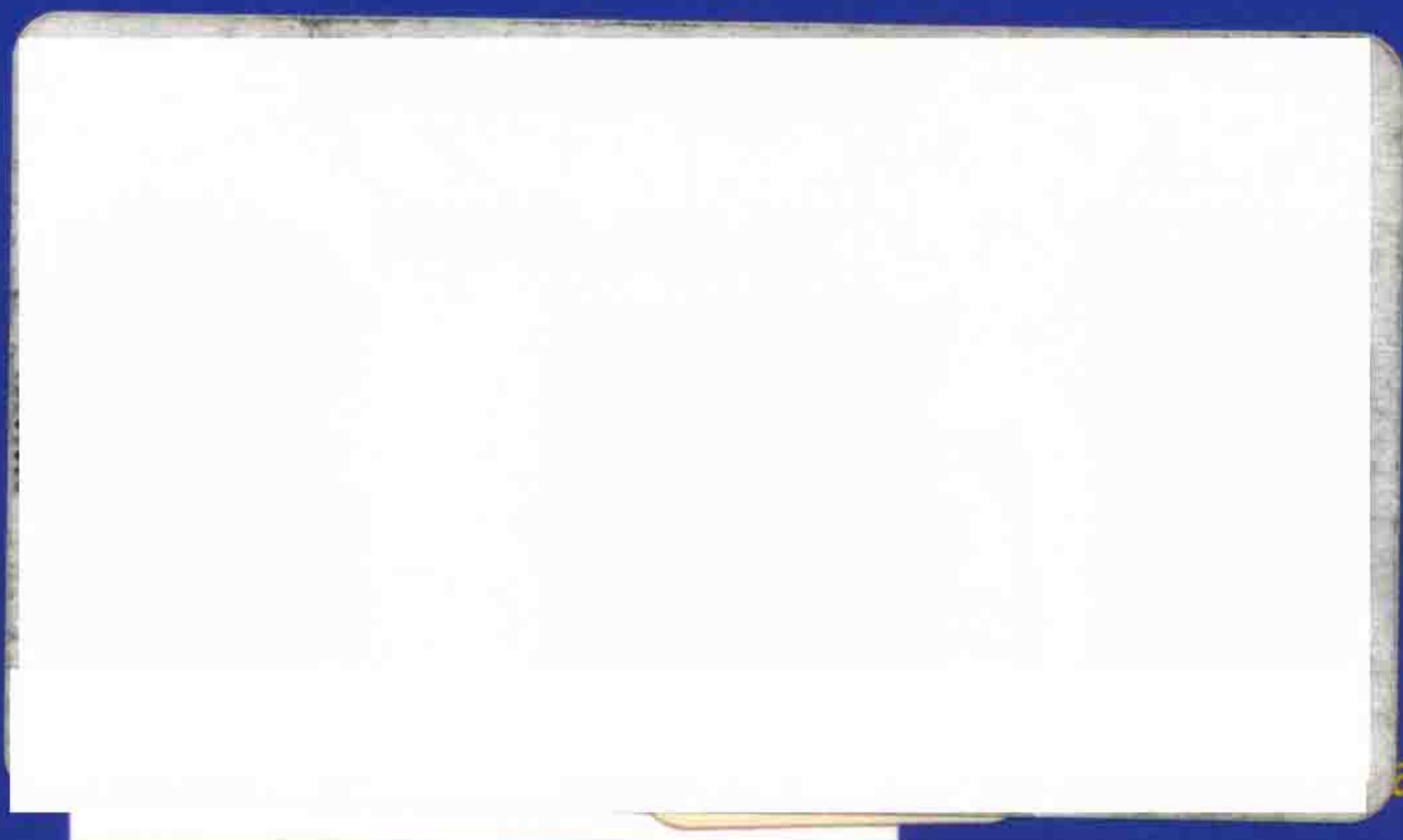
### *Praise for Contemporary Linguistics*

"This is the best single-volume introduction to the wide-ranging field of linguistics on the market."  
— Douglas Wulf, *George Mason University*

"This textbook has very good organization; keeps a current, balanced perspective; and provides lots of interesting data to intrigue students. It's challenging and interesting for the instructor. It makes linguistics come alive."  
— Glenn Gilbert, *Southern Illinois University*

