

Cambridge University Press

978-0-521-61478-8 - Linguistics: An Introduction, Second Edition

Andrew Radford, Martin Atkinson, David Britain, Harald Clahsen and Andrew Spencer

Frontmatter

[More information](#)

Linguistics

Written by a team based at one of the world's leading centres for linguistic teaching and research, the second edition of this highly successful textbook offers a unified approach to language, viewed from a range of perspectives essential for students' understanding of the subject. A language is a complex structure represented in the minds of its speakers, and this textbook provides the tools necessary for understanding this structure. Using clear explanations throughout, the book is divided into three main parts: sounds, words and sentences. In each, the foundational concepts are introduced, along with their application to the fields of child language acquisition, psycholinguistics, language disorders and sociolinguistics, giving the book a unique yet simple structure that helps students to engage with the subject more easily than other textbooks on the market. This edition includes a completely new section on sentence use, including an introduction and discussion of core areas of pragmatics and conversational analysis; new coverage of sociolinguistic topics, introducing communities of practice; a new subsection introducing the student to Optimality Theory; a wealth of new exercise material and updated further reading.

ANDREW RADFORD, MARTIN ATKINSON, DAVID BRITAIN, HARALD CLAHCEN and ANDREW SPENCER all teach in the Department of Language and Linguistics at the University of Essex.

Cambridge University Press

978-0-521-61478-8 - Linguistics: An Introduction, Second Edition

Andrew Radford, Martin Atkinson, David Britain, Harald Clahsen and Andrew Spencer

Frontmatter

[More information](#)

Linguistics

An Introduction

SECOND EDITION

ANDREW RADFORD

MARTIN ATKINSON

DAVID BRITAIN

HARALD CLAHSEN

and

ANDREW SPENCER

University of Essex



CAMBRIDGE
UNIVERSITY PRESS

Cambridge University Press

978-0-521-61478-8 - Linguistics: An Introduction, Second Edition

Andrew Radford, Martin Atkinson, David Britain, Harald Clahsen and Andrew Spencer

Frontmatter

[More information](#)

CAMBRIDGE UNIVERSITY PRESS

Cambridge, New York, Melbourne, Madrid, Cape Town, Singapore, São Paulo, Delhi

Cambridge University Press

The Edinburgh Building, Cambridge CB2 8RU, UK

Published in the United States of America by Cambridge University Press, New York

www.cambridge.org

Information on this title: www.cambridge.org/9780521614788

© Andrew Radford, Martin Atkinson, David Britain, Harald Clahsen and Andrew Spencer 2009

This publication is in copyright. Subject to statutory exception and to the provisions of relevant collective licensing agreements, no reproduction of any part may take place without the written permission of Cambridge University Press.

First published 1999

Seventh printing 2007

Second edition 2009

Printed in the United Kingdom at the University Press, Cambridge

A catalogue record for this publication is available from the British Library

Library of Congress Cataloguing in Publication data

Linguistics : an introduction / Andrew Radford ... [et al.]. – 2nd ed.

p. cm.

Includes bibliographical references and index.

ISBN 978-0-521-84948-7

I. Linguistics. I. Radford, Andrew. II. Title.

P121.L528 2008

410–dc22

2008040946

ISBN 978-0-521-84948-7 hardback

ISBN 978-0-521-61478-8 paperback

Cambridge University Press has no responsibility for the persistence or accuracy of URLs for external or third-party internet websites referred to in this book, and does not guarantee that any content on such websites is, or will remain, accurate or appropriate.

Cambridge University Press

978-0-521-61478-8 - Linguistics: An Introduction, Second Edition

Andrew Radford, Martin Atkinson, David Britain, Harald Clahsen and Andrew Spencer

Frontmatter

[More information](#)

Contents

<i>List of illustrations</i>	page x
<i>List of tables</i>	xii
<i>Preface to the second edition</i>	xiii
<i>A note for course organisers and class teachers</i>	xiv
Introduction	1
Linguistics	2
Developmental linguistics	6
Psycholinguistics	9
Neurolinguistics	11
Sociolinguistics	14
Exercises	17
Further reading and references	21
Part I Sounds	23
1 Introduction	25
2 Sounds and suprasegmentals	27
Consonants	28
Vowels	36
Suprasegmentals	41
Exercises	44
3 Sound variation	47
Linguistic variables and sociological variables	47
Stylistic variation	53
Linguistically determined variation	54
Variation and language change	56
Exercises	59
4 Sound change	61
Consonant change	61
Vowel change	64
The transition problem: regular sound change versus lexical diffusion	67
Suprasegmental change	70
Exercises	72

