Do women talk more than men? Does text messaging make you stupid? Can chimpanzees really talk to us? This fascinating textbook addresses a wide range of language myths, focusing on important big-picture issues, such as the rule-governed nature of language and the influence of social factors on how we speak. Case studies and analysis of relevant experiments teach readers the skills to become informed consumers of social science research, while suggested open-ended exercises invite students to reflect further on what they’ve learned.

With coverage of a broad range of topics (cognitive, social, historical), this textbook is ideal for non-technical survey courses in linguistics. Important points are illustrated with specific, memorable examples: invariant *be* shows the rule-governed nature of African-American English; vulgar female speech in Papua New Guinea shows how beliefs about language and gender are culture-specific. Engaging and accessibly written, Kaplan’s lively discussion challenges what we think we know about language.

ABBY KAPLAN is an assistant professor (lecturer) in the Department of Linguistics at the University of Utah.
Women Talk More than Men

...And Other Myths about Language Explained

Abby Kaplan

University of Utah
Contents

List of figures  page viii
List of tables  xii
Acknowledgments  xvi

1 Introduction  1

Part I  ...But is it language?

2 ‘A dialect is a collection of mistakes’  9
   2.1 AAE as a rule-breaker  10
   2.2 Grammatical rules in standard and non-standard dialects  11
   2.3 Case study: What is the best way to teach the standard dialect to speakers of a non-standard dialect?  20
   2.4 Summary  27

3 ‘Sign language is skilled charades’  31
   3.1 Signed languages versus spoken languages  32
   3.2 Iconicity in signed and spoken languages  40
   3.3 Case study: Are signed languages just pantomime?  42
   3.4 Summary  48

4 ‘Chimpanzees can talk to us’  52
   4.1 First-generation studies with artificial languages  53
   4.2 First-generation studies with sign  60
   4.3 Second-generation studies  68
   4.4 Language, communication, and human uniqueness  71
   4.5 Summary  72

Part II  Language learning

5 ‘Children have to be taught language’  79
   5.1 Culture-specific beliefs about language acquisition  80
   5.2 The ‘30-million-word gap’  83
## Contents

5.3 Case study: Do parents correct their children’s mistakes? 92  
5.4 Summary 106

6 ‘Adults can’t learn a new language’ 111  
6.1 Age and second-language acquisition 111  
6.2 Case study: Are children more successful at learning a second language than adults? 117  
6.3 Reasons for the age effect 124  
6.4 Summary 128

7 ‘Being bilingual makes you smarter (or dumber)’ 132  
7.1 What does it mean to be bilingual? 133  
7.2 Bilingualism on a larger scale 136  
7.3 Case study: Does being bilingual make you smarter? 138  
7.4 Summary 149

Part III Language in use

8 ‘Women talk more than men’ 155  
8.1 Western commentary on language and gender 156  
8.2 Language and gender in context: Ideals and behavior 160  
8.3 Case study: Do women talk more than men? 165  
8.4 Case study: Do women use more tag questions than men? 177  
8.5 Summary 184

9 ‘Texting makes you illiterate’ 190  
9.1 Reactions to new and old technologies 190  
9.2 Text message abbreviations 194  
9.3 Case study: Does text messaging hurt literacy skills? 200  
9.4 Summary 211

10 ‘The most beautiful language is French’ 216  
10.1 Non-linguists’ evaluations of dialects 216  
10.2 Things that make a language beautiful (or ugly) 221  
10.3 Case study: Are some dialects more beautiful than others? 227  
10.4 Summary 232

11 ‘My language limits my thoughts’ 235  
11.1 The Sapir-Whorf hypothesis 235  
11.2 George Orwell and political language 242  
11.3 Case study: Does our language affect the way we think? 246  
11.4 Summary 260
## Contents

<table>
<thead>
<tr>
<th>Appendix A: Statistics brief reference</th>
<th>vii</th>
</tr>
</thead>
<tbody>
<tr>
<td>A.1 Descriptive statistics</td>
<td>265</td>
</tr>
<tr>
<td>A.2 Inferential statistics</td>
<td>270</td>
</tr>
<tr>
<td>A.3 Experimental design</td>
<td>277</td>
</tr>
<tr>
<td>A.4 Summary</td>
<td>280</td>
</tr>
</tbody>
</table>