"It's not just a textbook, it's an excellent resource for students and instructors."  
— Janet Cowal, *Portland State University*

"*Contemporary Linguistics* is the most comprehensive introductory text known to me."  
— Darya Kavitskaya, *Yale University*



Martin's  
[martins.com](http://martins.com)



# CONTEMPORARY LINGUISTICS

## AN INTRODUCTION

**Fifth Edition**

*Edited by*

**William O'Grady**

*University of Hawaii at Manoa*

and

**John Archibald**

*University of Calgary*

*U.S. edition prepared by*

**Mark Aronoff**

*State University of New York at Stony Brook*

and

**Janie Rees-Miller**

*Marietta College*

Bedford/St. Martin's  
Boston ♦ New York

**For Bedford/St. Martin's**

*Developmental Editor:* Joelle Hann

*Senior Production Editor:* Harold Chester

*Production Supervisor:* Yexenia (Jessie) Markland

*Marketing Manager:* Jenna Bookin Barry

*Art Direction and Cover Design:* Lucy Krikorian

*Cover Art:* Uta Uta Tjangala, "Emu Dreaming." Acrylic on canvas. Aboriginal art, 20th century. *Photo:* Jennifer Steele/Art Resource, NY.

*Text Design:* Kyle Gell

*Composition:* the dotted i

*Printing and Binding:* R.R. Donnelley & Sons Company

*President:* Joan E. Feinberg

*Editorial Director:* Denise B. Wydra

*Editor in Chief:* Nancy Perry

*Director of Marketing:* Karen Melton Soeltz

*Director of Editing, Design, and Production:* Marcia Cohen

*Managing Editor:* Erica T. Appel

Library of Congress Control Number: 2004108139

Copyright © 2005 by Bedford/St. Martin's

All rights reserved. No part of this book may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, except as may be expressly permitted by the applicable copyright statutes or in writing by the Publisher.

Manufactured in the United States of America.

0 9 8 7  
i h g

*For information, write:* Bedford/St. Martin's, 75 Arlington Street, Boston, MA 02116 (617-399-4000)

ISBN-10: 0-312-41936-8

ISBN-13: 978-0-312-41936-3

**Acknowledgments**

Acknowledgments and copyrights appear at the back of the book on pages 659–64, which constitutes an extension of the copyright page.

To the memory of  
our friend and colleague  
Ewa Iwanicka  
1950–1986

*Convinced at once that, in order to break loose from the beaten paths of opinions and systems, it was necessary to proceed in my study of man and society by scientific methods, and in a rigorous manner, I devoted one year to philology and grammar; linguistics, or the natural history of speech, being, of all the sciences, that which best suited the researches which I was about to commence.*

–PIERRE-JOSEPH PROUDHON, *What Is Property?* (1840)

# PREFACE

---

It has been our goal since *Contemporary Linguistics* was first published in 1989 to provide a comprehensive introductory linguistics textbook that conveys the fascinating aspects of language study to students in a way that is accessible and enlightening. By including up-to-date coverage of all the important areas of linguistics—from phonology, morphology, syntax, and semantics to cross-curricular topics such as sociolinguistics and psycholinguistics—we aim to prepare students for further work in the subject. At the same time, we strive for a clear, direct presentation of the material so that students at differing levels, and with differing goals for taking the course, can come to understand and appreciate how language works. To our gratification, feedback from users of previous editions indicates that *Contemporary Linguistics* has succeeded at both tasks.

In updating both presentation and content of the material in the text, we have retained those features that have proved themselves over time in a variety of classroom settings, providing:

***The most comprehensive introductory text available.*** *Contemporary Linguistics* provides the best coverage of core concepts of any introductory text—phonology, morphology, syntax, and semantics—while exploring cross-curricular issues as diverse as sociolinguistics, sign language, and computational linguistics.

***A flexible organization to match instructors' teaching needs.*** The subject of linguistics is treated as a cohesive whole, yet each chapter can also stand alone—a feature that enables instructors to teach the topics in the order they prefer.

***The knowledge of working experts in the field.*** Each chapter is written by an expert or a team of experts on a particular topic in linguistics, providing the most current and in-depth information available.

***Language students understand.*** The direct writing style makes complex concepts accessible to students at different levels of learning.