Cambridge University Press

978-0-521-61478-8 - Linguistics: An Introduction, Second Edition

Andrew Radford, Martin Atkinson, David Britain, Harald Clahsen and Andrew Spencer

Frontmatter

[More information](#)

vi

Contents

5	Phonemes, syllables and phonological processes	75
	Phonemes	75
	Syllables	78
	Syllabification and the Maximal Onset Principle	81
	Phonological processes	82
	Phonological features	85
	Features and processes	86
	Constraints in phonology	90
	Exercises	92
6	Child phonology	96
	Early achievements	96
	Phonological processes in acquisition	97
	Perception, production and a dual-lexicon model	100
	Exercises	106
7	Processing sounds	109
	Speech perception	109
	Speech production	113
	Other aspects of phonological processing	117
	Exercises	120
	Further reading and references	122
Part II	Words	125
8	Introduction	127
9	Word classes	129
	Lexical categories	129
	Functional categories	132
	The morphological properties of English verbs	135
	Exercises	138
10	Building words	140
	Morphemes	140
	Morphological processes – derivation and inflection	143
	Compounds	148
	Clitics	150
	Allomorphy	151
	Exercises	153
11	Morphology across languages	156
	The agglutinative ideal	156
	Types of morphological operations	162
	Exercises	165

Cambridge University Press

978-0-521-61478-8 - Linguistics: An Introduction, Second Edition

Andrew Radford, Martin Atkinson, David Britain, Harald Clahsen and Andrew Spencer

Frontmatter

[More information](#)

	Contents	vii
12	Word meaning	170
	Entailment and hyponymy	170
	Meaning opposites	175
	Semantic features	176
	Dictionaries and prototypes	180
	Exercises	182
13	Children and words	186
	Early words – a few facts	186
	Apprentices in morphology	188
	The semantic significance of early words	192
	Exercises	196
14	Lexical processing and the mental lexicon	199
	Serial-autonomous versus parallel-interactive processing models	199
	On the representation of words in the mental lexicon	204
	Exercises	211
15	Lexical disorders	213
	Words and morphemes in aphasia	214
	Agrammatism	215
	Paraphasias	217
	Dissociations in SLI subjects' inflectional systems	219
	Exercises	221
16	Lexical variation and change	224
	Borrowing words	224
	Register: words for brain surgeons and soccer players, hairdressers and lifesavers	226
	Biscuit or cookie? Variation and change in word choice	226
	Same word – new meaning	228
	Variation and change in morphology	233
	Exercises	238
	Further reading and references	242
Part III	Sentences	244
17	Introduction	245
18	Basic terminology	247
	Categories and functions	247
	Complex sentences	250
	The functions of clauses	253
	Exercises	254

Cambridge University Press

978-0-521-61478-8 - Linguistics: An Introduction, Second Edition

Andrew Radford, Martin Atkinson, David Britain, Harald Clahsen and Andrew Spencer

Frontmatter

[More information](#)

viii

Contents

19	Sentence structure	257
	Merger	257
	Tests for constituency	263
	Agreement, case assignment and selection	264
	Exercises	268
20	Empty categories	271
	Empty T constituent	271
	PRO: the empty subject of infinitive clauses	276
	Covert complements	278
	Empty complementisers	278
	Empty determiners	283
	Exercises	287
21	Movement	293
	Head movement	293
	Operator movement	297
	Yes–no questions	302
	Other types of movement	304
	Exercises	307
22	Syntactic variation	311
	Inversion in varieties of English	311
	Syntactic parameters of variation	314
	The Null Subject Parameter	319
	Parametric differences between English and German	321
	Exercises	325
23	Sentence meanings and Logical Form	330
	Preliminaries	330
	Thematic roles	333
	A philosophical diversion	336
	Covert movement and Logical Form	339
	Exercises	345
24	Children's sentences	349
	Setting parameters: an example	350
	Null subjects in early Child English	351
	Non-finite clauses in Child English	354
	Children's nominals	358
	Exercises	361
25	Sentence processing	366
	Click studies	367
	Processing empty categories	368
	Strategies of sentence processing	370
	Exercises	375