Language index 282
People index 284
General index 290
Figures

2.1 Frequency of Cypriot Greek dialect features in students’ essays. Androula Yiakoumetti, A bidialectal programme for the learning of Standard Modern Greek in Cyprus, *Applied Linguistics* 2006, 27, 2, 295–317, Figure 5. Reprinted by permission of Oxford University Press

3.1 Signs for TREE in American Sign Language (a), Danish Sign Language (b), and Chinese Sign Language (c). Ursula Bellugi and Edward S. Klima, Two faces of sign: Iconic and abstract, *Annals of the New York Academy of Sciences* 1976, Figure 6. Reprinted by permission of John Wiley & Sons, Inc

4.1 Lana at her lexigram keyboard. Susan M. Essock, Timothy V. Gill, and Duane M. Rumbaugh, Language relevant object- and color-naming tasks, *Language Learning by a Chimpanzee: The LANA Project*, Duane M. Rumbaugh, ed., 1977, Figure 1. Reprinted by permission of Elsevier

4.2 Example of a Yerkish sentence: please machine give milk period

6.1 Examples of possible relationships between the age at which a person begins acquiring a second language and the person’s ultimate fluency in that language

6.2 Relationship between age of arrival in the United States of Chinese and Korean immigrants and performance on an oral test of English syntax. Reprinted from *Cognitive Psychology*, 21, Jacqueline S. Johnson and Elissa L. Newport, Critical period effects in second language learning: The influence of maturational state on the acquisition of English as a second language, 60–99, copyright 1989, Figure 2, with permission from Elsevier

6.3 Foreign accent ratings by ten native English speakers for Italian immigrants who arrived in Canada at various ages. Reprinted with permission from James Emil Flege, Murray J. Munro, and Ian R. A. MacKay, Factors affecting strength of
List of figures


6.4 Relationship between score on a test of English syntax and age of arrival in the United States for Hungarian immigrants. Robert M. DeKeyser, *The robustness of critical period effects in second language acquisition*, *Studies in Second Language Acquisition* 22(4):2000, 499–533, Figure 1


7.1 Proportion correct anticipatory looks in the pre- and post-switch phases of Experiment 1. Ágnes Melinda Kovács and Jacques Mehler, *Cognitive gains in 7-month-old bilingual infants*, *Proceedings of the National Academy of Sciences* 106(16):6556–6560, 2009, Figure 2

8.1 Ratio of female to male speech participation by experimental condition. Christopher F. Karpowitz, Tali Mendelberg, and Lee Shaker, *Gender inequality in deliberative participation*, *American Political Science Review* 106(3):533–547, 2012, Figure 1

8.2 Average proportion of the conversation attributed to the first speaker, by gender of the first speaker and composition of the pair. Anne Cutler and Donia R. Scott, *Speaker sex and perceived apportionment of talk*, *Applied Psycholinguistics* 11(3):253–272, 1990, Figure 1


List of figures


11.1 Response times (in milliseconds) for across- and within-category comparisons for Russian speakers (left) and English speakers (right) by interference condition. Jonathan Winawer, Nathan Witthoft, Michael C. Frank, Lisa Wu, Alex R. Wade, and Lera Boroditsky, Russian blues reveal effects of language on color discrimination, *Proceedings of the National Academy of Sciences* 104(19):7780–7785, Figure 2. Copyright (2007) National Academy of Sciences, U.S.A


11.3 Performance on the memory task of Experiment 1 by native language and picture type. Reprinted from *Cognition*, 84, Anna Papafragou, Christine Massey, and Lila Gleitman, Shake, rattle, ‘n’ roll: The representation of motion in language and cognition, 189–219, copyright 2002, Figure 3, with permission from Elsevier

11.4 Examples of spatial questions used as primes. Reprinted from *Cognitive Psychology*, 43, Lera Boroditsky, Does language shape thought? Mandarin and English speakers’ conceptions of time, 1–22, copyright 2001, Figure 3, with permission from Elsevier

11.5 Reaction times to temporal questions by native language, type of spatial prime, and temporal language (before/after vs. earlier/later). Reprinted from *Cognitive Psychology*, 43, Lera Boroditsky, Does language shape thought? Mandarin and English speakers’ conceptions of time, 1–22, copyright 2001, Figure 4, with permission from Elsevier

A.1 Examples of strong (a), moderate (b), and no (c) correlation
List of figures

A.2 Duration of the middle consonant in words like *rapid* in sober and intoxicated speech, presented as a bar graph and a line graph 269

