

The Emergence and Development of American English

William A. Kretzschmar, Jr.



THE EMERGENCE AND DEVELOPMENT OF AMERICAN ENGLISH

William A. Kretschmar, Jr.
University of Georgia



CAMBRIDGE
UNIVERSITY PRESS



Shaftesbury Road, Cambridge CB2 8EA, United Kingdom

One Liberty Plaza, 20th Floor, New York, NY 10006, USA

477 Williamstown Road, Port Melbourne, VIC 3207, Australia

314 – 321, 3rd Floor, Plot 3, Splendor Forum, Jasola District Centre, New Delhi – 110025, India

Cambridge University Press is part of Cambridge University Press & Assessment, a department of the University of Cambridge.

We share the University's mission to contribute to society through the pursuit of education, learning and research at the highest international levels of excellence.

www.cambridge.org

Information on this title: www.cambridge.org/9781009161213

DOI: [10.1017/9781009161220](https://doi.org/10.1017/9781009161220)

© William A. Kretzschmar, Jr. 2026

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 & Assessment.

When citing this work, please include a reference to the DOI [10.1017/9781009161220](https://doi.org/10.1017/9781009161220)

First published 2026

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

Library of Congress Cataloging-in-Publication Data

Names: Kretzschmar, William A., Jr., author.

Title: The emergence and development of American English / William A. Kretzschmar, Jr., University of Georgia.

Description: Cambridge ; New York, NY : Cambridge University Press, 2025. | Includes bibliographical references and index.

Identifiers: LCCN 2024057522 | ISBN 9781009161213 (hardback) | ISBN 9781009161237 (paperback) | ISBN 9781009161220 (ebook)

Subjects: LCSH: English language – United States – History.

Classification: LCC PE2809 .K74 2025 | DDC 427/.973 – dc23/eng/20241231

LC record available at <https://lcn.loc.gov/2024057522>

ISBN 978-1-009-16121-3 Hardback

ISBN 978-1-009-16123-7 Paperback

Additional resources for this publication at www.cambridge.org/williamakretzschmar

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

For EU product safety concerns, contact us at Calle de José Abascal, 56, 1º, 28003 Madrid, Spain, or email eugpsr@cambridge.org

Contents

[List of Figures](#)

[List of Tables](#)

[Acknowledgments](#)

[Introduction](#)

[1 The Idea of American English](#)

[American English as Language](#)

[American English as Culture](#)

[American English in Politics](#)

[" Spoken in the United States "](#)

[2 Emergence](#)

[Complex Systems](#)

[Evidence of Emergence](#)

[Consequences of Emergence](#)

[3 Old World Origins for American English](#)

[Ancient History](#)

[Origins of English](#)

[Great Vowel Shift](#)

[4 The Colonial Period \(1600 – 1800\)](#)

[Demographics](#)

[Pattern of Settlement](#)

[Eighteenth-Century Immigration](#)

[Crèvecoeur and the American Experience](#)

[Schneider ' s Postcolonial English](#)

[Examples of Colonial American English](#)

[5 The National Period \(up to the Civil War, 1800 – 1865\)](#)

[Settlement Patterns](#)

[An Experiment in the Spread of Dialect Words](#)

[Immigration and Language](#)

[Webster and Standard American English](#)

[6 Gilded Age to World War II \(1866 – 1945\)](#)

[Robber Barons](#)

[Demographics](#)

[The Great Depression](#)

[Common Language](#)

[Mencken and The American Language](#)

[Grip the Rat](#)

7 The Information Age (1945 – Present)

[America as a World Power](#)

[Information and Technology](#)

[Demographic Patterns](#)

[Language in Use](#)

8 Regions and Localities

[Traditional Dialect Patterns](#)

[More Recent Dialect Maps](#)

[Perceptions of Regional Dialects](#)

[The American South](#)

[Regional Differences in Frequency Profiles](#)

[Listening to Regional Voices](#)

9 African American English

[Race and Slavery](#)

[Demographics and Migration](#)

[Features of African American English](#)

[Academic Ideas about African American English](#)

[Language in Use](#)

10 Social Differences in American English

[Social Class](#)

[North American Sociolinguistics](#)

[Multidimensional Social Behavior](#)

[Roswell](#)

[Social Differences in the Complex System of Speech](#)

11 Heritage Languages and American English

[Ideas about Language Contact](#)

[Language Use across Generations](#)

[Language Learning](#)

[Heritage Languages in Communities](#)

12 Standard American English

[Mavens](#)

[Pronunciation](#)

[World English versus American English](#)

[Standards and Urbanization](#)

Appendix 1 Terms and Concepts for Studying the English Language: Expression of Words with Sounds

[Words](#)

[Speech Sounds](#)

Appendix 2 Terms and Concepts for Studying the English Language: Beyond Expression to Content

[Words in Patterns](#)

[Patterns beyond Sentences](#)

Appendix 3 The Linguistic Atlas Project and Excel: Working with Survey Data

[Linguistic Atlas Project \(LAP\)](#)

[LAMSAS](#)

[LAGS](#)

[Other Atlas Projects](#)

[Getting Started Online](#)

[Data Download Center](#)

[LICHEN](#)

[Tallies](#)

[Working with Spreadsheets](#)

[COUNTIF](#)

[VLOOKUP](#)

[Computer Exercises](#)

[Glossary](#)

[References](#)

[Index](#)

Additional resources for this publication available at www.cambridge.org/williamakretzschmar

Figures

- [1.1 The American states.](#)
- [1.2 American regions.](#)
- [1.3 Dennis Preston.](#)
- [1.4 North America.](#)
- [1.5 A schematic, three-dimensional representation to visualize Zelinsky ' s cultural systems.](#)
- [1.6 Cutting potatoes.](#)
- [2.1 The break in pool.](#)
- [2.2 A dragonfly.](#)
- [2.3 A-curve for *dragonfly* variants.](#)
- [2.4 A-curve for *dragonfly* variants, after removing plurals and inappropriate responses.](#)
- [2.5 *dragonfly* variants just for men, and just for women.](#)
- [2.6 *dragonfly* variants for regional groups of speakers.](#)
- [2.7 *dragonfly* variants for groups of speakers by age.](#)
- [2.8 Flexible and understandable.](#)
- [3.1 Indo-European tree of languages.](#)
- [3.2 Alsace and Germany.](#)
- [3.3 Early regions in Britain \(showing the modern borders for Scotland and Wales\).](#)
- [3.4 Phase 1 of the Great Vowel Shift.](#)
- [3.5 Phase 2 of the Great Vowel Shift.](#)
- [4.1 European settlement pattern near Leicester \(England\) in the Middle Ages.](#)
- [4.2 Settlement and transportation by 1800.](#)
- [5.1 Settlement pathways from the American East Coast.](#)
- [5.2 American Settlement by 1850.](#)
- [5.3 *cloudburst* in LAMSAS \(density estimation\).](#)
- [5.4 Hans Kurath.](#)
- [5.5 Noah Webster.](#)
- [5.6 *The American Spelling Book.*](#)
- [6.1 Cornelius Vanderbilt.](#)
- [6.2a Andrew Carnegie.](#)

[6.2b Andrew Mellon.](#)

[6.3a Leland Stanford.](#)

[6.3b John D. Rockefeller.](#)

[6.4 Russell Patterson \(1893 – 1977\), “Where There ’ s Smoke There ’ s Fire,” ca. 1920s.](#)

[6.5 Settlement by 1890.](#)

[7.1 United States population density \(2000\).](#)

[7.2 Red and blue states as of 2020.](#)

[7.3 Vaux survey, map for “ sandwich ” responses \(#64\).](#)

[8.1 Kurath ’ s dialect map.](#)

[8.2 Variants of *dragonfly*.](#)

[8.3 Isoglosses.](#)

[8.4 Hempl ’ s dialect map.](#)

[8.5 Labov ’ s dialect map.](#)

[8.6 The Northern Cities shift.](#)

[8.7 The Southern shift.](#)

[8.8 Raw Value Map for /ay/ before voiced consonants \(e.g. *bide* \) on Formant 2.](#)

[8.9 Local Autocorrelation Map for /ay/ before voiced consonants on Formant 2.](#)

[8.10 HCA Dendrogram based on Factors 1, 2, 3, and 4.](#)

[8.11 Two perceptual maps.](#)

[8.12 Percentage estimates of the South.](#)

[8.13 Vowel system of a sample of Southern non-African-American men.](#)

[8.14 A-curve of 6,214 examples of \[u\] from twenty-three Southern non-African-American men.](#)

[8.15 A-curve for LAMSAS variants for *curdled milk* .](#)

[8.16 A-curve for New York City names for *curdled milk* .](#)

[8.17 A-curve for Philadelphia names for *curdled milk* .](#)

[9.1 W. E. B. Du Bois.](#)

[9.2 Race?](#)

[9.3 Martin Luther King, Jr. at the Lincoln Memorial.](#)

[9.4 Percentage of African Americans vs. all Americans by income class. Household distribution by income.](#)

[9.5 Raven and Virginia McDavid.](#)

[9.6 Lorenzo Dow Turner.](#)

[9.7 John Baugh.](#)

[9.8 John Rickford.](#)

[9.9 The Southern shift.](#)

[9.10 Atlanta African American Male vowel means vs. Kent and Read national means \(from the Atlanta Survey\).](#)

[9.11 Atlanta African American Female vowel means vs. Kent and Read national means \(from the Atlanta Survey\).](#)

[9.12 Roswell African American male front vowel means vs. Atlanta means.](#)

[9.13 Roswell African American female front vowel means vs. Atlanta means.](#)

[10.1 William Labov.](#)

[10.2 Sali Tagliamonte.](#)

[10.3 Class/Style model for -r in New York City \(redrawn from Labov 1972b\).](#)

[10.4 *fog* overall in LAMSAS.](#)

[10.5 *fog* for men \(765\) and women \(346\).](#)

[10.6 *fog* for farmers \(545\), housekeepers \(265\), managers \(94\), and professionals \(52\).](#)

[11.1 Native American Languages spoken in the United States.](#)

[11.2 Joe Salmons.](#)

[11.3 Carmen Fought.](#)

[11.4 Separate balls, separate languages.](#)

[11.5 Cake.](#)

[11.6 Batter.](#)

[11.7 Locative constructions among interviewers and learners.](#)

[11.8 Levels of scale, domains of use.](#)

[11.9 Levels of scale, domains of use, reorganized.](#)

[11.10 Learning by self-organization.](#)

[11.11 Type frequency, early vocabulary.](#)

[12.1 William Safire.](#)

[12.2 Bryan Garner.](#)

[12.3 Antonin Scalia.](#)

[App1.1 Places of articulation.](#)

[App1.2 American English vowel system in F1/F2 space \(following Kent and Read 2002\).](#)

[App1.3 \[i\] pronunciations in F1/F2 space, sixty-four DASS speakers.](#)

[App1.4 Frequency profile of pronunciations of the \[i\] vowel, sixty-four DASS speakers.](#)

[App1.5 Shaded cells for where sixty-four DASS speakers said the \[i\] vowel.](#)

[App1.6 Vowel space for sixty-four DASS speakers, shown with ellipses.](#)

[App3.1 Opening page of the LAP website.](#)

[App3.2 LAP projects.](#)

[App3.3](#) [Data Download Center: LAMSAS link.](#)

[App3.4](#) [Spreadsheet of LAMSAS speakers \(first twenty rows\).](#)

[App3.5](#) [LAMSAS field book page.](#)

[App3.6](#) [Portion of spreadsheet from LAMSAS page 4.](#)

[App3.7](#) [Portion of audio spreadsheet for LAGS020.](#)

[App3.8](#) [LICHEN opening screen.](#)

[App3.9](#) [LICHEN map of LAP speakers.](#)

[App3.10](#) [LICHEN search tab.](#)

[App3.11](#) [LICHEN search for LAGS middle-aged, highly educated, upper class women.](#)

[App3.12](#) [LICHEN display for LAGS 024.](#)

[App3.13](#) [Map of LAGS middle-aged, highly educated, upper class women.](#)

[App3.14](#) [LICHEN items tab.](#)

[App3.15](#) [Dragon fly chart \(partial\).](#)

[App3.16](#) [Map for *skeeter hawk* .](#)

[App3.17](#) [Excel file for *dragon fly* tally, after CSV download \(partial\).](#)

[App3.18](#) [Adjusted Excel tally with chart inserted \(partial\).](#)

[App3.19](#) [Excel with LAMSAS page 60 A file open \(partial\).](#)

[App3.20](#) [Sorted LAMSAS page 60 A file \(partial\).](#)

[App3.21](#) [New sheet for responses to line 4 of page 60 A file \(partial\).](#)

[App3.22](#) [Results of deleting duplicates in Column L \(partial\).](#)

[App3.23](#) [Tally for dragon fly item \(partial\).](#)

[App3.24](#) [Dragon fly tally with chart inserted.](#)

[App3.25](#) [VLOOKUP results for Sex added to the data file for dragon fly \(partial\).](#)

[App3.26](#) [VLOOKUP results for Sex and Age added to the data file for dragon fly \(partial\).](#)

Tables

[2.1 Top ten names for *dragonfly*](#)

[2.2 All the names for *dragonfly*](#)

[5.1 Distribution of words by number of cities](#)

[5.2 Distribution of variants by city](#)

[6.1 Differences between American and British English](#)

[7.1 Twelve “ Southern ” features for Roswell residents](#)

[8.1 Variants for “ extra bed on the floor ”](#)

[8.2 Variants for “ cornbread ”](#)

[8.3 Top LAMSAS variants for *curdled milk*](#)

[8.4 New York City names for *curdled milk*](#)

[8.5 Philadelphia names for *curdled milk*](#)

[9.1 When the plantation accent developed \(following Bailey 1997\)](#)

[10.1 Variants for *fog* overall in LAMSAS](#)

[10.2a *fog* for men \(765\)](#)

[10.2b *fog* for women \(346\)](#)

[10.3a *fog* for farmers](#)

[10.3b *fog* for housekeepers](#)

[10.3c *fog* for managers](#)

[10.3d *fog* for professionals](#)

[11.1 L-vocalization in the Australasian region \(adapted from Table 2, Horvath and Horvath 2003: 147\)](#)

[11.2 No nouns \(one child at age two, twenty-five most frequent words\) \(adapted from Tomasello 2003: 82\)](#)

[12.1 Standard American English Vowels \(adapted from Kurath and McDavid 1961: 6 with IPA symbols used in Upton and Kretzschmar 2017\)](#)

[App1.1 IPA symbols for English sounds](#)

[App2.1 Sentence patterns](#)

[App3.1 Community/Age Word Table](#)

[App3.2 Community Word Table](#)

[App3.3 Community/Job Word Table](#)

[App3.4 Community/Type Word Table](#)

[App3.5 Community/Race Word Table](#)

App3.6 [Community/Sex Word Table](#)

App3.7 [Community/Education Word Table](#)

Acknowledgments

My first acknowledgment is to my students, who have put up with my efforts to teach them in a different way and who have made many suggestions for how to do it better since my work on complex systems has begun to appear. But those were students in my History of the English Language classes: I have been unable to teach American English for nearly a decade because of my need to cover other courses at my university. Then, in Autumn 2019 I had the opportunity to teach American English again as Fulbright Distinguished Chair at Adam Mickiewicz University in Poznań, Poland. In Autumn 2020 I did teach American English again at my own university, though remotely during the pandemic so students had much to cope with.

My greatest debt is to my teachers and friends, particularly those who have participated with me in the American Dialect Society. Raven and Virginia McDavid gave me my first opportunity to study American English, and what a chance that was! Lee Pederson, another of Raven's students with whom I met regularly for lunch over two decades, greatly influenced my thought about American English – and provided the timelines in [Chapters 3](#) through [7](#). I have had fewer chances to connect with another of Raven's students, Roger Shuy, but I value greatly the chances I have had to talk with and learn from him. Finally, Richard Bailey was a teacher I could have had but never did when I was an undergraduate at Michigan, and who became a good friend only later in life. He encouraged me by exclaiming to others that my current research was “ exactly what we needed, ” and his own writing in a series of books provided an example for detailed, urbane, and witty research. I have been fortunate to live my academic life with such people, and I am – as complexity science would say – a product of our interactions.

I am very grateful for numerous good suggestions from anonymous readers of the manuscript for Cambridge University Press. Any remaining errors are of course my own.

Introduction



This book is about American English, a textbook meant to be a relatively brief, highly teachable volume designed for undergraduate courses in the area. *The Emergence and Development of American English* (*EDAE*) is meant to be an all-in-one volume, and so it includes introductory treatment of basic terms and concepts for language study in the first two Appendices. *EDAE* takes a historical perspective in that it offers a set of chapters that bring readers from the origins of English up to the present day in America. It also has chapters that flesh out the modern situation for American English: regions, social groups including a separate chapter on African American English, heritage languages, and Standard American English. The book is meant for undergraduates who lack training in English language studies or training in linguistics but of course can also be used by people who have more training. *EDAE* is designed for global readers, with an awareness throughout of the global reach of American English. There is a strong demand for new approaches suitable for a wide range of faculty with some training in language studies who want more comprehensive modern coverage. These teachers will benefit from the structure of chapters, modeled after the structure in the Cambridge Introductions to the English Language series (CIEL). This book is a companion for *The Emergence and Development of English* in CIEL, a brief but general coverage of history of the English language, and *EDAE* provides more audio and computer opportunities for teachers and students.

The key challenge for students and instructors in *EDAE* will be the incorporation of the science of complex systems into the mainstream coverage of American English. The book pursues a narrative thread throughout the chapters on “ emergence. ” Emergence is the key term from the study of complex systems, a new (literally only a few decades old) science currently useful in physics, genetics, evolutionary biology, and economics, but also a perfect fit for the humanities. The science of complexity describes how massive numbers of random interactions can give rise to order, self-organization of regularities that “ emerge ” from the interactions without specific causes. The drive of twentieth-century linguistics to make the study of language more scientific by means of grammatical and exceptionless “ rules ” has never been as successful as linguists might have hoped. The reason is that speech, language in use, is a complex system, as demonstrated from first principles and copious evidence in the author ’ s *The Linguistics of Speech* (2009) and *Language and Complex Systems* (2015), foundational books in the field. *Exploring Linguistic Science* (Burkette and Kretzschmar 2018) is a complete textbook meant to offer an easy introduction to complexity science and linguistics. Emergence in American English is not once-and-done; it continues in every place where Americans talk or write, in every locality and in every kind of conversation or text. Thus, in this book, while the text will apply the common terms and concepts of contemporary language study and linguistics, the story of the language will be about continual emergence and re-emergence of lexical, phonological, grammatical, and discourse forms of English out of the interaction of its speakers and the contingencies of their history. Complex systems are adaptable and so this method predicts linguistic change. The central aim of *EDAE* is to produce a compelling account of American English that does not leave out the people in favor of paradigms and rules, and that casts the important facts of the language as regularities that exist within a matrix of variation, subject to continual change. Of course, this book may be taught without engaging with complex systems if an instructor wishes to do so.

The subject of complex systems is explained briefly and non-technically in [Chapter 2](#) ; additional aspects of complex systems will be introduced in later chapters, but nowhere are students and their instructors subjected to heavily mathematical or otherwise technical discussion. Complex systems can describe the process by which we perceive our language behavior to be associated with our communities and practices; thus, the study of speech as a complex system addresses language as an aspect of culture that emerges from human interaction. The key point about the nonlinear A-curve and the property of scaling (see [Chapter 2](#)), signs that a complex system has operated in a speech community, is that these are understandable on a conceptual basis. Moreover, the book cannot replace normal linguistic terminology because the complex systems approach leads to discussion of emergence, and exactly what has emerged in the

language must be described in linguistic terms, introduced in basic terms and concepts in [Appendix 1](#) and [Appendix 2](#) for those who have not encountered them. These discussions are quite compressed, and so they provide a framework for teachers to explain using their own backgrounds, not a comprehensive resource about linguistics. A more thorough and detailed approach to complex systems in relation to linguistic terms and concepts can be found in *Exploring Linguistic Science* (Burkette and Kretzschmar 2018).

The point to emphasize about *EDAE* is that the theme of emergence will not throw the baby out with the bath water. This book is unique in its historical approach, and covers the same linguistic ground as other American English textbooks, but through emergence it does a much better job than other texts of talking about natural and inevitable change in the language, and about the fact that English is different in different places and social situations even while we can still talk about it as one language. Emergence provides an improved quantitative model for sociolinguistic analysis of language in communities (see [Chapter 10](#)), so that sociolinguists might reconsider some findings in a new light. Emergence also offers historical linguists an improved way to think about evident variation in the historical record. Complex systems does not replace sociolinguistics and historical linguistics, but instead stands beside them with the chance of improving our understanding of social and historical change. Complexity science tells us what *change* really means in quantitative terms, rather than the qualitative view of structural change often applied in linguistics. While some students (and teachers) may think originally that *EDAE* as a title refers to the progressive march of English towards its contemporary institutional standard, they will learn that the complex system of speech offers instead a richer description of our language in which the institutional standard is only a part.

[Appendix 3](#) is different in that it explains how to use data from the Linguistic Atlas Project (LAP). LAP is the oldest and largest survey research project on American English. It has collected information about Americans' everyday words, pronunciations, and grammatical choices in thousands of interviews across the country. Most of these interviews are concentrated east of the Mississippi River, in America's area of highest population density. The LAP website provides a great deal of this data, in text, audio, and images. The website has different parts, a Data Download Center and the LICHEN user interface, to provide the data to users. [Appendix 3](#) describes access to these sections. It also provides detailed instructions about using Excel (or similar programs) to access all the data provided in spreadsheet form. These instructions will also enable readers to create their own spreadsheets and analyze them, based on their experience with LAP data. Students can test their skills on a series of exercises, enough that instructors can assign one exercise per chapter as students progress through the full text. The Computer Exercises in [Appendix 3](#) take students from introductory exploration of the LAP website in the earlier exercises, to the opportunity to do their own research on data from the site. While each individual student's findings may be unpredictable, use of the structured exercises by the author in classes over many years has shown that, in a class of students, their overall findings always go along with the teaching in the text. [Appendix 3](#) thus does for linguistic analysis what is meant by the old saying, "if you give someone a fish you feed them today, but if you teach someone to fish you feed them for a lifetime." [Appendix 3](#) looks forward to students and teachers doing their own research through instruction about spreadsheets based on LAP. My own experience teaching American English with LAP data is that students really enjoy the chance to look at primary data, and to make their own maps and tables.