Illustrations

Figures

1	The human cerebral cortex, with the functions of some areas indicated	<i>page</i> 12
2	The human cerebral cortex, with Broca's Area (BA) and Wernicke's Area (WA) indicated	12
3a	Centralisation and age on Martha's Vineyard	19
3b	Location and centralisation on Martha's Vineyard	19
3c	Leavers and stayers on Martha's Vineyard	20
4	Cross-section of the human vocal tract	28
5	Cross-section of the vocal tract, illustrating the articulation of [m]	30
6	Cross-section of the vocal tract, illustrating the articulation of [n]	30
7	Cross-section of the vocal tract, illustrating the articulation of [ŋ]	31
8	Cross-section of the vocal tract, illustrating the articulation of interdental sounds	32
9	Cross-section of the vocal tract, illustrating the articulation of labiodental sounds	32
10	Cross-section of the vocal tract, illustrating the articulation of [j]	32
11	Cross-section of the vocal tract, illustrating the articulation of palato-alveolar sounds	33
12	The vowel quadrilateral (including only short vowels)	37
13	The vowel quadrilateral (with long vowels)	38
14	The vowel quadrilateral, including mid-closed vowels	38
15	The diphthongs of English	39
16	The vowel quadrilateral, including central vowels	40
17	Sound variation and speaker educational achievement: vowel assimilation in Tehran Farsi	49
18	The use of standard pronunciations of (ing) and speaker sex and social class	50
19	Ethnic variation in New Zealand English	50
20	Degree of backing of /ʌ/ among students at a Detroit high school	53
21	A travel agent's style shifting to clients: (t)-flapping	54
22a	Percentage of department store assistants using [r] by store	58
22b	Percentage of Saks department store assistants using [r] by age	58

Cambridge University Press

978-0-521-61478-8 - Linguistics: An Introduction, Second Edition

Andrew Radford, Martin Atkinson, David Britain, Harald Clahsen and Andrew Spencer

Frontmatter

[More information](#)

List of illustrations

xi

22c	Casual and emphatic pronunciations of [r] in New York department stores	59
23	Stylistic shifts in the speech of a lecturer	60
24	The pronunciation of (o) in Ucieda Spanish by speaker occupation	60
25	A vowel split in London	65
26	The Northern Cities Chain Shift	67
27	The devoicing of /v/ to [f] in Netherlands and Belgian Dutch between 1935 and 1993	73
28	An Optimality Theory tableau for the input /pin/ in English	91
29	Preliminary model of child phonology	98
30	Lateral harmony as feature spreading	102
31	Lateral harmony: constructing the output UR	103
32	A dual-lexicon model of child phonology	104
33	Matching input representation to syllable structure template	105
34	Results of an identification experiment for an [ɪ – ε]-series	111
35	Results of a discrimination experiment for an [ɪ – ε]-series	111
36	Results of an identification experiment for a [b – p]-series	112
37	Results of a discrimination experiment for a [b – p]-series	113
38	A simplified version of the scan-copier model of speech production	116
39	One view of the structure of the mental lexicon, illustrating the form of a lexical entry	205
40	A simple concept	206
41	Five conditions in a word/non-word recognition experiment	207
42	Differences between types of speech errors	208
43	Reported use of lexical pairs in New Zealand English	227
44	The adoption of British English by Canadian children	228
45	The lexical attrition of <i>dwile</i> in East Anglia	229
46	Speaker sex and the use of (ing) in casual speech in three English-speaking cities	234
47a	Social class and the use of (ing) in casual speech in Norwich	235
47b	Speech style and the use of (ing) among upper working-class residents of Norwich	235
48	Changes in the use of (ing) in Norwich across the generations	236
49	Ethnicity, levels of interethnic contact and the use of AAVE morphological features	237
50	Third person singular present tense zero in three locations in East Anglia	240

Map

The lexical attrition of the word <i>dwile</i> in East Anglia	229
---	-----

Cambridge University Press

978-0-521-61478-8 - Linguistics: An Introduction, Second Edition

Andrew Radford, Martin Atkinson, David Britain, Harald Clahsen and Andrew Spencer

Frontmatter

[More information](#)

Tables

1	IPA transcription for the English consonants	<i>page 29</i>
2	Consonantal sounds arranged by place and manner of articulation	35
3	The omission of [h] in Bradford	48
4	(th) and (ʌ) in the speech of two Belfast residents	51
5	Deletion of [t] and [d] in English	55
6	A hypothetical implicational scale	56
7	Social, contextual and linguistic variables from Labov's study of (r) in New York department stores	57
8	Spirantisation in Liverpool	63
9	Vowel changes in contemporary varieties of English	64
10	[ɑ:] and [æ] in Standard British English (RP)	69
11	Vowel changes in an English dialect	72
12	The English phoneme inventory	78
13	A distinctive feature matrix for some common vowels	93
14	Personal pronouns in English	134
15	Examples of derivational morphology in English	144
16	Forms of the Turkish noun EV 'house'	157
17	Forms of the Latin noun VILLA 'country house'	157
18	Forms of the Latin noun FELES 'cat'	158
19	Equivalences between Old and Modern English and other Germanic languages	231
20	The present tense forms of Modern English <i>help</i> and their equivalents in Old English and Modern German	234
21	Changes in the Old English suffixes <i>-inde</i> and <i>-inge/-ynge</i>	236

Cambridge University Press

978-0-521-61478-8 - Linguistics: An Introduction, Second Edition

Andrew Radford, Martin Atkinson, David Britain, Harald Clahsen and Andrew Spencer

Frontmatter

[More information](#)

Preface to the second edition

The overall structure of the book is unaltered from the first edition. Our justification for this is set out in the note for course organisers from the first edition that immediately follows this preface. We have, however, made a number of significant modifications.