***Extensive support for students.*** To help students master concepts, each chapter begins with a list of bulleted objectives and concludes with a summary, a list of key terms and ideas, recommended readings, and exercises that test and reinforce material presented in the chapter. Each chapter is broken down into carefully numbered subsections for students'—and instructors'—ease of reference.

***"For the Student Linguist" boxes.*** Written by actual students, these boxes highlight linguistic problems and help other students gain a richer perspective on each subject.

## New to This Edition

One of the joys of working on *Contemporary Linguistics* through its various editions has been charting new developments in the field and adding material that reflects the expanding research in its various subdisciplines. As linguistics has expanded, so too has the size of this textbook, and with each expanded edition has come the risk that the book would grow into an unmanageable tome. For the fifth edition, the Canadian editors of *Contemporary Linguistic Analysis*, the book on which *Contemporary Linguistics* has always been based, have taken the bold step of moving more advanced and detailed information and exercises online, an innovation that we have embraced in the U.S. version. In this way, we can take advantage of the exciting possibilities



of multimedia technology while controlling the physical size of the book. In fact, the Web site will extend the book's offerings not only with advanced material online but also with audio and video interactivity, bringing this introductory linguistics textbook into the twenty-first century.

In addition, all chapters in *Contemporary Linguistics* have been revised to reflect recent research, to include or expand material of current interest to instructors, and to streamline the presentation. Highlights include:

**Core chapters updated to reflect current scholarship.** All chapters that introduce the fundamental concepts of linguistics (Chapters 1–6) have been thoroughly updated—particularly the chapters on phonetics and syntax. The syntax chapter has moved to X' structure (with a simplified structure available in the Appendix of Chapter 5 for those instructors for whom that is more appropriate).

**A new chapter on sign language.** In response to instructors' requests, we are pleased to include a new chapter on sign language, authored by Wendy Sandler and Diane Lillo-Martin, who are in the forefront of linguistic research in this field.

**An updated computational linguistics chapter.** Thoroughly revised by Amanda Stent, a specialist in computational linguistics, the chapter reflects advances in speech recognition, parsing, and natural language generation.

**Expanded Web Features at [bedfordstmartins.com/linguistics/](http://bedfordstmartins.com/linguistics/)**

- **Advanced material available.** Students who have progressed beyond the introductory level will find all advanced lessons and exercises on the companion Web site.
- **Audio added to Web features.** Students will be able to listen to actual audio related to chapters that deal directly with sound—phonetics, phonology, sign language.
- **Streaming video for sign language.** Students will find streaming media that demonstrate signing and other issues in the field of sign language.

## Ancillaries

**The Study Guide**, updated for the fifth edition, offers summaries of the most important concepts from *Contemporary Linguistics*' core chapters, as well as a range of supplemental exercises with an answer key. **The Instructor's Resource Manual** provides teaching advice and includes answers to the exercises at the ends of chapters, while the **Transparency Masters** provide more than 100 key charts, images, and other teaching aids from the main text for use in the classroom.

## Acknowledgments

A book such as this one, with four editors and eighteen contributors, is clearly a team effort. However, the success of such a team effort rests on how well the book fulfills its purpose for the instructors and students who use it. We are indeed fortunate that our colleagues have been generous in providing us with valuable feedback and suggestions based on their experiences using the text in a wide variety of settings, and we express our heartfelt thanks to them.

Many individuals contributed comments and suggestions to the first four editions of the book, and their assistance continues to be reflected in this edition:

Howard Aronson, Peter Avery, Derek Bickerton, Robert Blust, Patrick Bruke, Vit Bubenik, Gary Byma, Lyle Campbell, Steven Carey, Andrew Carnie, Jack Chambers, Shuji Chiba, Vanna Condax, Eung-Do Cook, Lynda Costello, John Davison, John DeFrancis, Nicole Domingue, Elan Dresher, Matthew Dryer, Sheila Embleton, Robert Fisher, Michael Forman, Donald Frantz, Donna Gerds, John Haiman, John Hewson, Joyce Hildebrand, Robert Hsu, David Ingram, Ricky Jacobs, Kazue Kanno, Brian King, Uptal Lahiri, Margaret Larock, Gary Libben, Anatole Lyovin, Joyce McDonough, Barry Meislin, Marianne Mithun, Yves-Charles Morin, Woody Mott, Robert Murray, Michael O'Grady, Douglas Parks, George Patterson, Mary Pepper, Marilyn Phillips, Thomas Purnell, R. Radhakrishnan, Laurence Reid, Lori Repetti, Keren Rice, Lorna Rowsell, Lynn Santelmann, Yataka Sato, Coral Sayce, Albert Schütz, Peter Seyffert, Patricia Shaw, Ronald Southerland, Stanley Starosta, the students in Terry Pratt's linguistics course at the University of Prince Edward Island, Allison Teasdale, Charles Ulrich, Tim Vance, Theo Venneman, Douglas Walker, Lydia White, Norio Yamada, Mehmet Yavaş, and Nava Zaig.