Each chapter in *EDAE* is provided with Exercises (according to the CIEL pattern). The volume is also provided with online audio supplements (available at www.cambridge.org/williamakretzschmar) in addition to its instruction in the use of the online LAP resource. A special section at the end of every chapter offers students a chance to listen to relevant short audio passages. As referenced in the text of the volume, readers and teachers can access many audio samples from Jess Bessinger and Diane Bornstein, *A History of the English Language* (1973), from Cabell Greet's 1928 recordings, from a 1967 NCTE album that illustrates American speech, and from various LAP projects, in the Cambridge University Press online companion to this volume.

The Idea of American English



In This Chapter

American English is not a simple thing to define. The United States is a big place, with many different regions. American English is certainly different from British English, and yet it is hard to set boundaries on the differences. American culture also plays a role in American English, and some say that politics does as well. In the end, the multitude of voices of Americans of whatever belief and whatever region come together to emerge as what people around the world recognize as American English.

Mitford M. Mathews started his book called *The Beginnings of American English* with the following statement ([1931](#) : vii):

The expression ‘ American English ’ is used in this work in its generally accepted sense of ‘ that variety of English which is spoken in the United States of America. ’

This definition can also serve to launch the present book. Mathews ’ definition contains two key components:

- the idea that American English is a “ variety of English ”
- the idea that American English is “ spoken in the United States ”

Pretty obvious, you might think, perhaps not worth saying at all – until you start to think more closely about these ideas. Just what should we think of “ a variety ” when it has to do with a language, especially the American variety of English? What makes how some English speakers talk “ American ” (as something recognizably different from other speakers of English around the world)? How did it happen that a language like English came to have different varieties, especially the American variety? And what should we think about the relationship between the speech of a place and the place itself? Do English-speaking people from elsewhere around the world automatically begin to speak American English as soon as they arrive within the physical borders of the United States, or is there more to it than that? Unraveling these questions constitutes the purpose of this book.

The United States of America is a very large place. A convenient way to talk about America is to refer to the individual states, as on the following map ([Figure 1.1](#)).

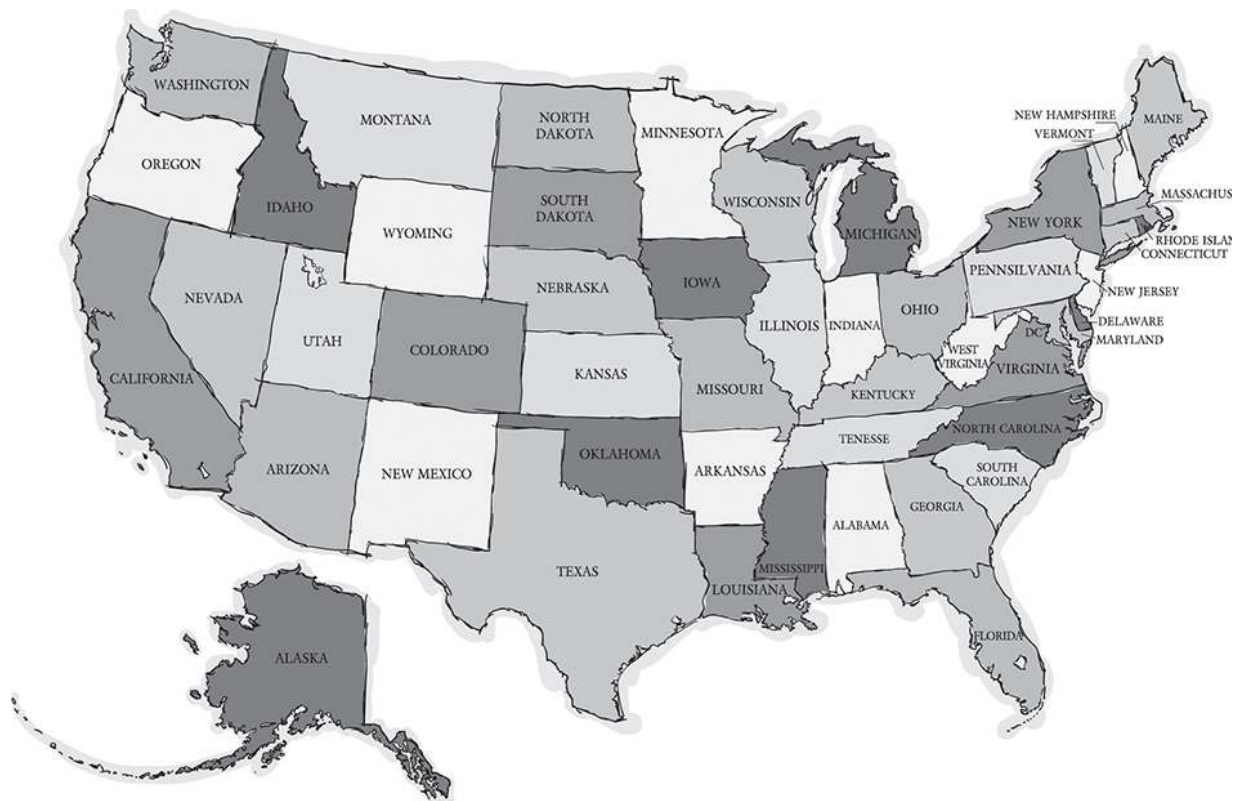


Figure 1.1 The American states.

Source: Jobalou/Getty Images.

There are also names for **regions**, collections of states. New England is the group of states east and north of the state of New York. Everybody talks about the “ South, ” but there is no general agreement about which states belong to it. One definition is east of the Mississippi River (the very large river that runs from north to south, along the western borders of Illinois, Kentucky, Tennessee and Mississippi), and from Tennessee and North Carolina South to the Gulf of Mexico, as in [Figure 1.2](#) . Others would include the old Confederate states (from Civil War days in the 1860s) of Virginia, Kentucky, Arkansas, Louisiana, and Texas. Still others might include Oklahoma. The “ Midwest ” is the same: some people would say it includes Ohio, Indiana, Illinois, Michigan, and Wisconsin, while others would also include Minnesota, Iowa, and Missouri across the Mississippi, and still others might include the Dakotas, Nebraska, and Kansas, as in [Figure 1.2](#) .

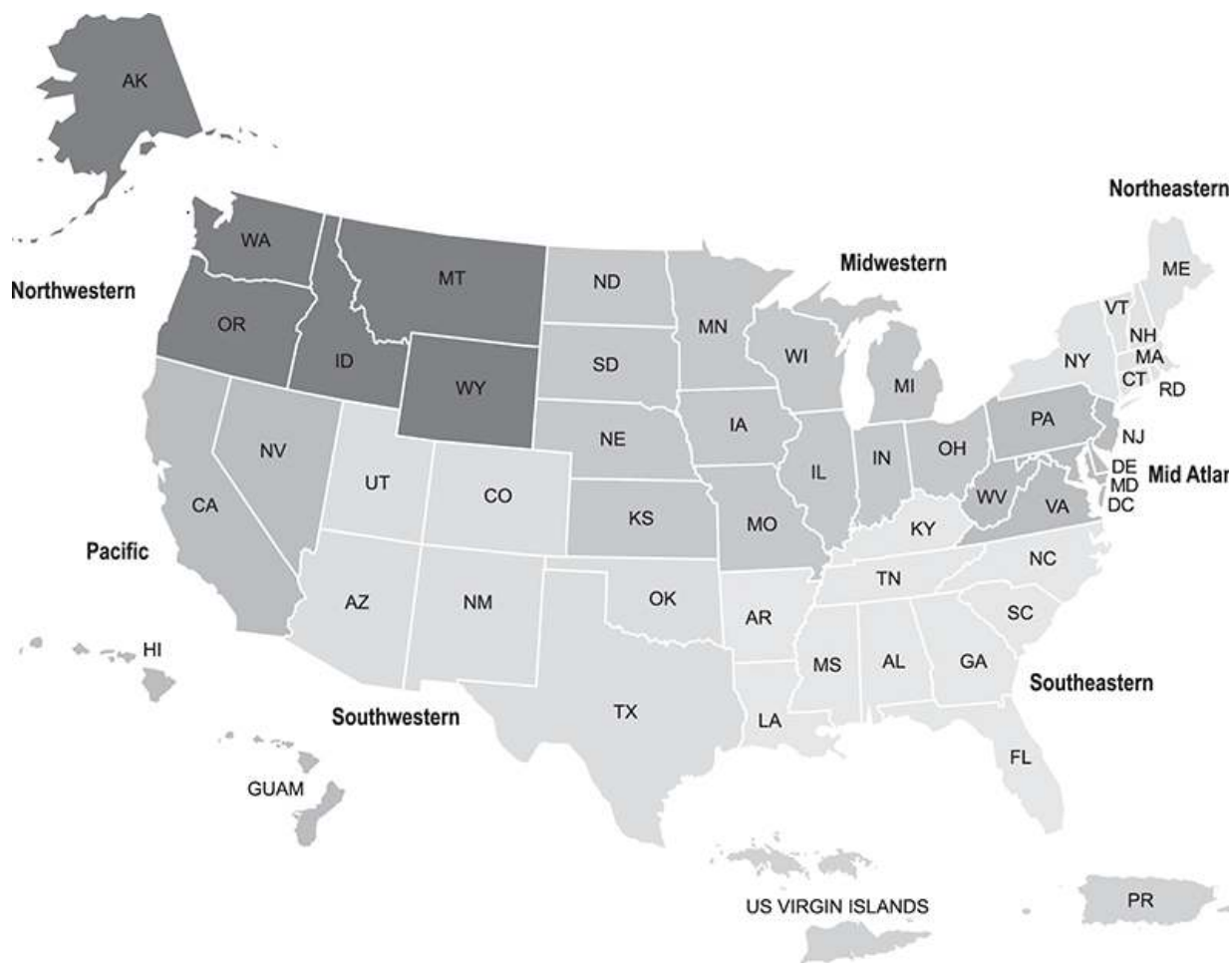


Figure 1.2 American regions.

Source: Getty Images.

The “ West ” might be all the states west of the Mississippi, but other people might start it with Montana, Wyoming, and Colorado, where the Rocky Mountains divide the continent. [Figure 1.2](#) puts California and Nevada in a Pacific region. Texas is often considered to be in a category by itself, as is the state of California. Other regional names, like “ Southwest, ” and “ Northwest ” (as in [Figure 1.2](#)) and “ Great Plains ” (as separate from the “ Midwest ”) are in common use, but again without precise definitions of what states belong to them. American geography across the states played an important role in settlement patterns, where rivers were conduits for travel and mountains blocked the way. In the rest of this book the names of states and prominent land features will be named – if you are not familiar with the places and features, they are easy to look up online.

American English as Language

The reason that a great many people are satisfied with their own impressions of American English, instead of wanting to make a study of it, is that their impressions are so clear. American English has a certain concrete reality for them, based on their experience with Americans speaking English in comparison with non-Americans speaking English. Citizens of the United States know that their own talk is not the same as the English used by somebody from another English-speaking country, say English in Britain – even if they have never traveled far from home. Since we hear people ’ s pronunciation all the while that they are talking, it is only natural that this characteristic of speech, often called **accent** , becomes identified with the behavior of the people doing the talking.

The term **Americanism** was coined in 1781 by John Witherspoon to describe “ use of phrases or terms, or a construction of sentences, even among persons of rank and education, different from the use of the same terms or phrases, or the construction of similar sentences, in Great Britain ” (Mathews [1931](#) : 17). This term seems perfectly appropriate to most people as the designation for words and phrases of American origin, but since the English language first appeared in Britain it may seem strange to some people to consider a word or phrase to be a **Briticism** . John Algeo, the foremost student of Briticisms, defines them as expressions with a form or use that originated in Britain after 1776 or one that is more characteristic of British than of American English ([2006](#)). Algeo distinguishes a more common kind of Briticisms, those that appear in American sources but in material by or about the British, from a more subtle variety, those that appear in American sources in native contexts. Among the latter, Algeo ([2006](#)) lists

<i>gaol</i> (Am <i>jail</i>)	<i>skinhead</i>
<i>now do you?</i> (a “ tag question ”)	<i>loo</i> (Am <i>toilet</i>)
<i>the occasional</i> (Am <i>an occasional</i>)	<i>on average</i> (Am <i>on the average</i>)
<i>Filofax</i> (Am <i>portfolio</i>)	<i>flat</i> (Am <i>apartment</i>)
<i>infra dig</i> (Am <i>undignified</i>)	<i>roundabout</i> (Am <i>traffic circle</i>)
<i>value for money</i> (Am <i>good deal</i>)	<i>flog</i> (Am <i>try to sell</i>)

While the terms “ Americanism ” and “ Briticism ” commonly refer to the origins of words, Americanisms and Briticisms are used in both countries, just at different rates. The words *flat* and *apartment* , for instance, are both used in both Britain and America, but *flat* is the more common word in Britain while in America people more commonly say *apartment* . As we shall see in later chapters, frequency differences like this (as opposed to all or nothing usage) are characteristic of how groups of people use language.

While many English speakers would find it difficult to cite particular differences in usage between, say, British and American English, most of them could also offer an imitation – more or less effective – of the speech of a British or American English speaker. Imitation here is not flattery but a declaration of differences: even people who give very bad imitations believe that there is a difference and try to enact it.

Dennis Preston ([Figure 1.3](#)) has studied what he has called **folk linguistics** or **perceptual dialectology** ([1989](#) , [1993](#) ; Preston and Niedzielski [2000](#)). He has found that people are not slow to form perceptions of how other people speak, and that the perceptions are bound up with how these folk (by which Preston means nothing bad, just that his subjects are not trained to analyze speech) see themselves as English speakers. We can accept individual people for themselves without abandoning our stereotypes. And we can maintain the stereotypes even if we cannot readily make a list of actual differences between them, whether in pronunciation or lexicon or syntax. This, then, is what most people mean by “ a variety of English. ” For most people a **variety of a language** is constituted by the perception of a difference.

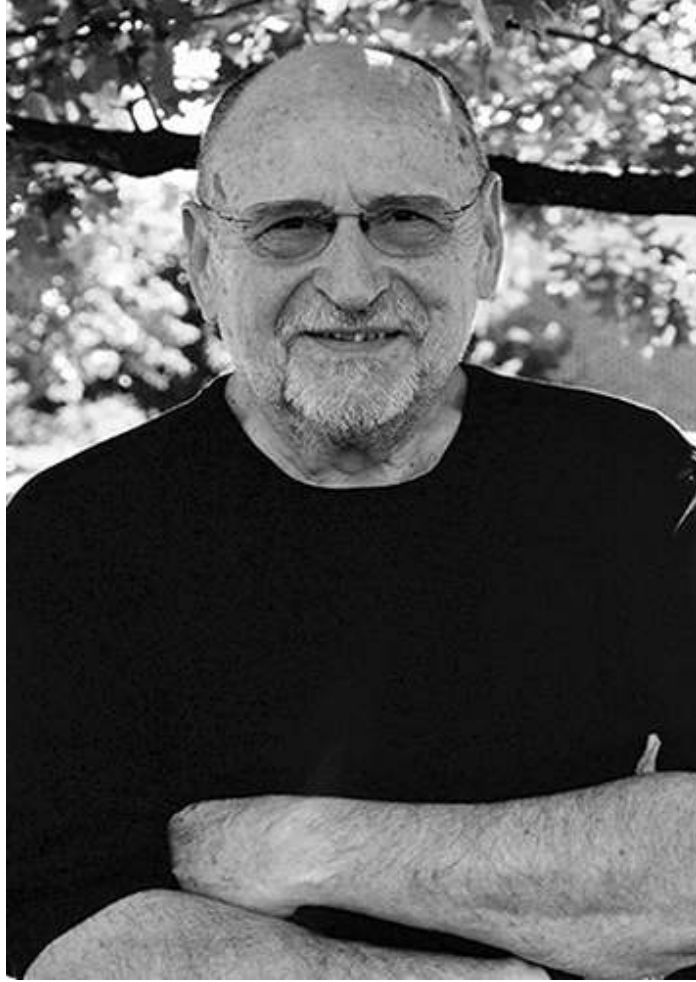


Figure 1.3 Dennis Preston.

Source: <https://linguistics.as.uky.edu/users/dpr235> . Courtesy of Dennis R. Preston.

The boundaries of such a variety are usually convenient designations of linguistic borders, rather than accurate assessments of linguistic evidence. It is very convenient, for instance, to use national boundaries as definitions for varieties of languages, like British English and American English. The problem remains even at the national level, as we can see from Canadian English. For British English speakers, Canadian English often gets lumped together with American English – rightly so, because Canada is also part of North America (see [Figure 1.4](#)), and the United States need not, though in practice it usually does, grab the label “ American ” all for itself.



Figure 1.4 North America.

Source: bergserg/Getty Images.

Besides the facts of geography, however, non-North-Americans perceive the pronunciation of Canadians to be essentially similar to that of US speakers. One prominent difference between American and Canadian English is the vowel sound in words like *out* and *knife*, so-called **Canadian raising**. The vowel sound in such words begins with the vowel found in *hot* for Americans, but Canadians begin it with a vowel more like that in *love*; the vowel for both Americans and Canadians ends with an *oo* or an *ee* sound, respectively (see [Appendix 1](#) for more accurate phonetic descriptions). Americans typically hear Canadian *out* as *oot*, but do not seem to notice as much that words like *knife* are pronounced differently by Canadians. The Canadian pronunciation may now be spreading in the Northern United States. This and many other differences are discussed in Charles Boberg's *The English Language in Canada* (2010).

We now can see that the idea that American English is "spoken in the United States" is problematic because what is "American" is defined less by the national border than it is by people's perception and point of view. The idea of a variety of a language is hopelessly entangled in perceptions, unless and until we can conduct a rigorous study of the parts of a language variety, of the features that speakers of the variety commonly use. Features of pronunciation, lexicon, syntax, and discourse (for more information on these, see [Appendix 1](#) and [Appendix 2](#)) all come together to form the whole of a language or a variety. Since we cannot take into consideration all of the actual conversations that people have, instead we have to concentrate on the features of language that are constantly repeated to form those conversations, as we derive them from examples of speech. The modern study of linguistics accepts four different ways for studying such features of a language, the names of which have already been introduced: **pronunciation**, **lexicon**, **syntax**, and **discourse**. As for pronunciation, each language and variety has a range of sounds that are commonly used in the expression of its words. There is also an inventory of words, a lexicon, that belongs to every language and variety. Each language and variety has characteristic patterns, syntax, with which its words can be arranged in sentences. Finally, each language and variety has characteristic habits of arrangement of words and sentences to form meaningful discourse. Pronunciation, lexicon, syntax, and discourse, then, tell us where to look for particular features that may be produced differently in different varieties. As we will see in [Chapter 2](#), the features of pronunciation, lexicon, syntax, and discourse in different varieties are matters of "more and less," not "on and off," so we will always be looking for tendencies, not sure indicators of a difference.

That said, given an assertion of the existence of a language variety on perceptual grounds, we should examine evidence from the speech of people who are said to speak it so that we can discover what we can about their pronunciation, lexical, syntactic, and discourse features. We will not be interested solely in features that we may find strange, different from what we consider to be normal in our own language variety, but instead we will want to build our knowledge of features in order to know more about the range of sounds, the lexicon, and the characteristic patterns of the language variety under study. Linguists have developed an array of technical terms and concepts for the study of linguistic features, as well as methods for collection and analysis of linguistic evidence (as in [Appendix 1](#) and [Appendix 2](#)).

American English as Culture

Even when we know a good deal about the linguistic features of a variety, we still must account for how people come to have their perceptions of the variety. Our perceptions of speech are often bound up with our perceptions of behavior, and this clue can lead us to consider how our speech is bound up with the whole range of social behavior, often known as **culture**. The cultural geographer Wilbur Zelinsky proposed a three-dimensional plan that could be used as a template for the analysis of cultural systems (1992: 72; [Figure 1.5](#) is a schematic cube for illustration). In his graphic representation of the plan it takes a moment to locate "Language": it is one of the **mentifacts** down near a bottom corner, just one slice of a much bigger cultural matrix, grouped together with religion, magic, the arts, and folklore. Mentifacts, which Zelinsky describes as "cerebral, psychological, or attitudinal in character" are just one of the "intrinsic components" that compose one dimension of his plan, say the righthand side of the cube in [Figure 1.5](#). **Artifacts** have to do with people's livelihood within their culture, from material things like tools or food, to means of production like farming or industrial activity, to more abstract concerns like technology or transportation systems. **Sociofacts** are elements of interpersonal relations, like kinship or politics. These three aspects of culture, taken together, constitute one way of describing the entire range of human behavior in a culture, an entire side of the cube. Besides these intrinsic components, Zelinsky also proposes dimensions for location, the "spatial dimension" (say, the

left-hand side of the cube), and for “ subcultural components ” (say, the top side of the cube), which correspond to different occupations or ideologies such as (again in Zelinsky ’ s words, [1992](#) : 72) “ males and females, farmers, ditchdiggers, Presbyterians, mountain climbers, convicts, Freemasons, bowlers, and drug addicts. ” There is, then, according to Zelinsky, practically an unlimited number of ways to divide and to describe cultural activity. The important point about this set of cultural divisions is that it is comprehensive – any aspect of culture can be described as either an artifact, a sociofact, or a mentifact, whether in some particular location or over the entire geographic extent of a culture, and whether limited to a subculture or widely diffused throughout a culture. The role of language within such a comprehensive model is as just one slice of the whole, and this tells us that language is necessarily bound up with other mentifacts like religion, the arts, and folklore, as well as with kinship and politics (sociofacts), and with people ’ s livelihood, what they eat and make and create (artifacts). Moreover, language is also bound to vary according to subculture (occupations, religions, sexual orientation, and many others) and according to the different locations or regions in which the intrinsic components and subcultural components are happening. From a model like this one, we can understand that we are all bound to perceive a language variety as the particular and recognizable form of speech that is associated with speakers who have particular cultural characteristics, whether in mentifacts, sociofacts, and artifacts, or in their subculture, or in their spatial situation – or in all of these at once!