A.3 Histograms of the pitch of words spoken by subjects 06 and 07 270
### Tables

#### 2.1 Means (M) and standard deviations (SD) for scores on Reading Test I (reading of single words)

<table>
<thead>
<tr>
<th>Table</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.1</td>
<td>Means (M) and standard deviations (SD) for scores on Reading Test I (reading of single words)</td>
<td>23</td>
</tr>
</tbody>
</table>

#### 3.1 Iconicity of children’s signs relative to adult signs as a percentage of each child’s total number of signs. Richard P. Meier, Claude E. Mauk, Adrianne Cheek, and Christopher J. Moreland, The form of children’s early signs: Iconic or motoric determinants?, *Language Learning and Development* 2008, Table 1. Reprinted by permission of Taylor & Francis Ltd., www.tandfonline.com

<table>
<thead>
<tr>
<th>Table</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.1</td>
<td>Iconicity of children’s signs relative to adult signs as a percentage of each child’s total number of signs. Richard P. Meier, Claude E. Mauk, Adrianne Cheek, and Christopher J. Moreland, The form of children’s early signs: Iconic or motoric determinants?, <em>Language Learning and Development</em> 2008, Table 1. Reprinted by permission of Taylor &amp; Francis Ltd., <a href="http://www.tandfonline.com">www.tandfonline.com</a></td>
</tr>
</tbody>
</table>

#### 3.2 Reaction times (in milliseconds) and accuracy by grade and strong/weak iconicity

<table>
<thead>
<tr>
<th>Table</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.2</td>
<td>Reaction times (in milliseconds) and accuracy by grade and strong/weak iconicity</td>
</tr>
</tbody>
</table>

#### 5.1 Proportions of parents’ sequiturs and non sequiturs in response to children’s primitive (P) and well-formed (WF) utterances, by grammatical construction. Roger Brown and Camille Hanlon, Derivational complexity and order of acquisition in child speech, *Cognition and the Development of Language*, J. R. Hayes, ed., 1970, Table 1.10. Reprinted by permission of John Wiley & Sons

<table>
<thead>
<tr>
<th>Table</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.1</td>
<td>Proportions of parents’ sequiturs and non sequiturs in response to children’s primitive (P) and well-formed (WF) utterances, by grammatical construction. Roger Brown and Camille Hanlon, Derivational complexity and order of acquisition in child speech, <em>Cognition and the Development of Language</em>, J. R. Hayes, ed., 1970, Table 1.10. Reprinted by permission of John Wiley &amp; Sons</td>
</tr>
</tbody>
</table>


<table>
<thead>
<tr>
<th>Table</th>
<th>Description</th>
</tr>
</thead>
</table>


<table>
<thead>
<tr>
<th>Table</th>
<th>Description</th>
</tr>
</thead>
</table>

#### 5.4 Mothers’ repetitions and non-repetitions of children’s well-formed and ill-formed utterances, broken down by
List of tables

5.5 Eve’s self-corrections after adult responses. Adapted from Table 2 of Matthew Saxton, Negative evidence and negative feedback: Immediate effects on the grammaticality of child speech, *First Language* 20, pp. 221–252, copyright 2000. Reprinted by permission of SAGE Publications

5.6 Eve’s responses to adult responses over the entire 9-month observation period and from the point at which she had attained 50% accuracy. Adapted from Table 3 of Matthew Saxton, Negative evidence and negative feedback: Immediate effects on the grammaticality of child speech, *First Language* 20, pp. 221–252, copyright 2000. Reprinted by permission of SAGE Publications


7.2 Means and standard deviations of the scores of monolingual and bilingual 4- and 5-year-olds on the incongruent pairs in the word-size task. Ellen Bialystok, Tali Shenfield, and Judith Codd, Languages, scripts, and the environment: Factors in developing concepts of print, *Developmental Psychology* 36(1):66–76, 2000, Table 4. Adapted with permission of the American Psychological Association

7.3 Means and standard deviations of scores on cognitive screening tests by number of languages spoken for three ‘waves’ of interviews. Lower scores are better. Gitit Kavé, Nitza Eyal, Aviva Shorek, and Jiska Cohen-Mansfield, Multilingualism and cognitive state in the oldest old, *Psychology and Aging* 23(1):2008, 70–78, adapted from Table 2

xv

List of tables

8.2 Amount of talk by gender of speaker and gender of addressee. Adapted from Table II of Susan J. Frances, Sex differences in nonverbal behavior, *Sex Roles* 5(4): 519–535, 1979. With kind permission from Springer Science and Business Media 171