For this fifth edition, we are especially grateful for the meticulous reading and detailed comments provided by our reviewers: Barbara Abbott (Michigan State University), Andrew Carnie (University of Arizona), Janet Cowal (Portland State University), Suzanne Flynn (Massachusetts Institute of Technology), Glenn Gilbert (Southern Illinois University), Lynn Guinden (University of Kentucky), Sharon Hargus (University of Washington), Darya Kavitskay (Yale University), Sandra Wright (California State University, Chico), and Doug Wulf (George Mason University).

Taking the cue from our reviewers' requests, we added a new chapter on sign language to *Contemporary Linguistics*, Fifth Edition. We were fortunate to have Wendy Sandler revise and update the excellent chapter she coauthored with Diane Lillo-Martin on this topic from Blackwell Publishing's *Handbook of Linguistics* (2002).

We are delighted to have worked once again with Bedford/St. Martin's. Nancy Perry, now editor in chief, was instrumental in getting the first edition off the ground and has given unflagging support throughout the history of the book. President Joan Feinberg and editorial director Denise Wydra also lent their support to this edition. We are grateful to Erica Appel, managing editor, for her patience and knowledge as the book went through production. Lucy Krikorian, art director, helped design the book's bold new cover. We are particularly delighted to have Harold Chester, senior project editor, working with us again; Harold distinguished himself on the fourth edition with his meticulous attention to detail. His eagle eye has not dimmed.

Perhaps our greatest debt at Bedford/St. Martin's is to Joelle Hann, the developmental editor for the fifth edition. Joelle joined Bedford/St. Martin's at about the time we began work on the fifth edition; she has taken the reins with professionalism and good cheer and guided us and the book through all stages from the beginning to the finished product. We gratefully acknowledge her efforts and thank her most sincerely.

Finally, we acknowledge our students, without whom this endeavor would be meaningless. In their questions and in their joy in discovering the elegance and beauty of language, they remind us why we have become linguists and why we are teachers.

Mark Aronoff  
Janie Rees-Miller



# PREFACE TO THE FIRST EDITION

---

Thanks to the application of rigorous analysis to familiar subject matter, linguistics provides students with an ideal introduction to the kind of thinking we call “scientific.” Such thinking proceeds from an appreciation of problems arising from bodies of data, to hypotheses that attempt to account for those problems, to the careful testing and extension of the hypotheses. But science is more than a formal activity. One of the great pleasures offered introductory students of linguistics is the discovery of the impressive body of subconscious knowledge that underlies language use. This book attempts to emphasize the extent of this knowledge as well as to introduce the scientific methodology used in linguistic analysis.

Although this is the first linguistics textbook designed primarily for a Canadian readership, we have tried to do much more than simply provide coverage of linguistic phenomena peculiar to Canada. As the title suggests, we have attempted an introduction to linguistic analysis as it is practiced at this stage in the development of our discipline. While we do not ignore or reject other fruitful approaches to linguistics, we have taken the generative paradigm as basic for two reasons. First, generative linguistics provides a relatively coherent and integrated approach to basic linguistic phenomena. Phonetics, phonology, morphology, syntax, and semantics are viewed within this framework as perhaps in no other as fully integrated and interrelated. Secondly, the generative approach has been widely influential in its application to a broad range of other linguistic phenomena over the past twenty years.