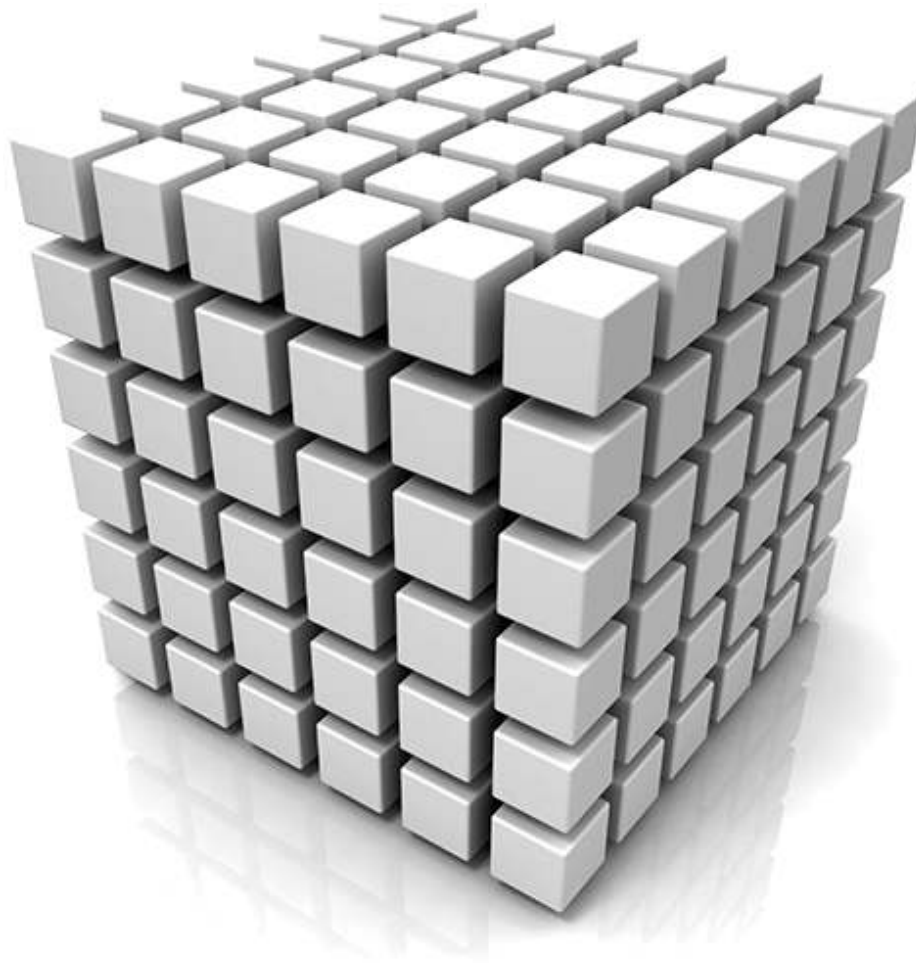


Figure 1.5 A schematic, three-dimensional representation to visualize Zelinsky ’ s cultural systems (Zelinsky [1992](#) : 73).

[Figure 1.5 long description.](#)

Source: Kuklev/Getty Images.

Zelinsky ’ s cube represents one entire culture, but the culture is not represented by the surface of the cube: Zelinsky proposes that we slice it in three different ways, by intrinsic components, by geographical groupings of people, and by social groupings of people. That

is to say, for any given culture region in the spatial dimension, it is possible to consider the whole range of artifacts, sociofacts, and mentifacts. So, too, for any given culture region and particular set of artifacts, sociofacts, and mentifacts, it is possible to observe variation in the dimension reserved for subcultural groups. On the cube in [Figure 1.5](#), you could choose to work on a whole side, or one layer of a side, or even on a single one of the smaller cubes that together make up the whole. Before this all begins to seem too complicated, it may be worthwhile to think of Zelinsky's model in terms of something very common and mundane: how you might want to cut up a potato in the kitchen. You can make slices in one direction, thin ones for potato chips (*crisps* in Britain) or thicker ones for cottage fries and potato casseroles. Alternatively, you can make slices in two directions and end up with pieces that are longer than they are wide, french fries, skinny like McDonalds or fat like the ones in a steakhouse. You can also cut the potato in three different directions and end up with diced pieces, big ones for stew or smaller ones for soup. The more times you cut, the more sides of each piece of potato you expose, and this creates different possibilities for the cook (see [Figure 1.6](#)).



Figure 1.6 Cutting potatoes.

Source: MarkAndrewPhotography/Getty Images.

To return to Zelinsky's cultural model, the more slices of culture you examine, the more sides of cultural activity you can reveal. More is not necessarily better – the slicing needs to match the intended result, whether for potatoes or culture. Potatoes cut up for stew will not make good potato chips! Besides the number of sides, you also have to think about how thick to make the slices. You can cut thicker or thinner, whether to make stew or soup with the potato, or to strive for more or less precision for cultural analysis. With either potatoes or culture, the more slices you want, the more work you have to do and, just as for the number of directions to cut, slicing thick or thin may be good for different purposes. Finally, it must be said that you can boil a potato whole, or mash together a whole collection of potatoes. So, too, it is possible to make gross generalizations about a culture or even a group of cultures when the occasion calls for it. Zelinsky's multidimensional model allows us to see that there is more than one way to examine culture, and that all of those different dimensions are still there waiting for us even if we choose not to cut in all the directions right away.

From Zelinsky's perspective, the cultural geography of the United States, language is a relatively small component of the whole; for the purposes of this book language takes center stage – but not the whole stage. When we choose language as our slice of American culture to examine, we cannot forget that American English is an integral component of American culture; the language of its speakers both helps to form the culture and is also formed by it. Cultural geographers, Zelinsky says, find it “more efficient and profitable ... to extract major subsystems from the total culture, then treat them independently of other aspects of the larger system, holding other things constant” ([1992](#): 74). For our purposes here, when we focus on language we are not obligated also to treat religion and folklore in depth, or to treat every culture region or subcultural component in detail, but neither should we forget that they are relevant. Indeed, because language is just one slice of the culture at large, we cannot expect to describe American English adequately without some discussion of different aspects of American culture. American English is not just “spoken in the United States,” but rather is spoken by people who are involved with American culture. When we focus on American English, we are not obligated to treat the English of other places (i.e., of other culture regions like Britain or Canada) in any depth, although they remain relevant, and we should be aware of the possibilities within American English for subsidiary cultural divisions and subcultural influences, like geographical regions, or occupational or ideological differences. As soon as we grant that language and culture are inextricably bound together, we have an answer for how to approach people's perceptions, and we can no longer be satisfied just with features of pronunciation, lexicon, syntax, and discourse as the sole target for our study. Zelinsky concludes that ([1992](#): 74)

It is only by taking into account the relevant multiplicity of components and dimensions at the particular scale chosen for observation, and also the fact that they are changing through time, that a realistic understanding of a given culture may be reached.

We can agree with him, and say that a realistic understanding of American English can only be achieved by locating its linguistic features in the context of the other dimensions of American culture.

American English in Politics

As we shall see in chapters to come, the United States began as a political (some might also say, religious) experiment. In the decades and centuries that followed, waves of immigrants brought into the new American ideal as it was enacted for them in North America by people who already lived in the country. Even today, many Americans subscribe to an American political ideal – about half the country to one version of it (the one currently expressed by Republicans) and the other half of the country to another, quite different version of it (currently expressed by Democrats). A surprisingly small number of Americans find themselves to be independent of these two points of view, free thinkers who might vote either way in an election, and this segment of the population often decides the direction of the government in Washington DC. This kind of split in American politics has always been present, whether between Royalists and Revolutionaries at the end of the eighteenth century, or between upholders of States Rights (in the South) and Abolitionists (in the North) in the nineteenth century. America has never spoken with a single voice. And that is an American hallmark: freedom of opinion, freedom of choice, whether as regards religion or for any of many other social options. At the same time, Americans have generally thought of themselves as different from the common ideas of the Old Country (whichever Old Country that was). Property rights have been a prime issue, since in America one can own one's own land while in the Old Country a few people might own the land while others worked it, or in other places nobody owned the land and strongmen struggled for control of it. The American Constitution and Bill of Rights began to codify this American difference into rules of law, and later Amendments to the Constitution and other laws have explored finer points. Neither the Republicans nor the Democrats today maintain the true and original ideal – no matter what they say! – since the American ideal has had to change over the centuries to fit emerging conditions in North America and the world at large.

Politics per se has little to do with the American variety of English except for the fact that different political groups have their own characteristics in speech, as in the terms for their preferred political issues. While some politicians may claim that American English is what holds American society together, actually the opposite is true. Yes, American English belongs to Americans, but it is the conversations and writings of Americans that create that relationship. There is no magical effect of an American standard language that makes Americans (as we shall see in chapters to come), but instead a bottom-up, grassroots process in which the interactions of people engaged in all of the different aspects of their daily lives (think Zelinsky's cube) produce what we can recognize as the American variety of English. Just as American politicians require the votes of their constituents to take office, American English requires the communication of people in America to be recognizable for itself among world varieties of English.

“ Spoken in the United States ”

To go back now to the second part of Mitford Mathews' definition, American English is a variety of English that is “ spoken in the United States. ” By this he meant much more than a mere coincidence of speech and geographical borders. Mathews' special topic was the developmental view of American English ([1931](#) : vii):

This form of English had its beginnings when the colonists and settlers began to adopt new terms and develop new senses of words, and, still later, it became more definite when the vernaculars of the various groups began to coalesce into one recognized form of language somewhat distinct from the English of the mother country.

We can observe in this statement different components in the separation of American English from British English. Mathews notes that features of the lexicon (and we may extend what he says to pronunciation, syntax, and discourse as well) are subject to a historical process. There were various groups that initiated new uses of words, and in time these originally separate groups came to “ coalesce ” to form a new, larger cultural entity – American culture. Following Zelinsky, we can understand Mathews' various groups of people originally to constitute different cultural (i.e., geographical) or subcultural (i.e., social) groups within English culture. In time, these originally separate groups came to share enough characteristics, whether in use of words or in the breakdown of previous geographical or

social barriers, so that they might be considered to form a new collective American cultural group that could be considered on its own terms as separate from the original English culture. Mathews does not mean by this that the identity of the original groups was necessarily lost, only that the groups came to participate in the identity of a larger American culture. Thus it makes sense to consider the “ beginnings ” of American English, and to consider that the characteristics of American English will necessarily be different at different moments in time, as American culture emerges, both develops and changes, over time.

In some ways the term “ American English ” is like mashed potatoes in our earlier metaphor: it groups together a large number of things to make a gross generalization. It is a valid generalization, certainly a useful one in discussions of World English, but mashing is not the only way to cook potatoes. This book is called *The Emergence and Development of American English* in order to emphasize that American English is not “ once and done, ” but that it continues to emerge and develop over time and across the culture. American speakers do not all speak alike. Americans come from different places across the wide expanse of the continent, they belong to subcultural groups too numerous to count, and they are free to hold many different beliefs and to lead their lives as they think best. Such pluralism and such freedom are undoubtedly the hallmark of American culture and the American experience, so it just seems wrong to name a book so that readers might get the idea that American English is something homogenous and exclusive, that there is some single way of speaking that all Americans must have, or else somehow be less than American. *The Emergence and Development of American English* instead emphasizes the inclusive quality of American English, that the multitude of voices of Americans of whatever belief and whatever region come together to emerge as what people around the world recognize as American English. This is the idea of American English to be explored in the chapters to come.

Summary

American English comes from a place, the United States, but that does not mean that all Americans talk the same way. Americans have somewhat different accents, lexicon, syntax, and discourse from place to place and from group to group. Still, American English can be recognized as its own variety of the language in comparison to other varieties of English around the world.

Key Terms

accent

Americanism

artifacts

Briticism

Canadian raising

culture

discourse

folk linguistics

lexicon

mentifacts

perceptual dialectology

pronunciation

regions

sociofacts

syntax

variety of a language

Audio Samples

In the online companion to this book (available at www.cambridge.org/williamakretzschmar), you can listen to audio samples that illustrate the state of the language. For this chapter you can hear three speakers from Roswell, Georgia. You will be able to hear that they talk differently, even though they all come from the same town just north of Atlanta (a big city known as an air travel hub and as the central place of the New South).

a1.1 Uptown-downtown in Roswell

a1.2 Civil War Story

a1.3 Baseball

Exercises

1. What regions can you name in the United States? Do your ideas go along with [Figure 1.2](#) , or would you put different states in the named regions? Or would you make other regions entirely, say one for New York City?
2. If our sense of a variety comes from our perception of a difference in how people use language, can you think of other ways in which our perception of differences gives us ideas? What about regions? What about kinds of foods? Styles of dress? Architectural designs?
3. Zelinsky ' s model of culture looks like a cube, in three dimensions. Can you think of anything he left out of the subdivisions of his cube (spatial, subcultural, intrinsic components)? Do you think that his multidimensional model, that allows you to slice and dice culture as you like, is a good representation of culture, or do you think it ' s harder than he says to take aspects of culture apart?

Computer Exercises

Computer exercises in [Appendix 3](#) are progressive, in that each exercise is intended to address a new skill or topic. They are not necessarily linked to the content of each chapter, although many of the exercises do parallel the content of the chapter. [Appendix 3](#) is the place that explains how to access data from the Linguistic Atlas Project website, in order to search, sort, and map it. In a classroom setting each individual user may get somewhat different results from examining the online data, so that it will be useful to discuss together what all the users found in order to understand the bigger picture. This, of course, is how science works, by adding together many observations to make a general point.

For [Chapter 1](#) it would be appropriate for the reader to do Exercise App3.1, which asks users to make maps online for features with different frequencies. The task is a good way to start using the website.

Further Reading

Preston , Dennis . 1989 . *Perceptual Dialectology: Nonlinguists ' Views of Areal Linguistics* . Dordrecht : Foris . " Folk Dialectology , " in *American Dialect Research* , edited by Dennis Preston . Amsterdam/Philadelphia : John Benjamins , 1993 . (with Nancy Niedzielski) *Folk Linguistics* . Berlin : de Gruyter , 2000 .

Preston has reinvigorated the idea that we should pay attention to what people *think* about language, not just how they say things differently. In particular, he has asked people where “ correct ” English is most likely to be found in America, and where the English in America is most “ pleasant. ” The answers are quite different! And Preston has found that people have very different ideas about where regional dialects can be found, even if many people do name the same general areas (like the “ South ”).

Zelinsky , Wilbur . 1992 . *The Cultural Geography of the United States: A Revised Edition* . Englewood Cliffs, New Jersey : Prentice Hall .

First published in 1973, Zelinsky ’ s classic brief textbook of cultural geography both outlines the field and comments on American culture. Part Three contains Zelinsky ’ s rethinking after twenty years of many of his original ideas, with some generally pessimistic comments on developments in American culture. Readers may or may not agree with the later comments, but will find no clearer presentation of the structures and patterns of American culture.

Videos: A number of video productions attempt to explore American English, among them *Do You Speak American?* (narrated by Robert MacNeil. New York: WNET, 2005) and *American Tongues* (Center for New American Media, 1988). YouTube also offers numerous short videos about American English. As a journalist, MacNeil sometimes prefers good TV to accurate reporting, as in the segment in which he looks for – and finds! – Shakespeare ’ s English in America.

2

Emergence



In This Chapter

The new science of complex systems explains why Zelinsky ' s cube is a good model of culture. It works well with economic markets – and also language in use. We can see the evidence that a complex system has operated in American English by looking at evidence from the Linguistic Atlas Project. Linguistic variants all show the same patterns of distribution, both overall in a population and in subset populations. These frequency profiles provide a challenge to traditional ways of thinking about language with grammars and dictionaries.

When we begin to make slices of Zelinsky ' s cube in order to investigate American English in all of its different spatial (geographical) and subcultural (social) aspects over time, we need to have a scientific model that supports such work. The best available model is called **complexity science** , or **complex systems** . The word “ complexity ” does not just mean ‘ complicated ’ but instead refers to the emergence of stable patterns out of the interactions of a great many different participants. Complexity science is still “ science, ” on a par with what most of us think of as science, but it works in a different domain from what many physical and natural scientists study. Aristotle gave us the basic idea of what science should be, when he advocated regular, systematic observation of the world around us. The most familiar domain of science today is **Newtonian Mechanics** . In this mode of analysis, the scientist looks for cause and effect relationships as individual elements interact with each other. You can think of planets at the large scale, and billiard balls at a smaller scale. The trick when you play pool is to strike the cue ball in such a way that it hits another ball and makes it move how you want it to, say into the corner pocket. In the modern physical and biological sciences, this emphasis on cause and effect has been carried further to what is known as **reductionism** . That is, scientists in the reductionist domain look for smaller and smaller constituents, under the idea that if you understand things at the lowest level of scale, you will better understand all the levels of scale. Complexity science, on the other hand, does not try just to reduce anything to basic principles but instead asks the scientist to observe every part of the whole for its own characteristics. Complex systems analysis can reach every slice of Zelinsky ' s cube, whether the cube as a whole or any small cultural segment. The status of different scales is not necessarily produced by one root cause. From the point of view of complexity science, we need to observe slices and scales individually instead of assuming that they all share essentially the same characteristics.

Complex Systems

Complexity science is a different domain for systematic observation and analysis. When we consider many interacting elements, not just one thing acting upon another thing, you might think that it would be possible to predict the behavior of the system by measuring what each of the individual parts does. The classic formulation of this problem is measuring the position, mass, and velocity of objects, in order to predict what they will do in relation to each other. Unfortunately, this analysis will not work. Henri Poincaré proved in the late nineteenth century that there is an infinite number of solutions even for the **three-body problem** , just three interacting objects. This means that we cannot use cause and effect to predict the behavior of a collection of many interacting parts – we know that individual interactions have causes and effects but we just cannot use that knowledge to predict what the system as a whole will do or even what any

individual element will do. This also means that we cannot use reductionism, because our measurement of the position, mass, and velocity of a single element cannot tell us what the whole set of elements will do. We cannot look for the smallest parts of a system and use them to understand the whole.

You might think again of a pool table for an example. The first shot of a game of pool is the “break,” that is, directing the cue ball against a triangular configuration of the other balls (see [Figure 2.1](#)). Most of us will strike the cue ball hard against the first ball in the triangle, and we cannot predict where all the balls will go – we hope one goes in a pocket so that we can keep our turn, and one often does, but we just do not know if that will happen.

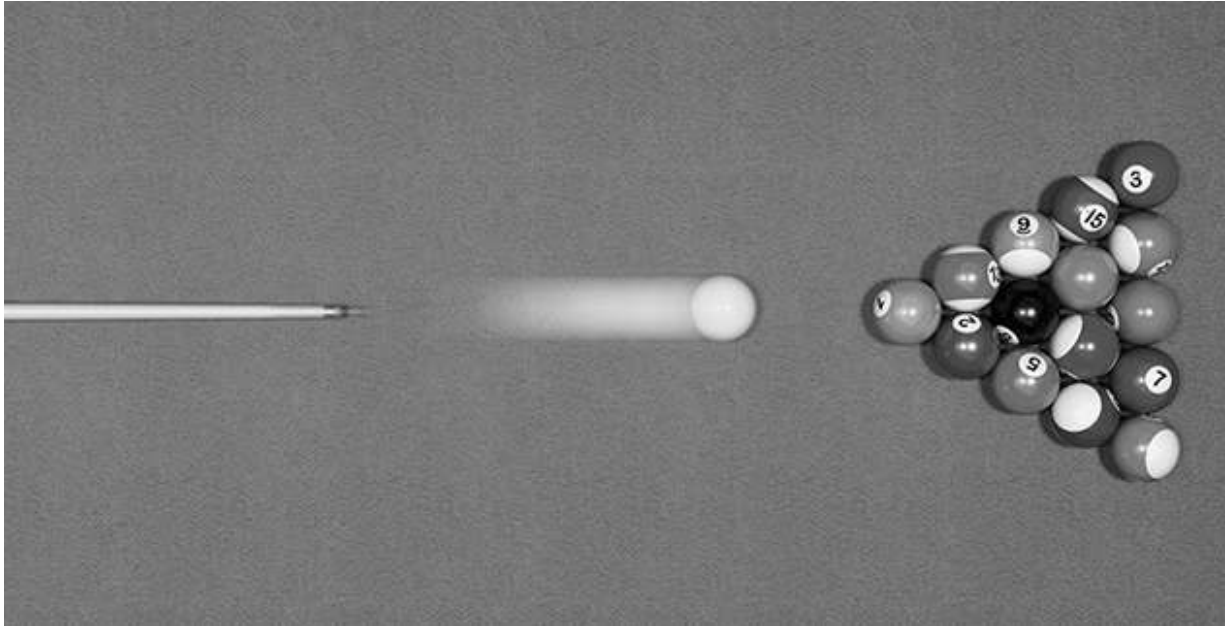


Figure 2.1 The break in pool.

Source: mevans/Getty Images.

Professional pool players have strategies for the break, say, trying for the smallest possible dispersion of the balls so that their opponent will have a more difficult shot. They do this by putting as little energy into the break as possible, but even then, the professionals cannot calculate where all the balls will actually end up. The break, therefore, is a good example of a complex physical system, one in which the behavior of each of many interacting elements is just not predictable. In biological and human systems, all of the balls, all of the elements in the complex system, are in constant motion affecting each other. We are all cue balls, making our own breaks.

The beginning of thinking about complex systems can be traced to Glasgow and to Adam Smith, who wrote about the famous **invisible hand**. In 1776 he wrote that a man of business

intends only his own gain, and he is in this, as in many other cases, led by an invisible hand to promote an end which was no part of his intention. Nor is it always the worse for the society that it was not part of it. By pursuing his own interest he frequently promotes that of the society more effectually than when he really intends to promote it.

Adam Smith was talking about the emergence of economic markets that satisfy the needs of society, not by the design (intelligent or otherwise) of some creator, but through the invisible hand of **self-organization** of activities that were motivated by self-interest, not society's interest. The fact that Smith spoke of some sort of “hand” showed that he believed the world to be a causal place, where an effect, like a market, must have a cause. Today, however, we should focus not on the hand but on his word “invisible,” because self-organization requires no causal hand. Complex systems have no simple causes for the effects that emerge from them. Rather, a complex system works through a process of interaction among a large number of components, as the process must cope with the contingencies of the environment in which the individual components are interacting. Cause and effect as in Newtonian Mechanics is a good explanation

for many aspects of the world around us, just not for everything. For circumstances that have many interacting components, like buyers and sellers or billiard balls in a game of pool, we need to let go of our assumptions about cause and effect and replace them with the idea of self-organization that leads to the emergence of patterns. Language is one of those circumstances.