As far as changes in content are concerned, we have introduced a whole new section on sentence use (section 27), including introduction and discussion of core areas of pragmatics and conversational analysis. Additionally, section 23 on sentence meaning has been modified so that it is not exclusively concerned with quantified expressions in Logical Form and now contains a short discussion of thematic roles with linked exercises. Finally, individual authors have taken the opportunity to update the sections for which they have been primarily responsible, when this seemed appropriate. Thus, all sections in part III (sentences) have been updated to reflect the change in the theoretical approach we favour here, whereby Tense replaces Inflection as a clausal head. There have been numerous other small changes in these sections to reflect recent theoretical developments. New socio-linguistic material in section 3 introduces communities of practice, and section 5 now contains a short introduction to Optimality Theory, an increasingly popular approach to the understanding of phonological structure. We have, of course, also attempted to correct errors that appeared in the first edition.

Turning to the exercises that follow each section, in many cases, these are a complete replacement for those appearing in the first edition. In other cases, we have retained some or all of the original exercises, but supplemented them with new material. For some sections, the set of exercises contains a model answer. At one stage, our intention was to provide this for all sets of exercises, but it became apparent that this was not always appropriate. Accordingly, individual authors have taken their own decision on this matter, and we now believe that the imposition of a one-size-fits-all format in this connection would not be appropriate, sometimes leading to rather pointless exemplification.

Finally, we have updated recommended further reading throughout and included bibliographical information for this alongside new materials referred to in the text and in the exercises.

Cambridge University Press

978-0-521-61478-8 - Linguistics: An Introduction, Second Edition

Andrew Radford, Martin Atkinson, David Britain, Harald Clahsen and Andrew Spencer

Frontmatter

[More information](#)

A note for course organisers and class teachers

There are a number of points which teachers can usefully bear in mind when considering how to use this book.

Firstly, the division into three major parts (sounds, words and sentences), with the foundational concepts *and* the ‘hyphenated’ disciplines being covered in each part, provides some options which are not readily available in the context of more conventional structures. Specifically, the distribution of competence for small-group teaching becomes a more manageable problem within this structure. The graduate student in phonology can take classes linked to sounds and give way to the morphologist when the course moves onto words, and the situation where hard-pressed assistants have to spend valuable time reacquiring basic material remote from their own research area is avoided. Additionally, as the three parts of the book are largely self-contained, each could be integrated as the introductory segment of more specialised courses in phonology, morphology or syntax. This might be particularly appropriate for students who have followed an introductory course which is at a somewhat lower level than what we are aiming at here.

Secondly, the book contains extensive exercise material at the end of each section, and it is intended that this should be helpful for small-group teaching. We have distributed references to the exercises throughout the text, the idea being that when an exercise is referenced, students should be in a position to undertake it with profit. On occasions, these references cluster at the end of a section, indicating that the whole section must be covered before students can fruitfully tackle the exercises. Obviously, this gives class teachers some flexibility in deciding what proportion of a section will be required reading, and while this might be seen as disrupting the uniformity of the structure of the book, we believe that its pedagogical justification is clear.

Thirdly, we should mention a couple of points about conventions. We have attempted to use bold face on the introduction of any technical or specialised vocabulary and thereafter use ordinary typeface unless particular emphasis justifies italics. There is always room for disagreement on what counts as technical or specialised and on the good sense of repeating bold-face references, at least on some occasions. We wouldn’t wish to say we’ve got it right, but we have thought about it!

Finally, at the end of each of the major parts of the book, we have included some bibliographical material. The purpose of this is twofold: we provide guidance on further reading for the topics covered in the book and we also give references for

Cambridge University Press

978-0-521-61478-8 - Linguistics: An Introduction, Second Edition

Andrew Radford, Martin Atkinson, David Britain, Harald Clahsen and Andrew Spencer

Frontmatter

[More information](#)

A note for course organisers and class teachers

xv

the research on which we rely in our discussions. Usually, although not always, these latter works are not appropriate for a student's next step in the discipline, but providing references in this way gives us a means of acknowledging the work of the many colleagues whose ideas have influenced us. Throughout these sections, we use the author–date system, and at the end of the book full details of both types of publication – further reading and original research – can be found in a conventional bibliography.