8.3 Mean talking time in seconds by gender and couple type; Table 1 of Kollock et al. (1985) 173

8.4 Average number of tag questions per speaker by gender and composition of the group. Adapted from Table II of Julie R. McMillan, A. Kay Clifton, Diane McGrath, and Wanda S. Gale, Women’s language: Uncertainty or interpersonal sensitivity and emotionality?, *Sex Roles* 3(6): 545–559, 1977. With kind permission from Springer Science and Business Media 183

9.1 Pre- and post-test spelling scores by group and exposure type. D. Powell and M. Dixon, Does SMS text messaging help or harm adults’ knowledge of standard spelling?, *Journal of Computer Assisted Learning* 2011, Table 2. Reprinted by permission of John Wiley & Sons, Inc. 202

9.2 Means and standard deviations of students’ scores on three standardized literacy tests. N. Kemp and C. Bushnell, Children’s text messaging: Abbreviations, input methods and links with literacy, *Journal of Computer Assisted Learning* 2011, Table 2. Reprinted by permission of John Wiley & Sons, Inc. 205

9.3 Correlation coefficients among demographic variables, texting behavior, and test scores. Beverly Plester, Clare Wood, and Puja Joshi, Exploring the relationship between children’s knowledge of text message abbreviations and school literacy outcomes, *British Journal of Developmental Psychology* 2009, Table 2, adapted. This material is reproduced with permission of John Wiley & Sons, Inc 207

9.4 Correlation coefficients between literacy measures and number of text messages sent and received at various points in the study. C. Wood, E. Jackson, L. Hart, B. Plester, and L. Wilde, The effect of text messaging on 9- and 10-year-old children’s reading, spelling and phonological processing skills, *Journal of Computer Assisted Learning* 2011, Table 3. Reprinted by permission of John Wiley & Sons, Inc 210

List of tables

11.1 Mean speed estimates in response to questions with different verbs. Reprinted from *Journal of Verbal Learning and Verbal Behavior*, 13, Elizabeth F. Loftus and John C. Palmer, Reconstruction of automobile destruction: An example of the interaction between language and memory, 585–589, copyright 1974, Table 1, with permission from Elsevier 259

11.2 Subjects who responded yes and no to the question *Did you see any broken glass?* by verb condition. Reprinted from *Journal of Verbal Learning and Verbal Behavior*, 13, Elizabeth F. Loftus and John C. Palmer, Reconstruction of automobile destruction: An example of the interaction between language and memory, 585–589, copyright 1974, Table 2, with permission from Elsevier 259

A.1 Average pitch (fundamental frequency), duration, and loudness (intensity) of consonant-vowel-consonant words in sober and intoxicated speech 266

A.2 *p*-values for various outcomes of a coin-tossing experiment, testing the null hypothesis that heads and tails are equally likely 272
This book has been long in the making, and it has benefited from the assistance of many people. Helen Barton at Cambridge University Press has been a helpful guide throughout. Derron Borders, Howard Giles, Jim McCloskey, Sean Redmond, and Fernando Rubio provided pointers to helpful literature. Special thanks to Ruth Kramer for help with Egyptian hieroglyphs, and to Valerie Fridland and Agnes-Melinda Kovács for supplying original copies of figures from their publications. The Interlibrary Loan staff at the University of Utah always amazes me with their fast and helpful service.

Many thanks are due to everyone who read and commented on various parts of the manuscript: Scott Liddell, Misha Becker, Rachel Hayes-Harb, Shannon Barrios, Robin Dodsworth, and especially Mark Shoun. As usual, none of these fine people should be held responsible for any remaining shortcomings of the book.

Special thanks to my family for being supportive throughout the whole process. My husband Aaron and I had many useful discussions about practically all of the material here; he also patiently endured rants about chimpanzee research, Hart & Risley, the direction of time, or whatever else I happened to be reading or writing about that day. My older son Graham showed poor planning in being three years old just at the time I was reading about all the fascinating experiments that bilingualism researchers have done with young children. Thanks for playing some silly games with Mommy – and I was so proud when you aced the DCCS task at 3:11. My younger son Jay provided lots of moral support, mostly by napping cutely on me while I was reading. Thank you all!