First let us consider what happens in a complex system for it to produce self-organized results like an economic market. For any complex system to operate, we must have the random interaction of a large number of **components**. This interaction constitutes **activity**, which is essential to the operation of the system, for a complex system dies if the activity stops. So, for example, there is no longer any American market for domestic chestnuts because all of the trees died out and nobody can buy and sell the nuts. As the interactions continue the components affect each other in what might be called an **exchange** of information, which leads to **reinforcement** of behaviors among the components, and thus to the **emergence** of stable patterns in the complex system, all without any central control. That is, as people buy and sell products, the prices they pay are affected by their knowledge of what other people are paying, and over time a stable market price emerges where not everybody is paying the same price but prices in general are predictable. All of these things happen in relation to **contingency**, to local circumstances, so that complex systems are able to react to circumstances, to change over time as they need to. In Adam Smith's economic market the components are the things being bought and sold: bread, beer, pins, cloth, and everything else we use and trade. People are **agents**, in that they facilitate the process of the complex system, in economic markets by doing the buying and selling.

Let us think about a particular example of a complex system in action, say the market in apples, where the components are apples in all their different varieties. The activity is all the sales of quantities of apples, and for each sale there is information, such as the source and the size and the variety of the apples and the price they sold for. As the agents exchange this information, they reinforce their buying and selling behavior by setting prices. Some apples are plentiful in the market (like Delicious apples in America, or Cox apples in Britain) and the price may emerge at a low level; some apples may be the current favorite variety (like Honeycrisp apples in the United States, a relatively new variety) and a higher price may emerge for them. Over time, the prices will be relatively stable but will change according to contingency: if there was late freezing weather in Michigan, where many Honeycrisp apples are grown, the price will emerge at a higher level because the supply is lower. Indeed, the price of Honeycrisp apples will go up as soon as the agents hear about the freezing weather because they expect the supply will be lower at harvest: information is more than just the facts available at the moment.

This was a feature of a famous Wall Street movie starring Eddie Murphy and Dan Aykroyd called *Trading Places* (1983), where Murphy and Aykroyd manipulated the market for orange juice by getting advance information about a crop forecast. Thus we can have futures markets and all sorts of other specialty markets in which human agents buy and sell, and in so doing create a market for different commodities or services.

Let us think now about language as a complex system. This is not how we have all been taught to think about language. All through primary and secondary school, our teachers always told us about the grammar of our language, rules that we should follow and violate only at our peril. Sometimes our teachers told us about dictionaries, and many of us supplemented that teaching by playing the game *Scrabble*, where we used letter tiles to make words and where the dictionary was the authority that told us the legal words in the language. Grammatical rules and lists of words in the dictionary provided structure for our language. And that is how all of us think of it, language as a structured entity, where we can decide what is grammatical or not according to the **syntagmatic structure** of the language, and where we know where to find the list of legal words, the **paradigmatic structure** of the language (you can see more about these structures in [Appendix 2](#)).

These structures are not the place to start when we think about language as a complex system. Instead, let us consider that people just use whatever experience they have in order to talk with each other. People are talkers. A person is not the same thing as a language: some people can use their experience to talk in two or more languages. Indeed, all of us do that even if we do not realize it: we all use somewhat different language in all of the different language interactions that we have, spoken or written. Our conversations with family members have different words and different grammar than the conversations we have at work. Conversations we have with children have different words and grammar than conversations we have with doctors, lawyers, and other professionals, and we all know what to do to talk with children, if not always with professionals. The words and grammar are not entirely different in these various conversations and situations for writing; it is just more or less likely that the talker or writer would use particular features in a particular situation. We probably would not talk about "syntagmatic structure" and "paradigmatic structure" in a family setting, but they occur in the previous paragraph for the very good reason that readers of this book can be expected to be comfortable with those words – if only after a look at [Appendix 2](#)! Each of us speaks a somewhat different language in all of the settings for speech and writing that we encounter, based on our

experiences with such settings. We may not name these differences in our language by the same names we use for national differences, like American English or British English (or English as opposed to Spanish or Chinese), but nonetheless we can recognize the differences.

All of that happens because of the complex system of language. We speakers and writers are agents, not the same as any language but users of language, in the same way that buyers and sellers are agents, not money themselves but users of money. The components in the complex system are all of the possible variant realizations of linguistic features, different word and grammar choices we use for children and professionals, for engineers and linguists. The activity in the system consists of all of our conversations, and as a more limited case, all of our writing. The exchange of information is not the same as sharing the meaningful content of what we say and write (which is information in a different sense), but instead the implicit comparison of the use of different linguistic variants, different ways of articulating the same meaning, by different agents in different situations. We listen to *how* people say things, and see *how* they write things, not just understand what they mean. **Feedback** from exchange of information leads to reinforcement, so speakers and writers are more likely to use particular variants in future occurrences of particular circumstances for speech. Human agents can think about and choose what linguistic variants to use, but that does not change the fact that we make choices in relation to the system, usually without thinking too much about them. Emergence, the order that emerges in speech, consists of the configuration of components, whether words, pronunciations, or grammatical constructions, that come to occur in any of the circumstances in which we actually communicate. As for other complex systems, all of these are conditioned by contingency and so emergent patterns can change over time. The process operating in complex systems just explains better what we already knew: we tend to talk like the people nearby, either spatially or socially near, and we tend to use the same linguistic tools that others do when we are writing or saying the same kind of thing.

How we use the information from our emergent patterns to manage our talk is not precise and rule-based, or based on categories. Our brains are composed of neurons, and all they can do is fire or not fire. We do not have linguistic categories in our minds, as early notions of cognitive linguistics had it. Instead, we just have firing patterns of all the interconnected neurons that come to correspond to our experience, this because the neurons can become habituated to repeated situations (see [Chapter 11](#)). John Miller illustrates the inexactness of the process in the paragraph below (Miller [2015](#) : 23), after he has told us that letters on a page “ emerge ” in our perception from numerous small printed dots:

the letters, when placed near one another, take on new properties and meaning, and ultimately result in the emergence of words.

Such emergence is so strong that it persists even if we scramble the letter between each word ' s start and end, that is, such ecregnmnee is so stnorg that it pessitrs eeavn if we sabcmrlre the lltteres betewen ecah word ' s satrt and end.

We do not see the dots, we see letters. We still see words even if they are not spelled exactly right – and when you think about it, how else could we proofread anything. Our minds are not like computers that rely on exact matches of text strings in searching and sorting data. We know, and computers do not know except for the limited case of spell checkers, what word was meant when it appears with an odd spelling – and we all get frustrated with some of the spelling changes our cell phones make when we are writing texts! We have some latitude in how we put stimuli together to make language, whether when we see letter shapes and word spellings, or when we hear pronunciations and understand words from those. As users of language, we are always reaching for the best fit of what we hear or see. Sometimes we do fail to put things together in the same way that our conversational partner has meant them, and these situations are often memorable for us, often quite funny because of the unanticipated broken expectations.

Evidence of Emergence

Let us look at an example of how complex systems affect what words we say. Here is a list of the top ten different names that people used, in a mid-twentieth-century survey of 1,162 people from the American Eastern States, for the insect with two sets of wings that flies in damp areas and eats mosquitos ([Figure 2.2](#)) – what many people today might call a *dragonfly* (see [Table 2.1](#)). All of this data, and much more like it, is freely available at www.lap.uga.edu ([Appendix 3](#) explains how to use it).



Figure 2.2 A dragonfly.

Source: Ernst Himmelsbach/500px/Getty Images.

Table 2.1 Top ten names for *dragonfly*

Name	Number of uses
snake doctor	536
snake feeder	413
mosquito hawk	360
darning needle	294
dragonfly	196
skeeter hawk	175
devil ' s darning needle	158
spindle	23
snake waiter	19
devil ' s horse	13

The people in the survey used lots of different words, and they did not use one word most of the time with some rare creative names. It may be surprising that the word many people think of first, *dragonfly* , was only in fifth place in the list of ten words, when we arrange the list by how often the 1162 people said it. *Snake doctor* was first for this survey, followed by *snake feeder*, *mosquito hawk*, and *darning needle*. The survey shows the same results for all questionnaire items: there is always more variation in words than anybody might expect. Here below is the whole list of names for a dragonfly (see [Table 2.2](#) . Content warning: the table contains a taboo racial slur.

It will be distressing enough to readers that I have chosen not to spell it in full.). Some of the entries are simple plurals of other entries (like *snake doctors* as well as *snake doctor*). A few of the names might actually be for other kinds of insects, but we can trust the field workers for the survey to do a good job of putting the right name down in the right place. Still, we can see that there are far more than just ten names for a dragonfly.

Table 2.2 All the names for *dragonfly*

a

Name	Number of uses	Name	Number of uses
snake doctor	536	donnel feathers	2
snake feeder	413	dragon fly	2
mosquito hawk	360	drum hawk	2
darning needle	294	galley nipper	2
dragonfly	196	galli nippers	2
skeeter hawk	175	gally nippers	2
devil's darning needle	158	gnat bug	2
mosquito hawks	89	gnat catchers	2
snake doctors	77	jar fly	2
dragonflies	42	johnny crowhorse	2
snake feeders	35	knit needle	2
darning needles	28	needles	2
spindle	23	partridge	2
snake waiter	19	praying mantis	2
skeeter hawks	17	saltpeter fly	2
devil's darning needles	14	snake bugs	2
devil's horse	13	snake charmer	2
mosquito	12	snake cure	2
devil's riding horse	8	snake doctor fly	2
mosquitoes	8	snake eaters	2
devil horse	6	snake feed	2
devil's needle	6	snake fly	2
snake servant	6	snake leaders	2
skeeters	5	snake peters	2
gnat hawk	4	snake skeeter	2
gnats	4	snake weeder	2
June bug	4	snake worm	2
mosquitos	4	stinging bee	2
needle	4	bedbug	1
snake flies	4	big mosquito	1
snake guarder	4	big mosquitoes	1
snake master	4	bull bats	1
snake spindle	4	bull haver	1
galli nipper	3	chulabama	1
girl nipper	3	covered up her ears	1
skeeter	3	dobson fly	1
bottlefly	2	dragon flies	1
busy bug	2	flea	1
darning bug	2	flies	1
darning fly	2	gadfly	1
devil riding horse	2	gally nipper	1
devil's bug	2	girlie nipper	1
devils' horse	2	girlie nippers	1
devil's horses	2	granddaddies	1
devil's knitting needle	2	guinea fowl	1
devil's needles	2	harmony birds	1
humming bird	1	schlange heeder	1

[Table 2.2 long description.](#)

b

Name	Number of uses	Name	Number of uses
humming birds	1	sew up your ears	1
July flies	1	sew up your eyes	1
July fly	1	shite poke	1
June bugs	1	sing-gaily	1
Katydid	1	snake tender	1
locust	1	snake tenders	1
mosquito hood	1	snake waiters	1
n*****s	1	spider	1
n*****s call them	1	spidle	1
quail	1	spinners	1
sand flies	1	they catch skeeter	1
sand fly gnat	1	yard flies	1
schlange geeder	1		

[Table 2.2b long description.](#)

Besides the common terms at the top of the list, we see that there are lots of names that only occur once (forty-five of them) or twice (thirty-eight of them). There are, in fact, 119 different entries in the list! If we take out the thirty plural forms, we still have seventy-nine different names. If we take out some entries that we think might be names of other insects or otherwise inappropriate answers, call it fifteen more entries, we still have sixty-four different names. This number is wildly higher than anybody might have thought from their own personal experience.

If we chart all the different names, sorted by frequency, the survey always shows us the same picture (see [Figure 2.3](#)).

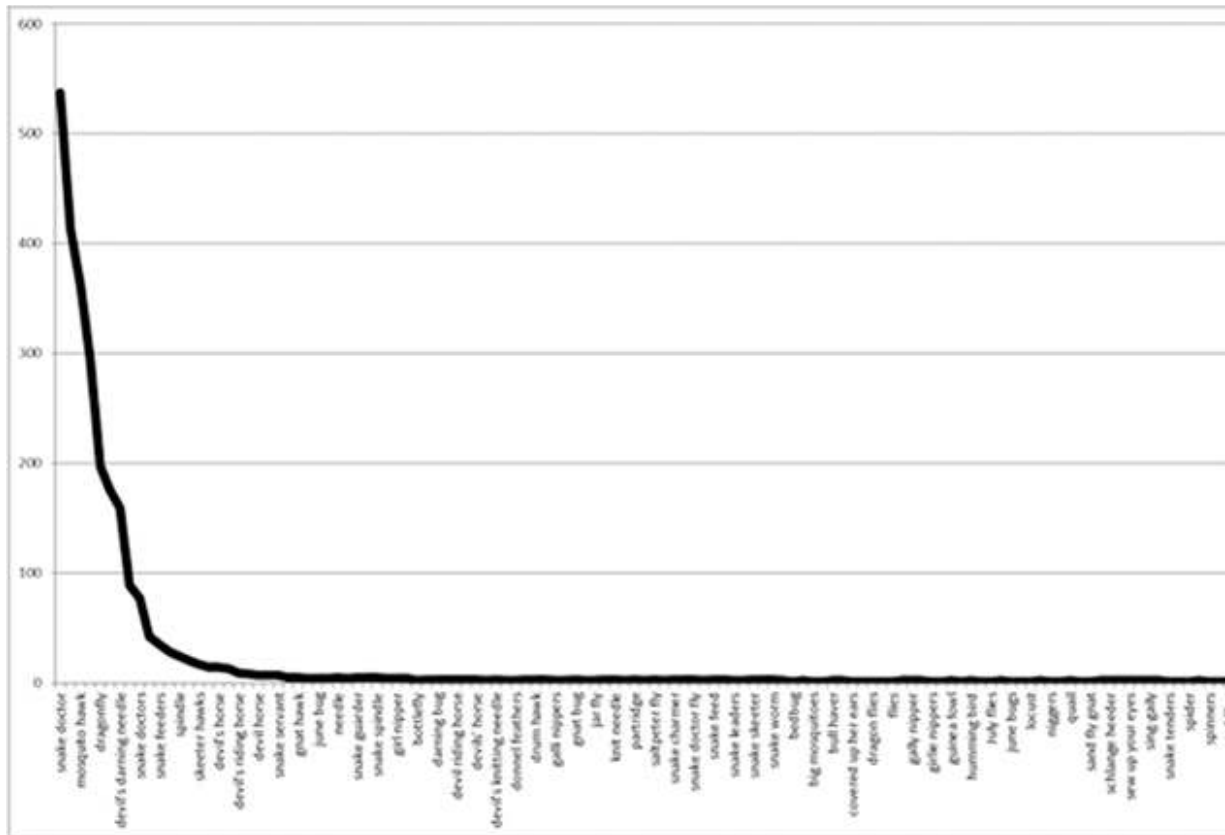


Figure 2.3 A-curve for *dragonfly* variants.

The curve always looks about the same for all the items in the survey, with a few forms at the left that occur frequently, a few more forms at the bend of the curve that occur fairly often, and a great many forms in the long tail of the curve that rarely occur. The technical name for this kind of curve is an asymptotic hyperbolic curve, but we will use a shorter name than that, **A-curve**. What about the list of forms after we take out the plurals and inappropriate responses? It looks pretty much the same ([Figure 2.4](#)):

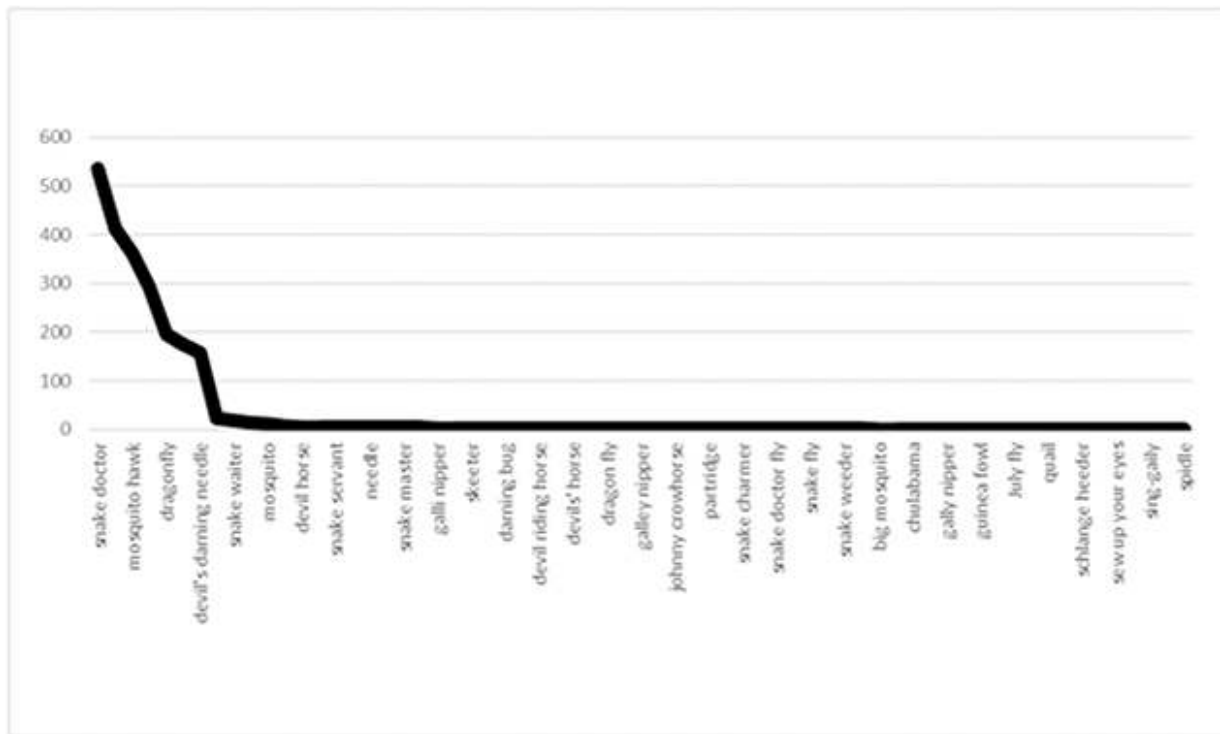


Figure 2.4 A-curve for *dragonfly* variants, after removing plurals and inappropriate responses.

The A-curve for the reduced set of sixty-four entries also has a few entries that occur frequently, some that occur fairly often, and a great many that hardly ever occur. The **frequency profile** of the different names for a dragonfly, or the variation observed for other items in the survey, is thus very robust since you can leave out numerous questionable entries and still see the same picture.

The frequency profile, shaped as an A-curve, is evidence of what has happened after the operation of the complex system of speech, after feedback has led to reinforcement of speakers' choices. The components are all the different words for "dragonfly." The activity in the system is people talking to each other in conversations that include dragonflies, and as they do so they use the different terms for the insect. It is easy for people to introduce a new term for a dragonfly, and people do that all the time. However, people do use some terms much more often than others in their conversations, and these are the terms in the top ranks of the A-curve. Is there some reason that *snake doctor* is a better term for "dragonfly" than *mosquito hawk*, or than *dragonfly* itself? No, it just emerged that people used *snake doctor* more often, as a result of feedback as people heard what other people said, which reinforced the frequency of the term. Sometimes we use the same term (for a dragonfly or for any other object) that other people use. Sometimes we use our own term. All of the activity and feedback in the complex system always produces an A-curve, whether for different terms for something, or in different pronunciations of a word, or in different ways of putting words together. While it is not predictable *which* term for an object will emerge as the one most often used in a population of speakers, we know that the frequency profile of all the terms that people used will be shaped like an A-curve.

What's more, the same picture appears when we look at different subgroups in the survey data. To be clear, in [Figure 2.5](#) we are looking at exactly the same data as we saw in the listing for all speakers, now just broken up into subgroups. Here we see the top ten different forms and the frequency profile for the whole list of forms for just the men in the survey, and for just the women in the survey.

Men (803; 81 different entries)

snake doctor	355
snake feeder	317
darning needle	210
mosquito hawk	203
devil's darning needle	118
dragonfly	116
skeeter hawk	112
spindle	23
snake waiter	18
devil's horse	8

Women (359; 47 different entries)

snake doctor	181
mosquito hawk	157
snake feeder	96
darning needle	84
dragonfly	80
skeeter hawk	63
devil's darning needle	40
mosquito	6
devil's riding horse	6
devil's horse	5

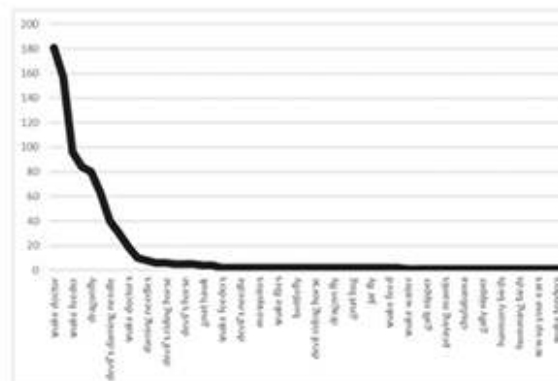
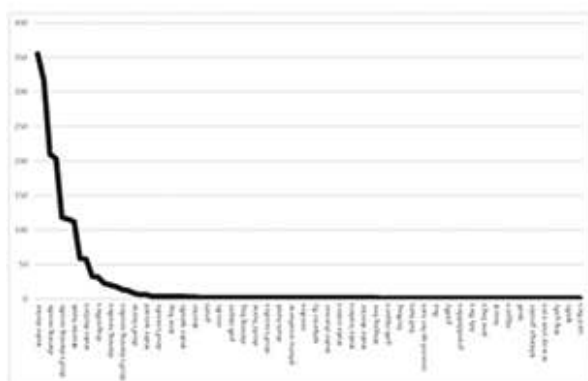


Figure 2.5 *dragonfly* variants just for men, and just for women.

There were 803 men in the survey and only 359 women, and we see that the men had eighty-one different entries for *dragonfly* and the women had only forty-seven different entries, yet the A-curve appears for both groups. Moreover, we see that, while most of the top ten different names are the same, the men have *spindle* and *snake waiter* that the women do not have, and the women have *mosquito* and *devil's riding horse* that the men do not have. In fact, people of both sexes used these forms, just not in the top ten. The forms that men and women both have in the top ten occur in a different order. *Snake doctor* is the most common form for both, but women use *mosquito hawk* more than the men and they use *devil's darning needle* less. This difference in order in the frequency profiles is what can make us think that men and women talk differently. They do so, however, within the same frequency framework, always an A-curve.

We see the same thing if we compare subgroups for three different regional groupings of speakers: New York, New Jersey, and Pennsylvania in the North; West Virginia, Maryland, Delaware, the District of Columbia, and Virginia in the middle; and North Carolina, South Carolina, Georgia, and Florida in the South ([Figure 2.6](#)). The A-curve is apparent below each list. Again, we see that most of the entries in the top ten lists overlap, and that the order of the entries is different. Six entries are on all of the lists – *darning needle*, *snake feeder*, *devil's darning needle*, *dragonfly*, *snake doctor*, and *mosquito hawk* – but in a different order each time. The other entries, like

skeeter hawk or *spindle* , would be found further down on all the lists if not in the top ten. Again, the order of the lists, how often speakers in the group use each name even though all the groups use it, is what allows us to think that speech is different in each of these areas.