The extent of our “contemporariness” has been limited by the inevitable compromise between the need to present basic concepts and the demands of sophisticated and competing recent approaches. In many cases, early versions of our chapters were judged “too contemporary” by instructors who were not specialists in the subfields in question. This led to substantial revisions and a somewhat more traditional approach to certain issues than was originally intended. Where possible, however, later sections of the chapters are used to present more contemporary material. In this way, we have attempted to provide what is promised by the title—an introductory text that provides a solid grounding in basic linguistic concepts, but one that also prepares the student to go on to current work in the discipline. For this reason, the student is introduced to multilevelled phonology (in preparation for further tiered analysis), allophonic/morphophonemic distinctions (in preparation for lexical phonology), interaction among components of the grammar (in preparation for a more extended modular approach), word-formation rules in morphology, and examples of parametric variation in syntax.

To the extent possible, we have attempted to integrate the basic mechanisms outlined in the first five chapters of the book into our discussion of phenomena in later chapters. Thus, our discussion of semantics, historical linguistics, first and second language acquisition, and neurolinguistics draws to some degree on the notions presented in our introduction to generative grammar.

No textbook can be all things to all users. We hope that this book will provide students not only with a springboard to the realm of scientific linguistic analysis,



but with a greater appreciation for the wonder of human language, the variety and complexity of its structure, and the subtlety of its use.

We gratefully acknowledge the assistance of Jack Chambers and Sheila Embleton, both of whom read the manuscript in its entirety and provided invaluable comments. Thanks are also due to those who have read and commented upon individual chapters and sections, including Steven Carey, Matthew Dryer, David Ingram, Gary Byma, Gary Libben, Robert Murray, R. Radhakrishnan, Ronald Southerland, Mary Pepper, Derek Bickerton, Robert Blust, Ricky Jacobs, Don Frantz, John Haiman, John Hewson, Nicole Domingue, Lydia White, George Patterson, Donna Gerds, Elan Dresher, Keren Rice, Robert Fisher, Marilyn Philips, Lorna Rowsell, and Joyce Hildebrand. For assistance in the planning, editing, and production of the manuscript, we are grateful to Coral Sayce, Lynda Costello, Joyce Hildebrand, Brian Henderson, Patrick Burke, Les Petriw, and our project editor at Copp Clark, Margaret Larock.



# CONTEMPORARY LINGUISTICS

AN INTRODUCTION



# CONTENTS

---

<i>Preface</i>	<i>vii</i>
<i>Preface to the First Edition</i>	<i>xi</i>
<i>List of Technical Abbreviations</i>	<i>xxv</i>

## *o n e*

---

<b>LANGUAGE: A PREVIEW</b>	<b>1</b>
1 Specialization for Language	1
2 A Creative System	2
3 Grammar and Linguistic Competence	5
3.1 Generality: All Languages Have a Grammar	6
3.2 Parity: All Grammars Are Equal	7
3.3 Universality: Grammars Are Alike in Basic Ways	8
3.4 Mutability: Grammars Change over Time	9
3.5 Inaccessibility: Grammatical Knowledge Is Subconscious	10
<i>Summing Up</i>	11
<i>Key Terms</i>	11
<i>Recommended Reading</i>	11
<i>Exercises</i>	12

## *t w o*

---

<b>PHONETICS: THE SOUNDS OF LANGUAGE</b>	<b>15</b>
1 Phonetic Transcription	16
1.1 Units of Representation	17
1.2 Segments	17
2 The Sound-Producing System	18
2.1 Glottal States	19
3 Sound Classes	20
3.1 Vowels, Consonants, and Glides (Syllabic and Nonsyllabic Elements)	20
4 Consonant Articulation	21
4.1 The Tongue	22
4.2 Places of Articulation	22
5 Manners of Articulation	24
5.1 Oral versus Nasal Phones	24
5.2 Stops	24
5.3 Fricatives	26
5.4 Affricates	27



5.5	Voice Lag and Aspiration	28
5.6	Liquids	29
5.7	Syllabic Liquids and Nasals	30
5.8	Glides	31
6	Vowels	32
6.1	Simple Vowels and Diphthongs	32
6.2	Basic Parameters for Describing Vowels	33
6.3	Tense and Lax Vowels	34
7	Phonetic Transcription of American English Consonants and Vowels	35
8	Suprasegmentals	37
8.1	Pitch: Tone and Intonation	37
8.2	Length	41
8.3	Stress	42
9	Speech Production	43
9.1	Coarticulation	43
9.2	Articulatory Processes	43
9.3	Some Common Articulatory Processes	44
10	Other Vowels and Consonants	48
	<i>Summing Up</i>	49
	<i>Key Terms</i>	50
	<i>Recommended Reading</i>	52
	<i>Exercises</i>	52
	<i>For the Student Linguist: "Don't Worry about Spelling"</i>	55