<u>North</u>		<u>Middle</u>		<u>South</u>	
darning needle	288	snake doctor	321	mosquito hawk	276
snake feeder	170	snake feeder	164	skeeter hawk	131
devil's darning	118	mosquito hawk	76	snake doctor	124
needle		skeeter hawk	42	snake feeder	79
dragonfly	112	devil's darning	36	dragonfly	60
snake doctor	91	needle		mosquito	12
spindle	23	dragonfly	24	devil's horse	11
mosquito hawk	8	snake waiter	17	devil horse	6
snake servant	6	devil's riding	8	darning needle	4
devil's needle	4	horse		devil's darning	4
needle	4	gnat hawk	4	needle	
		darning needle	2		

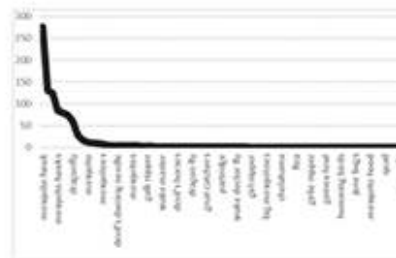
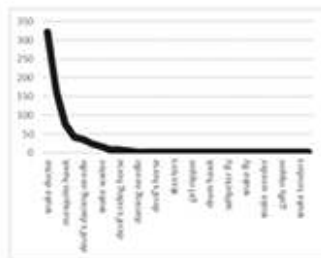
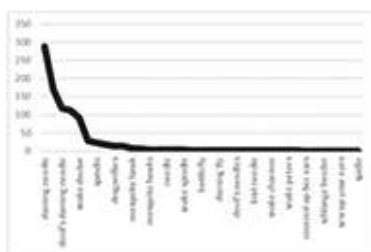


Figure 2.6 *dragonfly* variants for regional groups of speakers.

Let us look at one more set of subgroups, this time by age ([Figure 2.7](#)). The youngest group of speakers includes people up to forty-nine years old. The second group includes speakers between fifty and seventy-nine years of age. The last group has people between eighty and one hundred years old.

<u>Youngest (up to 49)</u>		<u>Middle (50-79)</u>		<u>Oldest (80-100)</u>	
snake doctor	126	snake doctor	339	snake doctor	71
snake feeder	114	mosquito hawk	241	snake feeder	70
mosquito hawk	71	snake feeder	229	darning needle	66
darning needle	50	darning needle	178	mosquito hawk	48
dragonfly	50	dragonfly	120	skeeter hawk	34
skeeter hawk	26	skeeter hawk	115	devil's darning	34
devil's darning	24	devil's darning	100	needle	
needle		needle		dragonfly	24
snake waiter	8	spindle	13	spindle	8
spindle	2	devil's horse	11	mosquito	7
mosquito	2	devil's riding horse	8	snake waiter	6

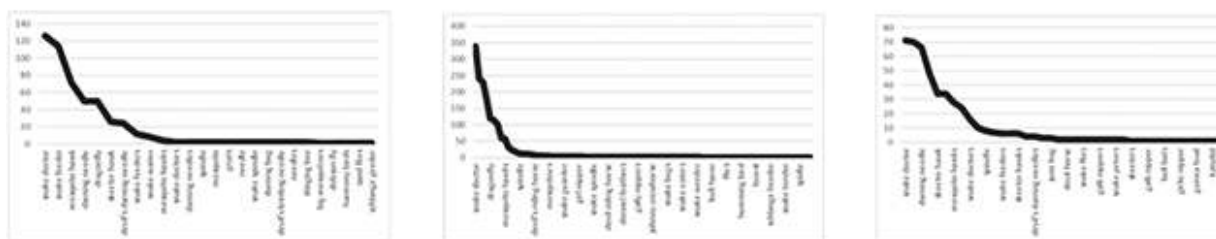


Figure 2.7 *dragonfly* variants for groups of speakers by age.

Again, the A-curve appears every time. For these groups, *snake doctor* is always the most common form, but after that the shared forms are in different orders in the frequency profiles. The same basic pattern occurs in the tallies for each group, whether overall or the smaller groups: there are a few words at the top that are very common, but the numbers pretty quickly decline to much smaller numbers. The constant presence of the A-curve pattern shows the characteristic **scaling** behavior (also known as **scale-free** behavior, in the same strange way that *flammable* and *inflammable* mean the same thing) that occurs in complex systems, where the A-curve pattern is repeated over and over in every subgroup of the data as well as in the data set overall. The A-curve and scaling properties that we see in speech match what is known in mathematics as a pattern with **self-similarity**. Fractal mathematics with self-similarity was named by mathematician Benoit Mandelbrot (e.g. 1982), and it works better than the mathematics we are usually taught (whether calculus or statistics) for many aspects of the natural world, including language. As the Fractal Foundation says,

A **fractal** is a never-ending pattern. Fractals are infinitely complex patterns that are self-similar across different scales. They are created by repeating a simple process over and over in an ongoing feedback loop Geometrically, they exist in between our familiar dimensions. Fractal patterns are extremely familiar, since nature is full of fractals. For instance: trees, rivers, coastlines, mountains, clouds, seashells, hurricanes, etc.

(<https://fractalfoundation.org/resources/what-are-fractals/>, viewed January 7, 2025).

The A-curve and the scaling properties of language are the best signs that language is self-similar as it arises from a complex system of interactions.

We can illustrate the notion of scale in economics. We all know that there are different markets at different levels of scale. In your neighborhood you can buy essential items (in America often at a “ convenience store ”), but you can also go a bit further away and participate in the town market to buy things at a large grocery store, or at a general-purpose “ big box store ” (e.g., Walmart in America) or one that may specialize in electronics or products for pets. Prices in the bigger stores are likely to be lower. If what you need is more specialized or exotic than what you can get in town (like your favorite imported mustard or a specialized repair service), you may have to go to the big city, which supports markets in exotic foods and special services. Thus markets organize themselves, everywhere, into different levels of scale. So it is, too, for language in use. It is possible to document characteristic uses of language by very small groups who are interested in the same activity, each known as a **community of practice** (that is, a group of people who “ share a concern or a passion for something they do and learn how to do it better as they interact regularly, ” as described in Wenger-Trayner (2015); see [Chapter 10](#)), and by larger groups of speakers who live in the same town or interact in the same social group, up through the national level of scale at which we can distinguish American English from British and other world varieties of English.

The idea of scale thus solves the problem of how we can have a national language variety at the same time that we can recognize regional and social varieties in the same population. It cannot be the case that speakers, or buyers, are uniquely associated with their smallest level of interaction. If you could only talk like your associates in a community of practice, how could you make yourself understood in wider communities or nationally? Speakers, and buyers, naturally participate at different levels of scale, as well as in different regional and social groups, by manipulating their choices among the same sets of variants for linguistic features. As for regions, a Southern American consumer can buy “ grits ” (a cornmeal product enjoyed for breakfast) at every level of scale, one or two kinds in the convenience store, additional kinds in the town grocery store, and fancy coarse-ground grits only in the big-city or online in the national marketplace. If the Southerner leaves her region, say to go to the North, she may find no grits at all in convenience stores, perhaps one or two kinds in a local grocery store, and more kinds in the big city, and she would have to go online to get her favorite coarse-ground variety. It goes without saying that the same is true for language in different regions. Regions and social groups, Zelinsky ’ s cultural slices, are relatively different between themselves, as well as being different within themselves by levels of scale. Speakers of a language can recognize and must negotiate levels of scale as well as differences they perceive between regional and social groups in language use.

Consequences of Emergence

There is always much more variation than we might have thought in a population of speakers, but usually we get things right because the ever-present A-curve in the frequency profiles of the variants offers us a huge perceptual advantage for what people usually say ([Figure 2.8](#)). Top-ranked words for a particular situation, the things that people normally say, are massively more likely than all the other possible things. Language is *flexible* because we can accommodate a great many possibilities in the long tail of the curve when we choose to use them, but language is *understandable* because we usually do not take advantage of the flexibility.

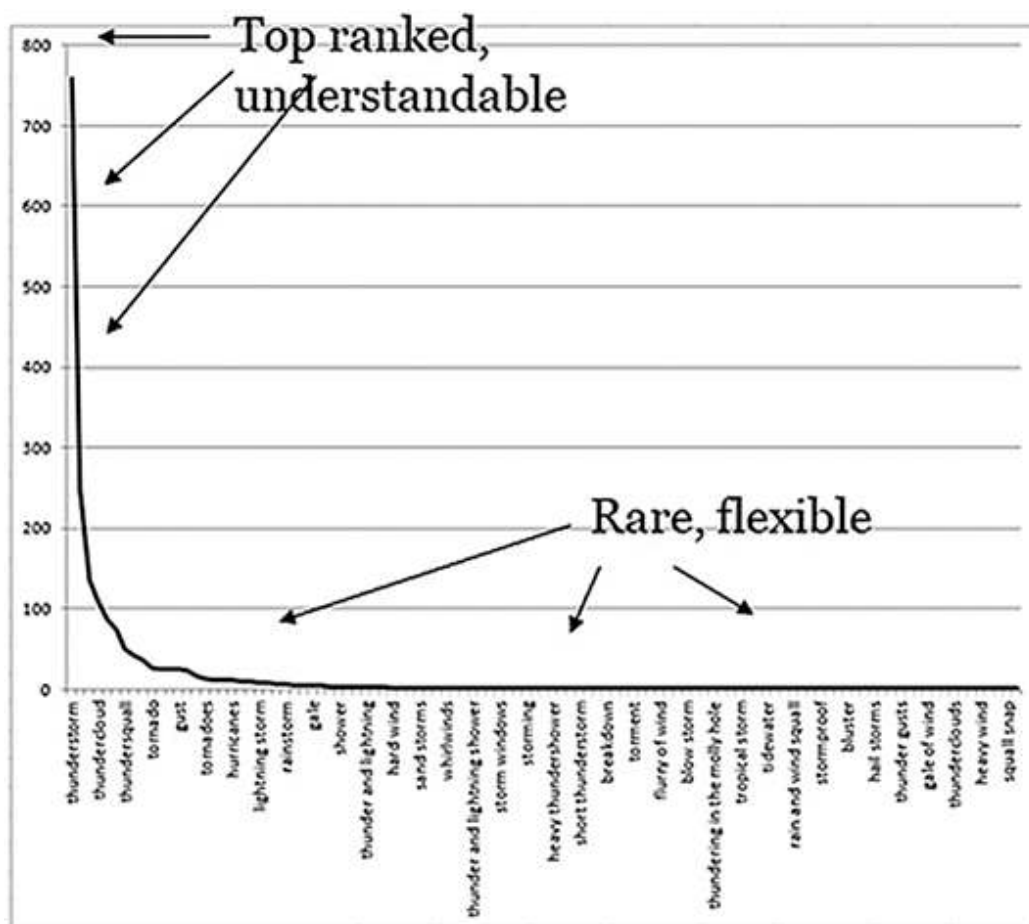


Figure 2.8 Flexible and understandable.

[Figure 2.8 long description.](#)

The A-curve frequency profile is thus not only a curious effect of a complex system but something functional, something that makes language work for us in every population of speakers. Wide variation in the components of speech, as processed in the activity of speakers with feedback and reinforcement, lets us understand each other and also express our individuality in American English – and in every other human language.

Perhaps the first person ever to notice this nonlinear frequency profile in speech was George Zipf, a mid-twentieth-century Harvard professor. **Zipf's Law**, so-called, says that if you count the frequency of words in any large text and then put the frequencies in descending order, there is an inverse relationship between each frequency and its rank in the order, roughly $P = 1/r$ where P is the frequency and r is the rank (see Kretzschmar 2009 : 190 – 198 for more information on Zipf's Law). So, in concrete terms, the second-ranked variant in a list will be half as common as the first one ($P = 1/2$), and the third-ranked variant will be one third as common as the first ($P = 1/3$), and so on. This formula yields a nonlinear plot of frequency and rank, what we have talked about in this chapter as the A-curve. **Nonlinear** just means 'curved,' like the A-curve, rather than straight. An A-curve, however, is not just any old curve: as it happens, if both axes of an A-curve chart use logarithms instead of simple counts of the data, the chart produces a straight line rather than the sharp curve. This is the special property of an A-curve, what makes the term *nonlinear* especially interesting for our study of language. Zipf's Law, however, is not a "law" in the same way that physics has natural laws. Zipf's formula produces a curve that follows the **80/20 Rule**, also called the Pareto Principle after an Italian economist who had noticed that 80 percent of the land in Italy was owned by 20 percent of the people. In speech, the 80/20 Rule predicts that 80 percent of the **tokens** (that is, the terms or other linguistic features that people actually say) come from 20 percent of the **types** (that is, the list of all the terms or features that people could say). However, when we count tokens and types in speech, we get a range of proportions, sometimes 90/10, sometimes 70/30. In every case there is a big quantitative difference between the one or a few terms/features at the top of the A-curve and the many terms/features that do not occur

very often in what is called the long tail (or fat tail) of the curve. Zipf ' s curve, then, is less a precise formula for a law and more like a guideline. Thus the A-curve: it avoids unnecessary implications of formulas and laws from Zipf while showing the characteristic quantitative difference in the frequency of terms/features as a nonlinear curve.

The complex system of language may actually work in a way that is not precise and rule-based but, ironically, the A-curve also creates our universal perception that language is structured. Grammar is a perceptual consequence of the complex system of speech, not a description of it. It is highly likely that the A-curve distributional pattern gave rise to the idea of grammar in the first place, because speakers of any language perceive that, for any question about how to put words together, there will be one or a few constructions that occur a great majority of the time, at the top of the A-curve. The idea that there is a fixed objective language hierarchy, a linguistic system, originates as an **observational artifact** , something that we just *perceive* to be there because we usually do one of just a few things. The problem with traditional grammar is the assumption that there is only one grammar for a language. Instead, we should think of grammar as derived from what we say and write, and think that there is a somewhat different grammar for every situation in which we say or write something.

The existence of complex systems in our cultural interactions allows us to be diverse, and at the same time allows us still to show ourselves through our behavioral choices to be members of our regions and groups at every level. Complexity science thus describes the process by which we perceive our language behavior to be associated with our communities and practices; it is the underlying process for the creation of what we call language varieties or dialects. Complex systems, therefore, offers a model that can explain the multidimensional layering of cultural regions and groups described by Zelinsky. The complex systems approach accommodates the decisions that speakers make about their language in every kind of conversation and situation for writing. Complex systems allow us to recognize and honor the linguistic and cultural decisions that every individual has to make, and at the same time to understand how such decisions result in local and larger cultural patterns.

Summary

Complexity science provides an effective scientific model for how economic markets work and also for how language varieties work. Speakers of a language have frequency profiles for the variants they can use for any feature, like names for *dragonfly* . Every group of speakers has an A-curve in the frequency of variants, and different groups have different orders for the variants on their A-curves. This previously unsuspected frequency characteristic of language accounts for why we perceive grammar in language.

Key Terms

80/20 Rule

A-curve

activity

agents

community of practice

complex systems

complexity science

components

contingency

emergence

exchange

feedback

fractal
frequency profile
invisible hand
Newtonian mechanics
nonlinear
observational artifact
paradigmatic structure
reductionism
reinforcement
scale-free
scaling
self-organization
self-similarity
syntagmatic structure
three body problem
tokens
types
Zipf ' s Law

Audio Samples

These audio samples (available at www.cambridge.org/williamakretzschmar) all come from American speakers from the Southern states. When you listen to them, imagine that you are hearing their words and pronunciations according to the model of a complex system: they can all use the same variants, but use them at different rates. They are all talking about their families.

a2.1 Speaker from Tennessee (LAGS 025)

a2.2 Speaker from Alabama (LAGS 387)

a2.3 Speaker from Texas (LAGS 847)

Exercises

1. How many different words do *you* know for a dragonfly? These days, you may be more familiar with different names for soft drinks, or for athletic shoes, or for sandwiches the come in long buns. Choose three different items, and list the variants you have heard (you can ask friends what they know, too).
2. People say that men talk differently from women, but can you name any specific differences? Perhaps how many colors they know? Are such differences associated with particular settings for conversations (like locker rooms or kitchens)? Do you think men and women mostly know the same words, but use some of them at different frequencies?

3. How does the principle of understandable high-frequency words vs. flexible low-frequency words play out in communities of practice? What about health-related words that doctors use as opposed to words their patients use? What about game-related words that people who play video games use that might be used much less by people who do not play? Can you think of other communities of practice who use some words at higher frequencies than people outside the community of practice do?

Computer Exercises

Exercise App3.2 in [Appendix 3](#) goes well with this chapter. It asks users to tally and chart the number of occurrences of each response type from three different items, in order to test the hypothesis that all of the charts will show an A-curve.

Further Reading

Mandelbrot, Benoit. [1977](#) . *Fractals: Form, Chance, and Dimension* , and [1982](#) . *The Fractal Geometry of Nature*. San Francisco: Freeman. These are the foundational books for the idea of fractals. There is lots of mathematics in them – nonlinear mathematics, at that – but the graphic designs are fascinating. The American public TV program called *Nova* produced a program on fractals called “ Fractals: The Hidden Dimension, ” available on YouTube. It has interviews with Mandelbrot.

Mitchell , Melanie . 2009 . *Complexity: A Guided Tour* . Oxford : Oxford University Press .

This book provides a thorough introduction to complexity theory, including its history and its application to the physical sciences. Mitchell illustrates her examples, making more detailed points about complex systems accessible.

Kretzschmar , William A. , Jr. 2009 . *The Linguistics of Speech* . Cambridge : Cambridge University Press , and 2015 . *Language and Complex Systems* . Cambridge : Cambridge University Press .

Burkette , Allison , and William A . Kretzschmar , Jr. 2018 . *Exploring Linguistic Science* . Cambridge : Cambridge University Press .

These books provide the foundational information about A-curves and the Linguistic Atlas Project. They can be challenging – especially [Chapter 6](#) in the 2009 book, which introduces complexity and dimensionality. The 2015 book applies complexity science to many subfields within linguistics. The 2018 book is an introductory textbook, both for complexity science and for linguistics. Kretzschmar, William A., Jr., Virginia McDavid, Theodore Lerud, and Ellen Johnson. [1993](#) . *The Handbook of the Linguistic Atlas of the Middle and South Atlantic States* . Chicago: University of Chicago Press.

The *Handbook* gives all the information you need about how the Linguistic Atlas of the Middle and South Atlantic States survey was conducted and who its speakers are.

Zipf , George . 1949 . *Human Behavior and the Principle of Least Effort* . Cambridge, MA : Addison Wesley . While Zipf was brilliant he was also a difficult person. He applied a principle of “ least effort ” based on his law to many things in society, and a number of these connections were more imaginative than substantial. As Bernard Mandelbrot wrote of Zipf ’ s [1949](#) book (Mandelbrot [1982](#) : 403),

It is one of those books ... in which flashes of genius, projected in many directions, are nearly overwhelmed by a gangue of wild notions and extravagance. On the one hand, it deals with the shape of sexual organs and justifies the Anschluss of Austria into Germany because it improved the fit of a mathematical formula. On the other hand, it is filled with figures and tables that hammer away ceaselessly at the empirical law that, in social science statistics, the best combination of mathematical convenience and empirical fit is often given by a scaling probability distribution.

Old World Origins for American English



In This Chapter

American English is part of a historical process. Within its own time, American English can be divided into periods that correspond to important stages in its development. Before that time, we begin with the ancient history of language and then move on to the beginnings of English. The chapter ends as American English begins, in the first years of the seventeenth century.

Timeline

449

Hengest and Horsa come to Britain: English begins.

1066

Norman invasion of Britain.

1400

Death of Chaucer.

1492

Columbus lands on several Caribbean islands.

1540

De Soto explores the South as far as the Mississippi River (1543).

1579

Drake claims New Albion (continent north of Mexico, at the Pacific).

1585

Roanoke colony founded.

1609

Hudson discovers Hudson River.

1616

Death of Shakespeare.

American English did not suddenly appear on July 4, 1776, as a new and fully developed variety of the language. It belongs to a process of change in the language that began over a millennium earlier and continues to this day. Still, American English could not exist before settlement of the New World, and so any account of the development of American English must mark a beginning at the time of the first permanent English settlements in North America. After that time different American voices began to take their own direction, which was different from the direction of linguistic change for English speakers in England and other places. The next chapters will trace the development of American English voices. First, in this chapter, we need to know about English before American settlement: where English came from, what it was like until the point that American voices began to branch off, and what circumstances influenced the branching process. In each of the following four chapters, we will consider one of the four major divisions in the development of American voices: the **Colonial Period** (beginnings to 1800), the **National Period** (1800 – 1865), the **Gilded Age to World War II** (1866 – 1945), and the **Information Age** (1945 – present). These periods are to some extent arbitrary divisions in the continuous history of the English language in America, and yet they do correspond to important cultural developments. The Colonial Period corresponds to the time when new North American settlements by English speakers retained their political and social focus on the British Isles, and therefore ends with the separation of political and social affairs in the American colonies from reliance on Old World culture. The National Period focuses on the creation of an American national culture, characterized by westward expansion across the eastern half of the continent and the creation along the way of regional cultural patterns. Regional differences culminated in the Civil War (1860 – 1865). The driving of the Golden Spike in 1869 marks the beginning of a new period, the Gilded Age. When the Union Pacific and Central Pacific railroads were joined, it also marked the connection between the West and the East (and other regions as well) that truly made the United States one nation. At the same time, the fact that the connection was made by an emerging industrial technology in transportation – railroads – marks the time when the American nation grew to become a world power, as shown by its involvement in World War II. The final division, the Information Age, builds on the foundations laid down in the earlier periods but is itself culturally distinct, characterized by new social and cultural patterns as new technologies like radio, TV, and computing accelerated the pace of communication across the country. These periods do not march towards some definite conclusion for the English language, whether in America or worldwide – it would be pretty conceited of us now to think that hundreds of years of American voices existed solely to produce our contemporary version of American English. To mark different periods in the history of American voices, including our own time, just helps to organize the facts of continuous change in the language into more manageable portions.

Ancient History

The English language is historically related to a family of languages called **Indo-European**. Nobody knows exactly where or when the actual people lived who spoke the first form of Indo-European, perhaps 6000 years ago, now reconstructed (there are no written records from that far back) as Proto-Indo-European. Written records from the Indo-European family go back as far as about 2000 BC, by which time the earlier Indo-European language had already begun to branch into what have become its main constituent language groups: Indian, Iranian, Armenian, Hellenic, Albanian, Italic, Balto-Slavic, Germanic, Celtic, Hittite, and Tocharian. Many of these groups in turn branched and rebranched into languages familiar in the modern era; some, Hittite and Tocharian, became dead languages when they no longer had living communities of speakers. To consider an example of what happens as groups continue to grow and change, the Italic group includes Latin (now no longer spoken by any living community but still taught as a historical language), which in turn developed into Romance languages such as Italian, French, Spanish, and others. Indo-European was not itself the first or only language spoken in early human cultures. Our earliest records of a written language, Sumerian, survive from about 3000 BC, for example, and Sumerian is not a member of the Indo-European family.

The next branch towards English from Indo-European is the **Germanic** languages, which arose in the northwestern part of the Indo-European area. The beginnings of the Germanic languages are still too old for there to be any written records. The various branches of the Indo-European language family, including Germanic, emerged and became distinct as a result of differential language change as people moved to settle new areas. That is, when groups of Indo-Europeans moved away from their original homeland, the members within each group would talk more to each other than they could talk to members of other groups. As the complex systems model predicts, such interaction allowed the emergence of different habits of speech in each of the groups. The central fact of language change is that new speech habits are always emerging, sometimes consciously but most times not through any deliberate intention; it happened for the Indo-Europeans and their descendants, and it is still happening today. These emerging habits tend to follow the residential and other cultural

groups to which people belong, then and now. The Germanic branch of Indo-European developed in just this way as the generations passed among the ethnically Indo-European people who settled the northwest. The same thing happened to Indo-Europeans who settled in other areas. The language habits of the Indo-European people who lived south of the Germanic group became Celtic, again with the passage of great stretches of time, and the language habits of the Indo-European people who lived east of the Germanic group in time became Balto-Slavic. As we saw in [Chapter 2](#), the regularities emerge from the operation of the complex system of language, in which there is room for a great many choices for words and sounds and in which, at the same time, speakers do tend to make similar choices.

The detective work in dictionaries and grammars that we call historical Indo-European linguistics had its great age of discovery only in the nineteenth century, and work continues today to unravel what must have happened to create the range of language branches and language habits existing today in the Indo-European region – and in all of the places to which Indo-European languages have been carried around the world. Most of this work attempts to explain the *differences* between language groups and languages, to make the branches of the Indo-European tree appear more separate and distinct, because people perceive that modern languages are separate and distinct (as discussed in [Chapters 1](#) and [2](#)).

Germanic is at the lower left of [Figure 3.1](#). Can you find English? It is important to keep in mind, however, that all of these groups and languages are still historically related to Indo-European and to each other. The language habits of the Germanic group are not entirely different from those of the Celtic group or the Balto-Slavic group. If they were, nobody could tell that these language groups were historically related to each other. The same is true for modern languages. There are systematic differences between them, to be sure, but there are also many similarities that testify to the connections between languages within branches and to the connections between branches within the Indo-European family. Consideration of the *similarities* and *connectedness* (as opposed to differences) focuses attention on the **linguistic continuum** within the Indo-European territory. Both then and now, people who live near to each other tend to be able to understand each other, as they must in order to carry on their daily affairs with each other. National boundaries even today most often do not prevent neighbors from talking to each other, and talking more like each other than might be predicted from their respective national languages as taught in schools or printed in books. For example, people who live in Alsace (today all in France) are part of a linguistic continuum which has, at different times, belonged to France or belonged to Germany. The line in [Figure 3.2](#) through the middle of Alsace shows where the German border was at the turn of the twentieth century. The historical development of the Indo-European languages was no different: near neighbors talked to each other, and the differences between particular daughter languages, and by extension the major Indo-European language branches, can be observed to emerge by historical linguists only as a function of the distance between the people who spoke them – we see the branches more clearly when we consider languages as they are spoken in their heartlands or capitals, not along the borders of the territories or countries in which they are spoken.

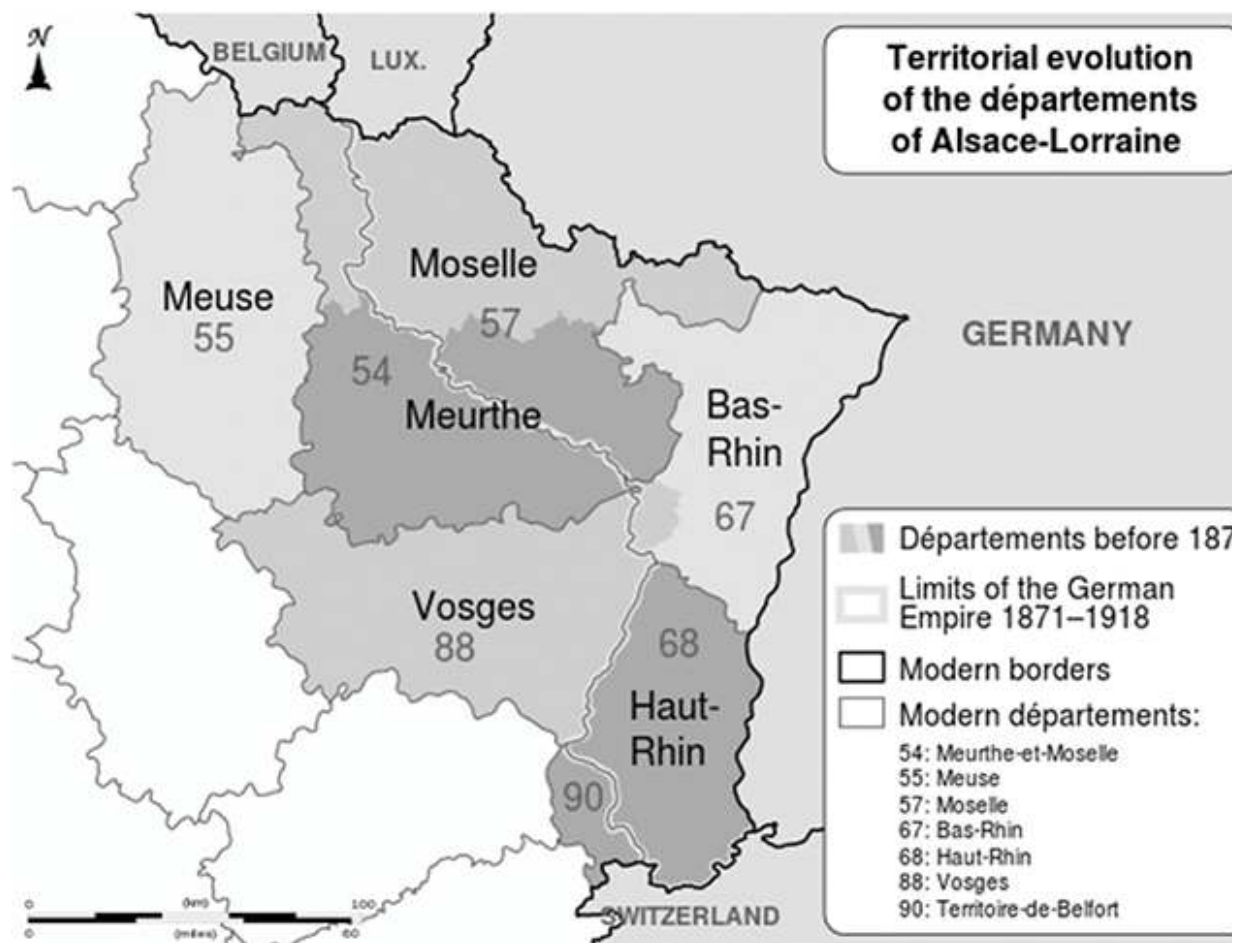


Figure 3.2 Alsace and Germany.

[Figure 3.2 long description.](#)

Source: Owen Blacker. 2011. 'Alsace Lorraine departments evolution map-en.svg'. Wikimedia Commons.

The idea of the linguistic continuum is a great match for the A-curve introduced in [Chapter 2](#), because the differences between heartlands and borders can be tracked in the frequency profiles: features that were rare in one place can become high frequency in another. So, for example, in Alsace we could count how often people said *Mann* or *Frau* (close to modern German) as opposed to *homme* or *femme* (close to modern French) for 'man, woman,' as a way to follow the continuum from central Germany towards central France. While it is sometimes useful to make binary distinctions, that a language is the same or different as in the Indo-European tree of languages, complexity science can explain the continuum of speech across time and territory that we always see when we observe more closely what people have actually said or written. Knowledge of the existence of a linguistic continuum is important for English because, historically, people who spoke the daughter languages that emerged from Germanic could often communicate with each other better, especially at the edges of their territories, than might be implied by the separate branches that historical linguists often draw for the Germanic family.

Origins of English

Unlike most other languages, English can date its origins with fair precision to about 449 AD. No written records of the language from that time still exist; the earliest written records of English come from about 700 AD. Still, between the **internal history** of the language (reconstruction of regularities in the features of a language, as for Indo-European and Germanic) and its **external history** (the historical record of cultural circumstances that affected the speakers of a language, and thus the conditions for change in the language), modern

observers can build a decent picture of what must have been happening before written records are available as evidence. The history of English is conventionally divided into three periods:

Old English	449 AD to 1150 AD
Middle English	1150 AD to 1500 AD
Modern English	1500 AD to the present

Thus, while the governor of the American state of Georgia once claimed that mountain people in his state spoke “ Old English, ” he was not using the term as we do in this book. These three periods are really just rough divisions in the history of English. Change in the language is continuous, both within the periods and across them. More specific references of the condition of the language often apply the labels “ early ” or “ late ” to the period name, and so Shakespeare ’ s stage of the language is often called **Early Modern English** (usually considered as coming from 1500 AD to 1700 AD). The earliest form of Old English is often called Prehistoric Old English (usually considered as coming from 450 AD to 700 AD). Periods in the history of English do give us specific boundaries in time to talk about, so long as we realize that, like the boundaries for periods in American English, they are arbitrary divisions.

Before the origin of English, the island of Britain was populated by a prehistoric culture that was displaced when members of the Celtic-speaking branch of the Indo-Europeans came to settle there. Much later, Julius Caesar invaded Celtic Britain in 55 BC, and Emperor Claudius conquered the island and made it part of the Roman Empire in 43 AD. Britain thus had roads and cities like the Romans, a literate culture, and new forms of religion (eventually including Christianity). The Romans created defensive walls and garrisons to protect the Romanized citizens from uncivilized Celts (the Welsh in the West, and later the Gaels, in Latin called *Scoti*, in the North) and Picts. Rome fell for the first time in 412 AD, and the disruption caused the Romans to withdraw their garrisons so that the Romanized British were no longer protected from the unRomanized Celts and Picts. The leaders of the British attempted to use the same mercenaries that the Romans had hired for defense, members of Germanic groups from across the North Sea on the continent. Hengest and Horsa were the leaders of these Germanic people, and they settled in Britain in 449 AD on their own isolated territory, the Isle of Thanet in the southeast. They did repel the Picts and Gaels, but then they began their own invasion of all Britain. It took the Germanic invaders nearly two centuries to complete their occupation of Britain, lacking only Scotland, Wales, and Cornwall, where some of the Romanized British sought haven with their ethnic relatives. It used to be thought that the British population was slaughtered by the Germanic invaders, but now there is evidence that many British people remained in England as second-class citizens, without the same rights or value as Germanic residents, as some early Germano-British legal codes show. Unfortunately for the victorious English people, by the end of the eighth century the **Vikings** , North Germanic raiders, had attacked the monastery at Lindisfarne and then the monastery at Monkwearmouth and Jarrow, and continued to attack other parts of Britain and Ireland for centuries. A new Germanic group thus threatened the people of Britain. But as before with the first wave of Germanic invaders, the Vikings eventually came to settle in Britain by about 900 AD, not just raid there, especially in the northeastern part of the island.

The English language is what has developed from the speech of the Germanic mercenaries, so we can say that the date of their arrival, 449 AD, is also the beginning of the English language. The Germanic mercenaries were members of a number of West Germanic groups, Angles, Saxons, Jutes, and Frisians, each certainly with their own speech habits but each able to understand speakers from the other groups. The names *England* and *English* come from the name of one of these groups, the Angles, but actually the Angles were historically no more important than the other groups. English grew more identifiable as something in itself, as something distinct from other West Germanic branches, over time as the various members of the Germanic groups settled most of the island of Britain. The Vikings, too, contributed to the English language, as they interacted from their own settlements in the Northeast of Britain with other Germanic groups.

The **Anglo-Saxon Chronicle** , prepared beginning in the ninth century and maintained for a long time afterwards in some locations, documents the volatile shifts in political power during this time. Here is what it says in the Anglo-Saxon Chronicle for the year 449:

449: Her Martianus 7 Ualentinus onfengon rice. 7 rixadon .vii. winter. 7 on þeora dagum gelaðode Wyrhtgeorn Angel cin hider. 7 hi þa coman on þrim ceolum hider to Brytene. on þam stede Heopwines fleot. Se cyning Wyrhtgeorn gef heom land on suðan eastan ðissum lande. wiððan þe hi sceolon feohton wið Pyhtas. Heo þa fuhton wið Pyhtas. 7 heofdon sige swa hwer swa heo common. Hy ða sendon to Angle, heton sendon mara fultum. 7 heton heom secgan Brytwalana nahtscipe. 7 þes lands cysta. He ða sona sendon hider mare weored þam oðrum to fultume. Pa comon þa men of þrim megðum Germanie. Of Ald Seaxum. of Anglum. of Iotum.

[Here Martianus and Valentinus seized the kingdom, and reigned seven winters. And in their days Vortigern invited the Angles here. And they came here to Britain in three ships, in the harbor called Heopwinesfleet. King Vortigern gave them land in the south-east of this country, on condition that they should fight against the Picts. Then they fought against the Picts, and had the victory wherever they came. They then sent to the Angles, ordered them to send more help, and had them told of the worthlessness of the Britons, and the virtues of the land. Then they soon sent here a larger army as help for the others. Then came men from three tribes in Germany, from the Old Saxons, from the Angles, from the Jutes.]

This passage describes events succinctly, but still includes the political statement that the Angles did fight and win against the Picts and that the British people were worthless. The Anglo-Saxon Chronicle says that the Jutes settled in Kent and Wessex, that the Old Saxons settled in Essex (between Mercia and Kent), Sussex (between Kent and Wessex), and Wessex, and that the Angles settled in Mercia and Northumbria ([Figure 3.3](#)).



Figure 3.3 Early regions in Britain (showing the modern borders for Scotland and Wales).

Source: Kretzschmar, William A., Jr. 2018. *The Emergence and Development of English*. Cambridge: Cambridge University Press.

We know, however, that a mixture of Germanic peoples lived in all of these areas, and that other Germanic groups such as the Frisians also participated in settlement, so that it is not possible to connect any of the four kingdoms exclusively with any Germanic group. Somewhat different varieties of Old English were spoken in these regions, however, owing to the emergence of somewhat different habits among speakers interacting with their neighbors in each one (again as the complex systems model predicts). Most surviving Old English texts, however, come from Wessex, the seat of King Ælfred and the place where manuscripts had a higher chance of survival. As for the language of the passage, it is quite different from Modern English at first glance. The passage has some letters that we no longer use (þ and ð, both used where we would use “th,” and 7, a symbol meaning ‘and’). But a closer look shows many similar words, like “winter

” and “ lande, ” or like the verbs “ send ” and “ come ” though these have unfamiliar endings. This is not what the governor of Georgia thought his neighbors in the mountains were speaking! Old English does, however, create the foundations for English as we know it. You can listen to the sound of Old English online (a3.1, with transcripts in a separate file), in other passages from the Anglo-Saxon Chronicle.

When William the Conqueror took the English throne in 1066, it changed the course of emergence for English. William was the Duke of Normandy – of course “ Normandy ” means ‘ land of the North Men, ’ the same Vikings who had settled that region of France about the same time they were settling north-eastern Britain – and thus William had his Norse heritage in common with many Englishmen. But change did come because William, as a conqueror and not merely a successor, exchanged the nobility of the English state, and thus put speakers of Norman French into positions of authority all across Britain. While the common people in England continued to speak English, they now had to contend with an aristocracy who did not speak their language, and the consequence is a massive influx of French words into English. The Middle English period also saw the formation of English sentence patterns much more similar to Modern English. The most familiar Middle English author is from the end of the fourteenth century, Geoffrey **Chaucer** , who died in 1400. Here is the beginning of the General Prologue to *Canterbury Tales* , Chaucer ’ s most famous work.

Whan that Aprille with his shoures soote [
,
gentle, sweet
,
]

The droghte of March hath perced to the roote,
And bathed every veyne in swich licour
Of which vertu engendred is the flour;

...

Thanne longen folk to goon on pilgrimages,

And palmeres [
,
pilgrims
,
] for to seken straunge strondes

To ferne halwes, kowthe [
,
known
,
] in sondry londes;

And specially from every shires ende

Of Engelond to Caunterbury they wende [
,
go
,

]

The holy blisful martir for to seke,
That hem hath holpen whan that they were seeke.

A few of the words need to be provided with glosses; others may be spelled differently, or take a moment to recognize, like “ halwes ” ‘ hallows, shrines. ’ Some French loan words are used with meanings we may no longer recognize, like “ licour ” ‘ liquid ’ when Americans use the word mainly for alcoholic drinks. And yet Chaucer ’ s English is not so different from Modern English that we cannot understand it after a little practice. You can listen to the sound of Chaucer ’ s Middle English online (a3.2, with transcripts in a separate file).

The Early Modern period from 1500 to 1700 saw the transition from English as a language of the common people to English as a language for all purposes. In order for this to happen, English acquired words from French and Latin: instead of using the words as parts of French or Latin sentences, these words became part of English sentences. So, for example, whereas law cases in England were conducted in French until 1362, pleadings after that were supposed to be carried out in English. French words became used as English words in legal situations: *justice, equity, jury, judge, plaintiff, defendant, attorney, larceny, torts, bail, parole*, and many others. **Loanwords** , or **borrowings** , are words used in one language, like English, that replicate words used in another language, like French. Of course, French lost nothing when English borrowed its words, and English will not be paying French back: the idea of a loan or of borrowing is a metaphor that describes what people do with features in languages. At the end of the sixteenth century **Shakespeare** made fun of those who mixed up Latin with their English in *Love ’ s Labor ’ s Lost* (V.i). The pedant Holofernes converses with the curate Nathaniel:

Holofernes :

Satis quid sufficit. [Enough is as good as a feast]

.....

Nathaniel :

I praise God for you, sir. Your reasons [discourse] at dinner have been sharp and sententious [meaningful], witty without affection [affectation], audacious without impudency, learned without opinion [dogmatic view], and strange without heresy. I did converse this quondam [former] day with a companion of the king ’ s, who is intituled, nominated, or called, Don Adriano de Armado.

.....

Holofernes :

Novi hominem tanquam te [I know the man as well as I know you]. His humor is lofty, his discourse peremptory [decisive], his tongue filed [polished], his eye ambitious, his gait majestical, and his general behavior vain, ridiculous, and thrasonical [boastful]. He is too picked [refined], too spruce, too affected, too odd, as it were, too peregrinate [foreign in manner], as I may call it.

.....

Nathaniel :

A most singular and choice epithet.

While Nathaniel thinks that Holofernes has used a choice bit of description, another character, Moth, a serving boy, thinks that “ They have been at a great feast of languages, and stol ’ n the scraps. ” Holofernes and Nathaniel are “ book-men ” and mix their languages, mainly Latin with English, and Shakespeare pillories them throughout the play by having common people comment on their speech, as Moth here, or elsewhere Dull, a constable.

Words also entered English from other languages, and that often happened because the Early Modern period is when England and its navy began to engage with the rest of the world. In perhaps the most notable engagement of the period, the English defeated the Spanish Armada in 1588 and, besides repelling a Spanish invasion, signaled that England would be a player on the high seas. A decade earlier Sir Francis Drake had sailed all the way around the world, an expedition that was supposed to attack Spanish possessions in the New World, and had claimed New Albion, the North American continent north of Mexico. Henry Hudson found the Hudson River in 1609. Of course Christopher Columbus had traveled to the Americas in 1492, and the Spanish had explored much of Central America and southern North America in the early sixteenth century. The English were not the first to get to North America, but they eventually established long-lasting colonies there, as we shall see in the [next chapter](#) .

Great Vowel Shift

Perhaps the greatest change in the history of English occurred in the Early Modern Period in English pronunciation, the **Great Vowel Shift** (**GVS**) (see [Figure 3.4](#)), which made the vowels of English differ from those of continental European languages. Between 1400 and 1700, the **long vowels** ([i:, e:, ε:, æ:, a:] in the front, and [ɔ:, o:, u:] in the back; the long [e] and long [o] are now diphthongized to [eɪ, oʊ] ; see [Appendix 1](#) for discussion of vowel symbols, diphthongs) were raised in a process of **vowel rotation** . **Raising** just means that a vowel was pronounced at a higher articulatory position than it had been before. The term “ vowel rotation ” suggests that the individual acts of raising tend to raise vowels until they get to the highest position, and then vowels fall along a more centralized track.

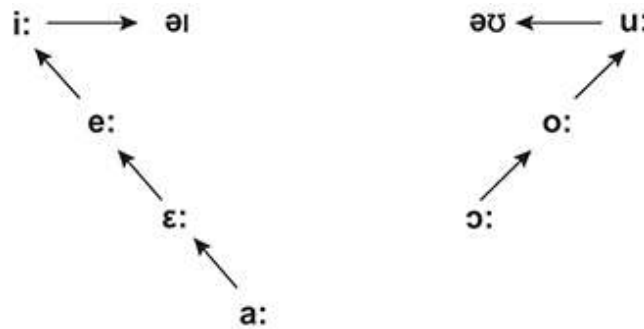


Figure 3.4 Phase 1 of the Great Vowel Shift.