### *three*

<b>PHONOLOGY: THE FUNCTION AND PATTERNING OF SOUNDS</b>	<b>57</b>
<b>1</b> Segments in Contrast	59
1.1 Minimal Pairs	59
1.2 Language-Specific Contrasts	61
<b>2</b> Phonetically Conditioned Variation: Phonemes and Allophones	62
2.1 Complementary Distribution	62
2.2 Phonemes and Allophones	63
2.3 Classes and Generalization in Phonology	64
2.4 Canadian Raising	65
2.5 English Mid Vowels and Glides	67
2.6 Language-Specific Patterns	68
<b>3</b> Phonetic and Phonemic Transcription	69
3.1 Phonetic and Phonemic Inventories	71
<b>4</b> Features	72
4.1 Why We Use Features	72
4.2 Feature Representations	76
<b>5</b> Above the Segment: Syllables	83
5.1 Defining the Syllable	83
5.2 Onset Constraints and Phonotactics	85
5.3 Language-Specific Phonotactics	86



5.4 Setting Up Syllables	87
5.5 Syllabic Phonology	89
<b>6 Derivations and Rules</b>	<b>91</b>
6.1 The Form and Notation of Rules	92
6.2 Derivations	95
6.3 Rule Application	96
6.4 Processes and Rules: A Last Word	97
<i>Summing Up</i>	97
<i>Key Terms</i>	98
<i>Recommended Reading</i>	99
<i>Appendix: Hints for Solving Phonology Problems</i>	99
<i>Exercises</i>	101
<i>For the Student Linguist: "The Feature Presentation"</i>	108

## *four*

---

<b>MORPHOLOGY: THE ANALYSIS OF WORD STRUCTURE</b>	<b>111</b>
<b>1 Words and Word Structure</b>	<b>112</b>
1.1 Morphemes	113
1.2 Analyzing Word Structure	114
<b>2 Derivation</b>	<b>118</b>
2.1 Some English Derivational Affixes	119
2.2 Two Classes of Derivational Affixes	122
<b>3 Compounding</b>	<b>123</b>
3.1 Properties of Compounds	124
3.2 Endocentric and Exocentric Compounds	125
3.3 Compounds in Other Languages	125
<b>4 Inflection</b>	<b>127</b>
4.1 Inflection in English	127
4.2 Inflection versus Derivation	128
4.3 How Inflection Is Marked	130
4.4 Other Inflectional Phenomena	133
<b>5 Other Morphological Phenomena</b>	<b>133</b>
5.1 Cliticization	134
5.2 Conversion	134
5.3 Clipping	135
5.4 Blends	135
5.5 Backformation	136
5.6 Acronyms	137
5.7 Onomatopoeia	137
5.8 Other Sources of New Words	137
<b>6 Morphophonemics</b>	<b>138</b>
<i>Summing Up</i>	139
<i>Key Terms</i>	139
<i>Recommended Reading</i>	140
<i>Appendix: How to Identify Morphemes in Unfamiliar Languages</i>	140



<i>Exercises</i>	142
<i>For the Student Linguist: "Bambification"</i>	147

## *f i v e*

---

<b>SYNTAX: THE ANALYSIS OF SENTENCE STRUCTURE</b>	<b>151</b>
1 Categories and Structure	152
1.1 Categories of Words	152
1.2 Phrase Structure	155
1.3 Sentences	160
1.4 Tests for Phrase Structure	161
2 Complement Options	162
2.1 Complement Options for Verbs	163
2.2 Complement Options for Other Categories	164
2.3 Complement Clauses	165
3 Move	167
3.1 Yes-No Questions	167
3.2 Deep Structure and Surface Structure	171
3.3 <i>Do</i> Insertion	172
3.4 <i>Wh</i> Movement	173
4 Universal Grammar and Parametric Variation	177
4.1 Verb Raising	178
5 Some Additional Structures	182
5.1 Coordination	182
5.2 Relative Clauses	184
5.3 Passives	186
<i>Summing Up</i>	188
<i>Key Terms</i>	188
<i>Recommended Reading</i>	190
<i>Appendix: How to Build Tree Structures</i>	190
<i>Exercises</i>	195
<i>For the Student Linguist: "Backwards"</i>	198