The first step is that the highest long vowels, [i:] in the front and [u:] in the back, both become diphthongs [əɪ , əʊ] with the addition of the central vowel [ə]. To use words as examples, the word *bite* was pronounced [bi:t] in Middle English, but after the first step of the GVS the word was pronounced [b əɪ t]. The word *cow* in Middle English was pronounced [ku:], but after the first step of the GVS the word was pronounced [k əʊ]. Then the next highest vowels in front and back, [e:] and [o:], rise so that they are pronounced [i:] and [u:]. Again in words, in Middle English the word *see* was pronounced [se:], but after this step of the GVS it was pronounced [si:]. And Middle English *food* , pronounced [fo:d], was then pronounced [fu:d] after this step of the GVS. Then the vowels below those: in words, Middle English *meat* [m ε :t] became [me:t], and Middle English *boat* [b ɔ :t] became [bo:t]. Finally, Middle English *mate* [ma:t] became [mæ:t]. These changes were complete by about 1600. Next, there was a second phase of the GVS between 1600 and 1700 (see [Figure 3.5](#)).

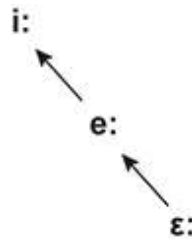


Figure 3.5 Phase 2 of the Great Vowel Shift.

Words that had previously been raised one step, like *meat* and *mate* , were raised one more step in a process called **second raising** , so that *meat* was now pronounced [mi:t], rhyming with *meet* , and *mate* was now pronounced [me:t]. A few words did not change, however: *great* , *break* , *steak* still retain their first phase pronunciations as [gre:t, bre:k, ste:k], rather than the pronunciations we might have predicted from second raising [gri:t, bri:k, sti:k]. Later, the original [i:] vowels, like *bite* that had changed to [b əɪ t], and the original [u:] vowels, like *cow* that had changed to [k əʊ], underwent a small further change to [baɪ t] and [kau] as many speakers would say them today. The remaining words with the [e:] vowel also changed slightly to be pronounced [eɪ], so *mate* [meɪ t] and *great* [greɪ t].

However, the sound change in real life was just not as neat and regular as this. The way that the complex system of speech works, with the emergence of particular habits of pronunciation or word usage in local and regional communities throughout the English-speaking

world, means that these changes occurred at different times – or sometimes not at all – among different regional groups in the British Isles. Indeed, modern dialect survey evidence shows that it is possible to find speakers somewhere in Britain whose pronunciation of particular words today still matches every stage of the GVS. There are longstanding dialect areas in Britain, from Scotland in the North to Land 's End in the Southwest. Top-level generalizations (that is, at the top level of scale in the complex system) like the GVS are still useful so long as we know that they are broad abstractions, and that we can expect linguistic life to be much messier on the ground among actual speech communities. As [Chapter 2](#) has shown us, the top-level frequency profile has other frequency profiles below it at every level of scale, so that regions or cities or even individuals will have their own frequency profiles that are unlikely to match the one at the top level.

One practical consequence of the GVS was its effect on English spelling. The fact that *meet* and *meat* now sound the same but are spelled differently was caused by the second raising step of the GVS. The same is true of *see* and *sea*. *Been* and *bean* sound the same for many speakers in Britain, but not for speakers in America. The pronunciation of English words also differs from the pronunciation of cognate words in European languages because of the GVS: an English *table* [teɪ bəl] sounds different from a French *table* [tɑ blə]. This is one reason for the many complaints by learners of English about spelling and pronunciation.

We cannot leave this chapter without one more look at Shakespeare (died 1616). Many modern readers have been exposed to his plays or poetry, perhaps to Sonnet 18 (you can listen to this passage online, a3.3):

Shall I compare thee to a summer
,
s day?

Thou art more lovely and more temperate:
Rough winds do shake the darling buds of May,

And summer
,
s lease hath all too short a date:

Sometime too hot the eye of heaven shines
And often is his gold complexion dimmed;
And every fair from fair sometimes declines,

By chance or nature
,
s changing course untrimmed;

But thy eternal summer shall not fade,

Nor lose possession of that fair thou ow
,
st;

Nor shall death brag thou wander
,
st in his shade,

When in eternal lines to time thou grow
,
st.

So long as men can breathe, or eyes can see,
So long lives this, and this gives life to thee.

The language is no longer difficult to understand, and perhaps the worst problem is that spelling disguises the fact that the GVS was not yet complete and Shakespeare's pronunciation is not the same as ours today. There are a few other differences, like the use of *thee/thou* (older forms of the *you* pronoun we use today), and ' *st* endings that we no longer use on verbs. These archaic forms may be familiar to some, however, from Sunday church services. The King James Bible was prepared at this time and also has these forms, and it is still in use in many churches (i.e., at a lower level of scale in the complex system than we expect in national use). More subtle differences in the meanings of words, not the same for Shakespeare as they are for us even though the words are spelled the same, may trip up the incautious reader. C. S. Lewis, in particular, has written wisely about such semantic change over time (1967).

The Old World origins of English, from 449 AD until Shakespeare, provide the source material for American English. We should not expect that one variety of English could cross the Atlantic unchanged to create American English, because there were many varieties of English in the British Isles in Shakespeare's day, as there had been at all times since Old English. This is just what the complex system of language predicts, the scaling property of varieties. So, we can expect that English speakers migrating to the New World – from Scotland or Land's End and all parts in between – will bring a broad collection of words, pronunciations, and grammatical habits with them. Out of those, the new English settlers would create American English as a consequence of their interactions with their neighbors in the new land.

Summary

The English language is part of a long process of development that began with the Indo-Europeans. It emerged from the speech of different Germanic groups who invaded Britain, and continued to emerge somewhat differently in different parts of the island. Borrowings from Latin and Norse began to occur in the Old English period. The Norman Conquest changed the circumstances for linguistic interaction, and English acquired many borrowings from French, as well as more from Latin and Norse. The Great Vowel Shift was a major change in pronunciation. All of these happenings set the stage for the emergence of American English.

Key Terms

Anglo-Saxon Chronicle

borrowing

Chaucer

Colonial Period

C. S. Lewis

Early Modern English

external history

Germanic

Gilded Age to World War II

Great Vowel Shift (GVS)

Indo-European
Information Age
internal history
linguistic continuum
loanword
long vowels
Middle English
Modern English
National Period
Old English
raising
second raising
Shakespeare
Vikings
vowel rotation

Audio Samples

Available at www.cambridge.org/williamakretzschmar .

a3.1 Anglo-Saxon Chronicle (Old English)

a3.2 Chaucer, General Prologue, Canterbury Tales (Middle English)

a3.3 Shakespeare, Sonnet 18 (Early Modern English)

Exercises

1. Listen to the audio samples of Old English (a3.1) (available at www.cambridge.org/williamakretzschmar), and while you do so, write down words that you recognize as still belonging to Modern English. You will find the task much easier if you look at the transcripts of the passages, also online.
2. In the passage from Shakespeare 's *Love 's Labour 's Lost* , many words are glossed. Look up each of those words in the *Oxford English Dictionary* (or another dictionary that gives etymologies) and write down what language they came from. You can skip the Latin passage in the first line – that ' s not English and will not have any etymology.
3. In the past when you had to read Shakespeare, you may have thought of it as “ old English. ” Now you know it is not – Early Modern English! Sometimes the differences between Shakespeare ' s English and Modern English sound “ poetic, ” and sometimes that just makes Shakespeare hard to follow. When you read Sonnet 18, which usages do you think are “ poetic, ” and which ones are just hard to follow? There is no correct answer here: do the best you can to talk about particular features of Shakespeare ' s language and how you interpret them (or find it hard to interpret them) today.

Computer Exercise

[Exercise App3.3 in Appendix 3](#) explores differences by age, to try to observe language change. The apparent time hypothesis from sociolinguistics (see [Chapter 10](#)) suggests that speakers from different age groups will show different stages of a linguistic change.

Further Reading

The ancient history of languages has fascinated many an imagination. See, among many other scholarly offerings, Derek Bickerton, *Language and Species* (Chicago : University of Chicago Press, 1990) ; Mark Kaiser and V. Shevoroshkin, "Nostratic," *Annual Review of Anthropology* 17 (1988), 309 – 329 ; Carl Darling Buck, *A Dictionary of Selected Synonyms in the Principal Indo-European Languages: A Contribution to the History of Ideas* (Chicago : University of Chicago Press, 1949) . Among literary treatments of the subject, notable is William Golding, *The Inheritors* (1963) .

There are numerous editions of the Anglo-Saxon Chronicle, which still exists in nine manuscripts, each one different. The translation prepared by Dorothy Whitelock (*The Anglo-Saxon Chronicle*, ed. and trans. Dorothy Whitelock, David Douglas, and Susie Tucker, New Brunswick, New Jersey : Rutgers University Press, 1961) aligns translations of several of the manuscripts. A recent translation is Michael Swanton, *The Anglo-Saxon Chronicle*, London : Routledge, 1998 .

Malcolm Parkes, *Pause and Effect: Punctuation in the West*, Berkeley : University of California Press, 1993 . This engaging book describes the history of punctuation, something we no longer notice – unless we get it wrong.

Peter Hunter Blair, *An Introduction to Anglo-Saxon England*, 3rd ed., Cambridge : Cambridge University Press, 2003 . The classic account of Anglo-Saxon culture. A compendious resource, over 600 pages and 700 articles, is the *Wiley-Blackwell Encyclopedia of Anglo-Saxon England*, 2nd ed. (Oxford : Wiley-Blackwell, 2013) , edited by Michael Lapidge, John Blair, Simon Keynes, and Donald Scragg.

Peter Baker, *Introduction to Old English*, 3rd ed., Oxford : Blackwell, 2012 ; Bruce Mitchell and Fred Robinson, *A Guide to Old English*, 8th ed., Oxford : Blackwell, 2011 ; Alastair Campbell, *Old English Grammar*, Oxford : Clarendon Press, 1959 . The first two books are popular introductions to Old English, both in advanced editions. Campbell is still the standard Old English reference grammar. A fine new Old English reader, with an introductory chapter on Old English, is Richard Marsden, *The Cambridge Old English Reader*, 2nd ed. (Cambridge : Cambridge University Press, 2015) .

The Riverside Chaucer, ed. by Larry Benson and F. N. Robinson, 3rd ed., New York : Houghton Mifflin, 1987 . A long-running popular collection of Chaucer's works. Besides *Canterbury Tales*, modern readers will still enjoy *Troilus and Criseyde*, perhaps the best love story ever written in English.

Hilary Mantel, *Wolf Hall*, London : Holt, 2009 ; *Bring Up the Bodies*, London : Holt, 2012 ; *The Mirror and the Light*. London : Holt, 2020 . Hilary Mantel's descriptions of England and court life in the sixteenth century are deservedly popular. The second book describes the relationship of Anne Boleyn and Henry VIII in great detail. The books have also been made into a BBC TV series. Can you imagine these TV programs presented with Early Modern pronunciations?

C. S. Lewis, *Studies in Words*, 2nd ed., Cambridge : Cambridge University Press, 1967 . Lewis talks about a number of keywords like *nature* and *world* as well as *free*, and along the way paints a picture of the kind of cultural humanism studied at Oxford and Cambridge in the mid-twentieth century.

For general coverage of the history of the English language, see William A. Kretzschmar Jr., 2018, *The Emergence and Development of English*, Cambridge : Cambridge University Press .

The Colonial Period (1600 – 1800)



In This Chapter

The beginnings of American English come from the way that Europeans settled in North America. The circumstances of early immigration were different from the circumstances of life in the Old Country, and the interactions of speakers in the new setting shaped local habits. Crèvecoeur reports a typical experience of an immigrant coming to America. Early formation of American English does follow Schneider's model for colonial Englishes, if we understand it from the point of view of complex systems.

Timeline

1607

Jamestown founded.

1619

Black slavery introduced in Virginia.

1620

Plymouth founded.

1625

Dutch establish New Amsterdam.

1636

Harvard University established.

1650

Population 51,700.

1670

Population 114,500; Charleston founded.

1682

William Penn settles Pennsylvania, Philadelphia founded

1690

Population 213,500.

1701

Detroit founded; Yale University founded.

1710

Population 375,500.

1730

Population 654,950.

1746

College of New Jersey founded, now Princeton University.

1750

Population 1,207,000.

1751

Philadelphia Academy founded, now University of Pennsylvania.

1754

French and Indian War (1754 – 1760).

1770

Population 2,205,000; Boston Massacre (riot put down by British soldiers).

1773

Boston Tea Party (protest against Tea Tax).

1775

Revolutionary War (1775 – 1783).

1776

Declaration of Independence.

1780

Population 2,781,000.

1782

Hector St. Jean de Crèvecoeur, *Letters from an American Farmer*.

1783

Noah Webster, *Grammatical Institute, American Spelling Book*.

1790

Population 3,929,214; Washington DC founded.

American English offers a good example of the general question of how new varieties of a language emerge, and what then happens to them over time. For America, this is the process by which particular linguistic features emerged with high frequencies in the English of

the colonies, and by which different features could become more common in different areas. American English and its varieties are the product of random interactions in a complex system, beginning in the first generation, between speakers who brought with them their use of different varieties of British English. The findings of this approach are not in conflict with Edgar Schneider ' s popular book about the general process of variety formation, *Postcolonial English* ([2007](#)). We can never answer the question " why " American English is as it is – there is never a good answer to the " why " question in the history of a language – but it is now possible to address more adequately the question " how " it came to be as it is.

Demographics

Let us begin with the facts of immigration and settlement. North American settlement by English speakers began in the seventeenth century, amounting at that time to about 150,000 migrants from all parts of Britain (Bailyn [1986](#)). These English speakers and their descendants accounted for a majority of the colonial population of 275,000 people by 1700 (" new " immigrants seldom amounted to more than 10 percent of any local population at any one time). Two characteristics of European settlement – introduction of disease and violence towards the survivors – created a pattern of replacement of the native population rather than integration with it, a pattern that would continue long thereafter. Up to 90 percent of the Eastern **Native American** population was lost (see Dobyns [1983](#) , Smith [1994](#)), beginning with sixteenth-century Spanish explorers and the diseases they brought. The settlers themselves were not immune to disease. The earliest English settlements to survive at all after Sir Walter Raleigh ' s initial Roanoke colony (1585) disappeared without trace, Jamestown (1607) and Plymouth (1620), suffered mortality rates of 50 percent or more in their first years, and child mortality was up to 50 percent before the age of twenty (Bailyn [1986](#) : 100). So, the population of English settlers, too, was subject to rapid and continuing replacement. This created mixed populations of English speakers in every settlement from different British regions.

This fact stands in contrast to more romantic views, such as historian David Fischer ' s book, *Albion ' s Seed* (1989). Fischer gives the impression that British regional culture was transplanted whole to North America, with section titles like " East Anglia to Massachusetts " and " The South of England to Virginia. " He is simply wrong to write that " On Smith and Tangier islands ... immigrants from the far southwest of Britain founded a culture which still preserves the dialect of seventeenth century Cornwall and Devon " (1989: 784). Nobody today preserves in its entirety Shakespeare ' s English, or any other regional British variety from the seventeenth century, because no living language fails to change over time. Even settlements like Plymouth that are often supposed to be regionally homogenous were actually quite mixed, as we know from the Mayflower passenger list – half of the passengers were not Pilgrims – and from complaints by the Pilgrims about their non-Pilgrim neighbors (you can listen to Plymouth Records online, a4.1, with transcripts in a separate file). Moreover, many English settlers had already migrated to London before taking ship for America. Keene reports that " Most adult Londoners were born outside the city: in the eighteenth century the outsiders may have been as many as two-thirds of the total " (Keene [2000](#) : 109). North American emigration accounted for as much as 70 percent of English population increase during the seventeenth century, and a majority of those people came to North America through London (Bailyn [1986](#) : 40). So, early immigration from London did not constitute a population of " standard " speakers, but a pre-mixed blend of regional voices. The effect of early general replacement of the native population by English settlers, and of the continuous change in the immigrant population owing to mortality and new migrants, was to create a new complex system out of the interactions of the settlers.

To return to North America in the seventeenth century, complexity science tells about the process by which order, here a new American variety of English, emerged from the mixture of regional British characteristics among the settlers in every locality. We know that there were massive numbers of exchanges of linguistic features – whether words or pronunciation or grammar – deployed by human agents, the speakers thrown together in America. In the early American environment, the immigrants all contributed their own resources of speech as they tried to talk to their neighbors. Given the preponderance of early English settlement, it is no surprise that English features came to constitute the majority of the language in the new order that emerged. There were, of course, some contributions from Native American languages or other European languages in the seventeenth century; for example, New Amsterdam (later New York City) was founded by the Dutch in 1625. However, in every colony a variety of English emerged as the everyday language of the founding population of settlers (see McDavid [1958](#) : 483, Zelinsky [1992](#) and Mufwene [2001a](#) : [Chapter 2](#) and [3](#) , for the influence of original settlement populations, the **Doctrine of First Effective Settlement** , and the **Founder Principle** respectively). In Zelinsky ' s words, " the specific characteristics of the first group able to effect a viable, self-perpetuating society are of crucial significance for the later social and

cultural geography of the area, no matter how tiny the initial band of settlers may have been " ([1992](#) : 13 – 14). And after such a start, given that speech is a complex system, the variants available in the population of speakers for any and every linguistic feature began to be distributed according to the A-curve pattern simultaneously at every level of scale. Right from the beginning, somewhat different sets of variants, whether words or pronunciations or ways to put words together, would emerge as top-ranked elements in different localities. Also right from the beginning, a particular set of variants emerged as top-ranked elements at the highest level of scale, American English. The order that emerged at the national level of scale was not exactly the same as what emerged in any single locality or colony and yet, owing to the scaling property of complex systems, neither was it just an abstraction that avoided the special characteristics of any individual colony, nor was it just a kind of average of speech from lower levels of scale. The term **colonial leveling** is sometimes used to suggest that American English had avoided or leveled the differences between regional British varieties, and thereby simplified the language. The term **koinéization** is similarly sometimes used to imply that American English had created a simplified mixture of language features. Neither of these impressions is right. There was no particular avoidance of differences or simplification in the mixture of features; self-organization in the complex system of language simply allowed some features to emerge as most common, whether in American English overall or in the varieties of many different smaller populations of speakers. Massive numbers of interactions between speakers as agents in the complex system caused the emergence of noticeable differences, both between American regions and between American and British English – not simple causes like Fischer ' s idea of wholesale cultural transference.

Despite the high mortality rates, English settlers continued to flood to the colonies in the eighteenth century. And other Europeans came, too, including large numbers of Germans from the Palatinate (*Pfalz* in German, in the southwestern part of modern Germany) starting in 1709. Thousands of African people were brought involuntarily to the colonies after 1680 (the first African slaves arrived as early as 1619) to work on plantations in Southern colonies, many of them from Caribbean islands where plantation agriculture was also common. These non-English groups contributed to an even more mixed population of speakers. Thus, it is also no surprise that substantial numbers of features, whether words or pronunciation or grammatical influences, also emerged in the complex system from non-English sources (see the [next chapter](#) for contributions from various languages to American English, particularly the lexicon). By 1790, of the total colonial population of nearly 4 million, over 2.5 million came from the United Kingdom (including nearly 500,000 from Scotland and Northern Ireland), about 250,000 from Germany, and 100,000 from the Netherlands. About 750,000 African people had been imported as slaves, the largest group after settlers from the United Kingdom. Even though a new variety of English was established in the original colonies, the continuing operation of the complex system in every colony allowed new variants to be introduced, and sometimes to be preferred, owing to the continuing massive interaction of elements.

Pattern of Settlement

European village life was never recapitulated in the English-speaking New World, and so the demographics for the production of language varieties were never alike in the Old World and in the New. As Raven McDavid wrote ([1975/1980](#) : 114 – 115),

the European village has been and still is a viable organic entity ... for village life has always depended on a cooperative tradition, a tradition of a balance of shared rights and responsibilities.

McDavid ' s version of the American village that did share something of the European cooperative pattern was his picture of the Southern mill town that emerged later as a part of cotton culture, where the textile company owned the local store and by its extension of credit came to own the lives of its workers. Apparent similarities elsewhere, he said, were superficial ([1975/1980](#) : 115):

Even when a village – or “ township, ” as it is sometimes called – sought to emulate the European pattern, as in parts of New England or in some of the transplanted New England settlements in Upstate New York and [later] the Middle West, it rarely emulated the European model by being a place where people lived, who made their livelihood by cultivating the surrounding farmland. Rather, it was set up as a miniature city – with banks and shops and ambitions to become something different and bigger

The city, it seems, was always the American model, and according to McDavid this was one of the “ centripetal ” forces that worked “ toward a greater degree of uniformity in American speech ” ([1980](#) : 120). Charleston was founded in 1670, Philadelphia in

1682. Some cities further west were also founded early in the period, like Detroit in 1701 by the French explorer Cadillac. Again McDavid ([1975/1980](#) : 119),

Even by 1700 it was clear that the colonies had a new pattern of living. Instead of the society of villages, with urban clusterings, there was a string of cities in the wilderness, generally seaports which mediated directly between the mother country and the frontier.

The American alternative to the village was the city, a more impersonal, commercial entity and a gateway to other colonies and to the world.

McDavid ' s contrast between village and city needs a little further explanation. The historical European demographic pattern had residential villages as the norm, with a larger market town within a day ' s round-trip travel, and still larger population centers with expanded services at wider intervals (e.g., Russell [1972](#) : 29 – 37).

[Figure 4.1](#) shows that the larger “ city ” (population below 1000) of Leicester in the Middle Ages was surrounded by smaller towns, each of them surrounded by villages and hamlets. Linguistic habits emerged within the village according to the complex system of interactions of the residents, and differentiation of linguistic habits emerged between villages because people lived their lives in small, stable, intensely local groups. Village life was characterized by what Lesley and James Milroy would call **strong ties** (more about these in [Chapter 9](#) and [Chapter 10](#)), a network of close relationships between people in a community which allowed for the maintenance of linguistic norms within the group (cf. [1987](#) , [1992](#) , where the Milroys describe not villages proper, but rather their work in the separate neighborhoods of Belfast). Differences with nearby villages were small because of interaction at market towns, according to the scaling principle of the complex system of speech, and greater distances allowed for greater differences to emerge. The result was a classic linguistic continuum, as described in [Chapter 3](#) .