## *s i x*

---

<b>SEMANTICS: THE ANALYSIS OF MEANING</b>	<b>201</b>
1 The Nature of Meaning	202
1.1 Semantic Relations among Words	202
1.2 Semantic Relations Involving Sentences	204
1.3 What Is Meaning?	206
2 The Conceptual System	209
2.1 Fuzzy Concepts	210
2.2 Metaphor	211
2.3 The Lexicalization of Concepts	212



2.4 Grammaticization	216
<b>3 Syntax and Sentence Interpretation</b>	<b>217</b>
3.1 Constructional Meaning	217
3.2 Structural Ambiguity	219
3.3 Thematic Roles	221
3.4 The Interpretation of Pronouns	225
<b>4 Other Factors in Sentence Interpretation</b>	<b>228</b>
4.1 The Role of Beliefs and Attitudes	228
4.2 Setting	229
4.3 Discourse	230
4.4 Conversational Maxims	232
<i>Summing Up</i>	234
<i>Key Terms</i>	235
<i>Recommended Reading</i>	236
<i>Exercises</i>	236
<i>For the Student Linguist: "Elvis's Biggest Fan Cleans Out Bank — Accomplice Lauanders the Dough"</i>	241

## *s e v e n*

---

<b>HISTORICAL LINGUISTICS: THE STUDY OF LANGUAGE CHANGE</b>	<b>245</b>
<b>1 The Nature of Language Change</b>	<b>246</b>
1.1 Systematicity of Language Change	247
1.2 Causes of Language Change	247
<b>2 Sound Change</b>	<b>249</b>
2.1 Sequential Change	249
2.2 Segmental Change	256
2.3 Auditorily Based Change	257
2.4 Phonetic versus Phonological Change	257
<b>3 Morphological Change</b>	<b>260</b>
3.1 Addition of Affixes	260
3.2 Loss of Affixes	261
3.3 From Synthetic to Analytic to Synthetic	263
3.4 Analogy	263
3.5 Reanalysis	264
<b>4 Syntactic Change</b>	<b>265</b>
4.1 Word Order	265
4.2 Inversion in the History of English	267
<b>5 Lexical and Semantic Change</b>	<b>268</b>
5.1 Addition of Lexical Items	268
5.2 Loss of Lexical Items	272
<b>6 Language Reconstruction</b>	<b>272</b>
6.1 Comparative Reconstruction	273
6.2 Techniques of Reconstruction	274
6.3 The Discovery of Indo-European	279



<i>Summing Up</i>	282
<i>Key Terms</i>	283
<i>Recommended Reading</i>	284
<i>Exercises</i>	284

## *e i g h t*

---

<b>THE CLASSIFICATION OF LANGUAGES</b>	<b>291</b>
1 Some Preliminaries	291
1.1 Dialect and Language	292
1.2 Types of Classification	294
2 Typological Classification	295
2.1 Phonology	296
2.2 Morphology	303
2.3 Syntax	306
2.4 Explaining Universals	310
3 Genetic Classification	313
3.1 The Indo-European Family	314
3.2 Some Other Families	318
3.3 Language Phyla	321
<i>Summing Up</i>	321
<i>Key Terms</i>	321
<i>Recommended Reading</i>	322
<i>Exercises</i>	322

## *n i n e*

---

<b>INDIGENOUS LANGUAGES OF NORTH AMERICA</b>	<b>325</b>
1 Origin and Classification	326
1.1 Ultimate Origins	326
1.2 Historical Relationships in North America	327
2 Phonetics and Phonology	329
2.1 Velar, Uvular, and Pharyngeal Articulations	329
2.2 Lateral Fricatives	329
2.3 Glottalized Stops and Affricates (Ejectives)	330
2.4 Vowels and Suprasegmental Features	330
2.5 Sounds Not Frequently Found	331
3 Morphology and Syntax	331
3.1 The Structure of Words	331
3.2 Grammatical Categories	334
3.3 Noun Classification	337
4 The Future of Indigenous North American Languages	340
<i>Summing Up</i>	341
<i>Key Terms</i>	341
<i>Recommended Reading</i>	342