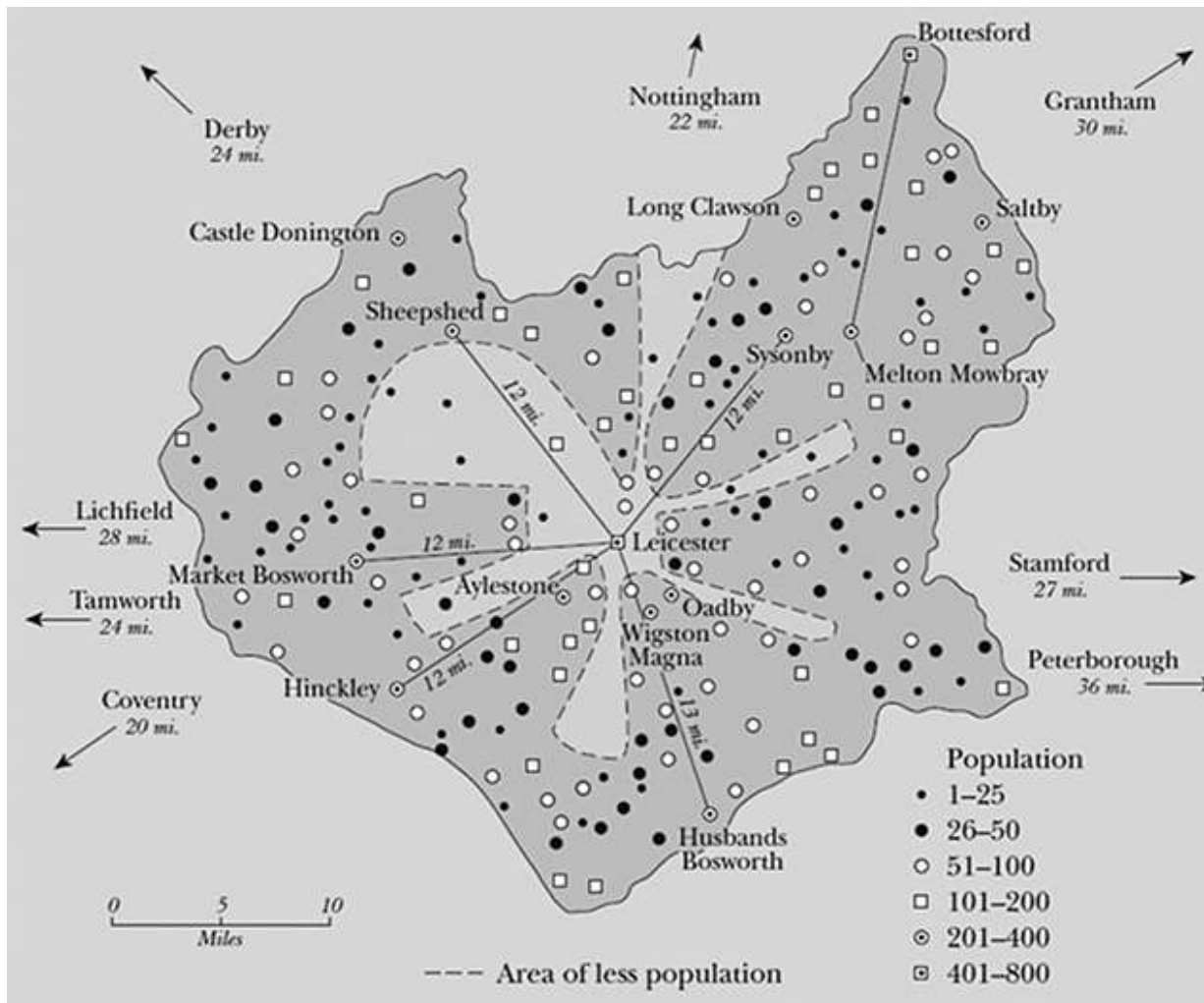


Figure 4.1 European settlement pattern near Leicester (England) in the Middle Ages.

[Figure 4.1 long description.](#)

Source: Kretzschmar, William A., Jr. 2010. Language Variation and Complex Systems. *American Speech* 85: 263 – 286.

The colonial American city, McDavida argued, did not have a supporting structure of feeder villages, but instead mediated linguistic habits for a fairly large number of people living under relatively isolated conditions on separate farms or other homesteads. Still, new American settlers did interact and cooperate with their neighbors, so local variation could emerge, and that variation could further emerge into patterns related to a city. Characteristic local variations in speech thus could and did develop in the more densely populated colonial cities, particularly among the local wealthy elite that ran commercial enterprises. Thus, American habits of settlement and communication created somewhat different possibilities for maintenance of linguistic norms than had existed in the Old World, although the same complex system of interactions worked in both places.

The main American port cities in the colonial period were Boston, New York City, Philadelphia, and Charleston. Early settlement in Virginia, beginning with Jamestown, was different in that it did not have a central port city; the port city of Norfolk only developed after 1750, and the capital Richmond was only incorporated in 1742. Each of the main port cities, and Virginia along Chesapeake Bay, developed its own culture region. Settlers who came through Boston eventually populated New England, as far north as Maine and as far west as the Berkshire Mountains, a part of the Appalachian Mountain chain that stretches from the Canadian border south to Alabama. The New York City culture region extended up the Hudson River. The Philadelphia region ran to the west of the city. Early settlement from Charleston in South Carolina occupied the lowland area north and south along the coast. The same is true of early settlement in Virginia,

which extended along the coast from the northern part of what is now North Carolina to the southern part of what is now Maryland. During the early period of settlement, the only way to get between these areas was by sea.

By 1800 ([Figure 4.2](#)), however, a road system was established near the coast, with western extensions to principal places like Pittsburgh at the headwaters of the Ohio River, founded in 1758, Charlotte in North Carolina, founded in 1768 at the intersection of two trading routes, and Augusta in Georgia, founded in 1736 at the fall line for the Savannah River (the place with a sharp drop in elevation causing waterfalls and rapids, so navigation upstream was interrupted). River travel was very important in this period with few roadways.

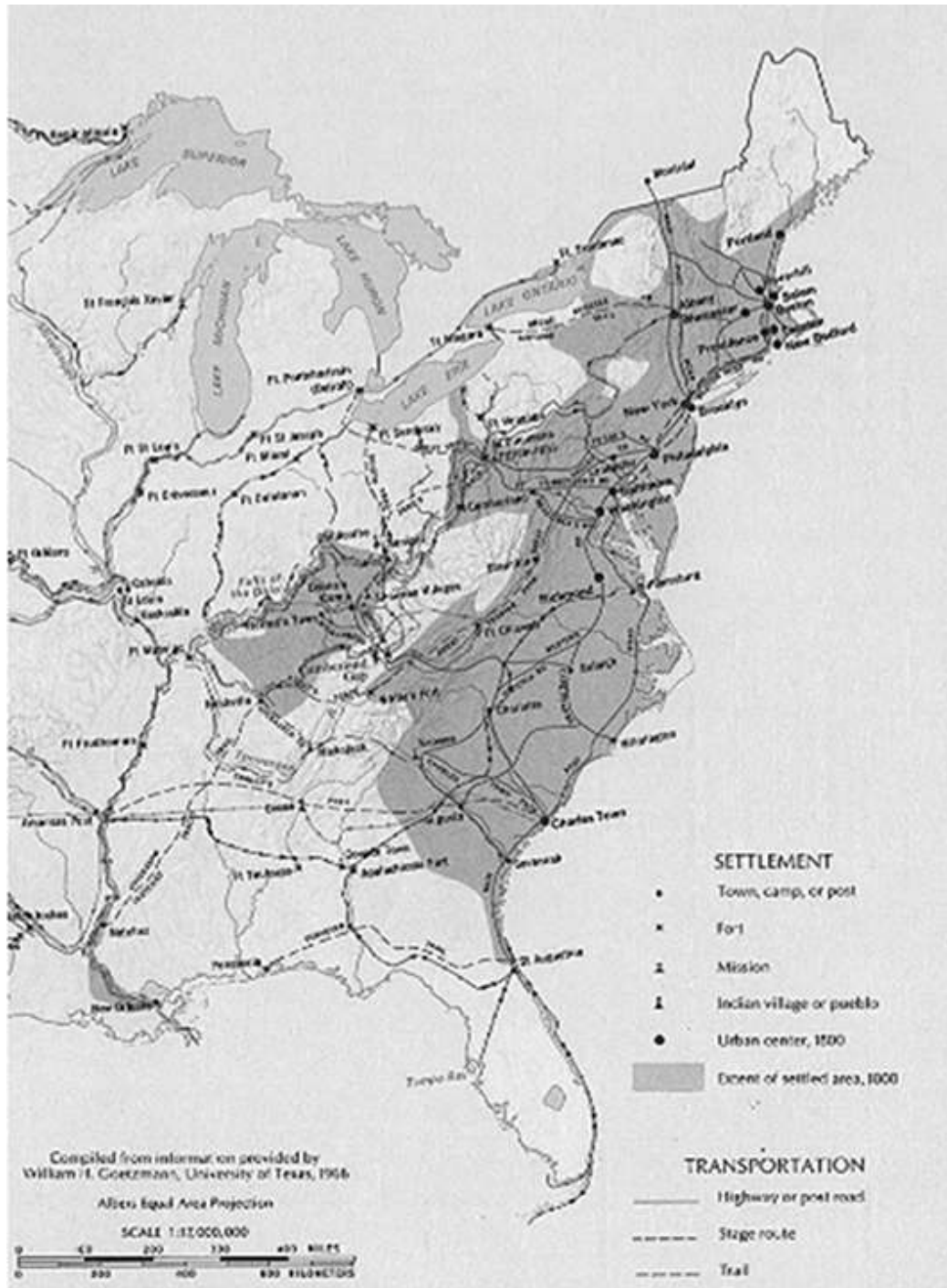


Figure 4.2 Settlement and transportation by 1800.

[Figure 4.2 long description.](#)

Source: *The National Atlas of the United States of America*. Arch C. Gerlach, editor. Washington, D.C.: U.S. Dept. of the Interior, Geological Survey, 1970, viewed at <https://legacy.lib.utexas.edu/maps/histus.html>.

Eighteenth-Century Immigration

Immigration in the eighteenth century proceeded according to a different pattern. In the seventeenth century new settlers stayed close to the coast, but in the following century what had been coastal frontier outposts developed into port cities, and new settlers, and children of colonial families whose lands could no longer support the youngest generation, passed through the coastal ports of entry and headed inland. As Bailyn has written, “ after the initial phase of settlement, the major stimuli to population recruitment and settlement were, first, the continuing need for labor, and, second, land speculation ” ([1986](#) : 60). For the labor market, in addition to single, male indentured servants, mainly from London, who had supplied the demand in the seventeenth century, about 50,000 English criminals were sent to North America (largely guilty of being poor, since dangerous criminals were typically executed at the time), large numbers of “ redemptioners ” came from Germany, and many thousands of Africans came as slaves. Because slaves took over many manual jobs from southern plantations north to Baltimore, indentured Europeans were often recruited for skilled jobs, especially in the building trades (Bailyn [1986](#) : 61 – 64). While the labor market served mainly the coastal cities and developed areas, inland settlement was often accomplished by families, whose pathways west were established by land speculators based in the port cities. Bailyn says that “ Boston was a nursery, Philadelphia a human warehouse, and New York was a staging center for the distribution of immigrants into the far northern frontier ” ([1986](#) : 53). The speculators ranged from large operators down to individual investors, like the author Crèvecoeur (see ‘ Crèvecoeur and the American Experience ’ below), who bought a small farm on the frontier as an eventual home for his daughter ([1782/1981](#) : 92); in the words of Charles Grant, “ the humblest pioneers were apparently speculating their heads off ” (cited in Bailyn, [1986](#) : 67). Boston was a nursery for inland settlement because it received little immigration, and its outlying territories were settled by its own excess population. Philadelphia and New York City, on the other hand, were major ports of entry, and new immigrants often spent considerable time there before leaving for the interior. The delay was not always good for them: unsanitary and crowded conditions led to high mortality rates. Bailyn notes that Philadelphia hosted a large number of German immigrants, while New York City hosted more Scots and Scotch-Irish, yet overall he reports that

The population that spread inland from coastal nodes to form new communities was a composite of ethnic and religious groups – Germans, French, Swiss, Scotch, Scotch-Irish, English, Caribbean islanders, Africans, Afro-Americans – carrying with them different cultural baggage And as these many groups spread through the backcountry and settled in growing inland communities and on farms and plantations scattered over millions of acres, complex regional configurations developed, which became in turn settings for later arrivals who filled in the interstices, thereby further complicating the emerging society. There was no single “ American ” pattern of family and community organization. There were many patterns, reflecting the variety of human sources from which the population had been recruited and the swiftly changing, fluid situations in which the people lived.

([1986](#) : 59 – 60)

More uniform large settlements like the Pennsylvania German (often called Pennsylvania Dutch) religious settlements were the exception that proved the rule. Most settlers found themselves in smaller groups or fending for themselves as individuals, and they had to make things up as they went along.

While large numbers of immigrants went inland, American institutions began to form in coastal cities. Higher education, for example, was supported by the foundation of numerous universities. Harvard was founded as early as 1636. Other schools followed in the eighteenth century: Yale in 1701, the College of New Jersey (later Princeton) in 1746, and the Philadelphia Academy (later the University of Pennsylvania) in 1751. The commercial and cultural opportunities of the cities supported inland migration, and also fostered political activity such as, in Boston, the Boston Massacre (1770, a confrontation between citizens and British soldiers, later publicized by revolutionary politicians) and the Boston Tea Party (1773, a protest against the Tea Tax). The Declaration of Independence and later the Constitution were discussed and approved in Independence Hall in Philadelphia. Washington DC was not founded as the capital until 1790, and the first session of Congress held there was in 1800.

Crèvecoeur and the American Experience

We can learn more about new American settlement patterns from a colonial witness, the *Letters from an American Farmer*, by Hector St. Jean de Crèvecoeur. Crèvecoeur was a Frenchman who had served in the British army in Canada, cultivated a 370-acre farm in New York State, and after the American Revolution became the French Consul in New York City. His *Letters* were published in London in 1782, with a French translation appearing in 1784. Crèvecoeur in the early letters idealized the American experience. He supplied a basic pattern for what somebody typically did to become an American:

If he is wise, he thus spends two or three years, in which time he acquires knowledge, the use of tools, the modes of working lands, felling trees, etc. [After acquiring friends, a good reputation, and a little money, he can use his acquisitions to buy land on credit.] He is now possessed of the deed, conveying to him and his posterity the fee simple and absolute property of two hundred acres of land, situated on such a river. What an epocha in this man's life! He is become a freeholder, from perhaps a German boor. He is now an American ...

([1782/1981](#) : 82 – 83)

The new immigrant began his new life in association with more established citizens, often but not exclusively with relatives or fellow countrymen, but as soon as possible abandoned their company for his own property on the frontier. Crèvecoeur's description of himself, though it leaves out his literary pretensions, probably did accord with his self-image before the Revolution:

I am but a feller of trees, a cultivator of lands, the most honourable title an American can have. I have no exploits, no discoveries, no inventions to boast of; I have cleared about 370 acres of land, some for the plough, some for the scythe, and this has occupied many years of my life.

([1782/1981](#) : 212)

Rather than live in villages, Americans lived on the land, and rather than share village rights and responsibilities, they owned their own land and made their own lives. There is an American tradition, also described by Crèvecoeur, of neighbors helping neighbors but these are people who lived at some distance down the road, not a few yards away.

A typical case of the speculative development and sale of land is described by Crèvecoeur ([1782/1981](#) : 90 – 105). He writes that “Andrew the Hebridean” – according to Bailyn, 40 percent of English settlement in the eighteenth century was Scots or Scotch-Irish ([1986](#) : 60) – arrived in Philadelphia with a group of Scots who had arranged a land deal with an agent; he himself however had no such arrangement, and Crèvecoeur picked him up on the docks and soon placed him with a local farmer and arranged a different job for his wife and teenage son. Andrew earned capital but he also learned the skills that he needed for successful homesteading, beginning with the use of the axe, which he had never had occasion to use in his treeless home country. After a couple of years, Crèvecoeur arranged for Andrew to be settled on uncleared land on the edge of the frontier, and Andrew was allowed to live there rent-free for seven years as he made progress in clearing the land. Thereafter for the rest of the thirty-year lease Andrew had to pay rent. Crèvecoeur concluded with an accounting of the money and possessions that Andrew was able to amass through his own efforts in the four years since his immigration, to a value of \$640 – when he had arrived with only about \$35 after selling all that he had acquired in a lifetime in Scotland. Crèvecoeur's account illustrates the hot labor market, the use of free labor to add value to wild land acquired for speculation, and eventual income to be derived from the property – and the same process is described in some detail by Bailyn ([1986](#) : 82). While some speculative deals did import a large number of Europeans directly for work on a particular parcel of land, the grand schemes of speculators often dissolved into mixed settlements or collapsed completely, so that individual initiative like Andrew's remained the rule. America had cities but its way of life was marked by the individuality of its new citizens on their own separate properties. It was not only the physical habits of settlement that affected the genesis of American English and its varieties, but the psychological preference for individuality that encouraged such settlement.

At the same time, Crèvecoeur insisted that the product of this individuality was a distinct American character:

Europe contains hardly any other distinctions but lords and tenants; this fair country alone is settled by freeholders, the possessors of the soil they cultivate, members of the government they obey, and the framers of their own laws, by means of their representatives.

This American character thus was a consequence of shared individual experience, not residence together in the same physical place. And with the exception of a few groups, like the Anabaptists who colonized land together and not singly as in the Pennsylvania German area, the American experience had the power to break down religious and national distinctions. Again Crèvecoeur:

Thus all sects are mixed, as well as all nations; thus religious indifference [i.e. lack of prejudice] is imperceptibly disseminated from one end of the continent to the other, which is at present one of the strongest characteristics of the Americans.

Of course this was the ideal. Crèvecoeur was scandalized by the treatment of slaves in Charleston. He was also confused during the Revolution, when his Tory sympathies made him the object of attack by his neighbors. We need not share his confusion, however, because we can see that even Crèvecoeur painted the American character in opposition to Europe: when American culture had torn down European social modes and replaced them with American ones, the American character could hardly be expected to tolerate attachments to the Old World once the Old World came to be perceived as a threat. Even as Crèvecoeur depicted it, the American character in the colonial period required political isolation. What Crèvecoeur gives us is a portrait of the new American social psychology.

To return to American English, it is clear that Americans' shared individual experiences did allow for the emergence of local variation, but not at first sharply delineated varieties in American English to parallel the historical regions in Britain. Learning to participate in the new American experience, according to Crèvecoeur, typically required some period of residence among longer-settled Americans, which would provide the opportunity for the future individualist to acquire some linguistic norms as well as capital and specialized skills for husbandry. The goal of new immigrants was to leave the place and people that they originally found and for whom they worked in order to settle on the frontier – not the wilderness, but the somewhat tamed and already marked areas made available for farming by legendary American “frontiersmen” like Daniel Boone. Thus, the new immigrants' desire to participate in the American experience included, to a greater or lesser degree, the motive and opportunity to sound like an American, but the circumstances for immigration weighed against the strong ties that would be expected in order for immigrants to maintain sharply distinctive local norms.

When, as Crèvecoeur suggested, new immigrants found employment for a time to learn American ways and to build resources before they went to homestead on the frontier, part of what they learned in the longer-settled areas was the local flavor of American speech. Some habits of speech from each port of entry would then be carried along settlement pathways throughout its focal area; the greater density of contact between speakers from the same port of entry than between those from different ports promoted the emergence of regional patterns as described in [Chapter 5](#). However, while distinctive local standards could be developed by city dwellers through their more frequent interactions, and local lexical and other linguistic norms were disseminated within typical settlement channels, still the variation stems largely from the somewhat different selection of features within the set of English features generally available in the colonies at the time. The American pattern matches the prediction of the A-curve from the complex system. Thus American social psychology and the demographics of settlement allowed simultaneously for the development of a relatively consistent American English both within and across the different regions of primary and secondary settlement, while they prevented the emergence of a marked national standard.

Schneider ' s *Postcolonial English*

Let us now consider how Edgar Schneider ' s [2007](#) book *Postcolonial English* discusses the emergence of new varieties of English in former colonies worldwide. His description of the histories of English in a number of places, including the United States, shows that the emergence of these postcolonial varieties does seem to follow a similar trajectory. His **Dynamic Model** suggests five phases in the evolution of such varieties: foundation of the colony, stabilization around the outside norm, nativization, formation of an internal norm, and diversification. American English began to form by self-organization out of the complex system of linguistic interactions in the new colonies. “Stabilization around the outside norm” represents the fact that, in America, English was imported as a language because of replacement of the indigenous population. “Nativization” began immediately in one sense, as settlers in every locality had to adopt words to describe local flora, fauna, and places. These were often terms taken from Native Americans, as recorded, for example, in

Thomas Harriot's *Briefe and True Report of the New Found Land of Virginia* (1588, cited in Bailey [2004](#) : 4 – 5), which was based on the failed Roanoke colony. The perception of nativization began in the eighteenth century, as British and American writers noted differences between the English of the Old and New World. John Witherspoon, for instance, commented in 1781 that (cited in Mathews [1931](#) : 16)

the vulgar in America speak much better than the vulgar in Great-Britain, for a very obvious reason, viz. that being much more unsettled, and moving frequently from place to place, they are not so liable to local peculiarities either in accent or phraseology. There is a greater difference in dialect between one county and another in Britain, than there is between one state and another in America.

Schneider cites no fewer than four other eighteenth-century writers who comment on the uniformity of American English ([2007](#) : 269 – 270). However, the period comments do more to distinguish American English from British English than they testify to any actual koinéization. The strongly marked regional dialects of Britain were certainly not maintained in America (no matter what Fischer said) owing to population mixture, noted here by Witherspoon. However, the complex system of speech did not create a uniform koiné; instead, somewhat different patterns of pronunciation, lexicon, and grammar emerged at different scales from locality to locality and from state to state, up to the national level of scale.

It was certainly possible then, as it is now, to describe the characteristics of an overall American variety, one clearly different from Britain as all the commentators tell us, even though the national description, then as now, was not an exact fit for any local variety. Schneider's " diversification " was already underway, if not yet strongly marked. Witherspoon also noted verbal differences between different regions, such as the word *chunks* for ' firewood ' in the middle colonies, and *tote* for ' carry ' in the Southern states (words still around today). Some other features that we associate still today with American regions were present then, such as r-lessness (when America was settled the change in Britain not to use the -r sound after vowels, so called **postvocalic -r** , was incomplete so some British immigrants had -r after vowels and others did not; for further discussion, see [Chapter 5](#)) and other matters of pronunciation, and grammatical choices like *hadn ' t ought*. This diversification of speech in the original colonies completes Schneider's picture of the initial emergence of American English, although we can say that diversification began to occur from the very beginning and just became more noticeable as the last stage. The stages of Schneider's Dynamic Model thus accord well with the process of the complex system of speech.

By the end of the eighteenth century, the eastern American seaboard had achieved a more settled status. Coastal port cities received new immigrants, who later moved inland to occupy their own land. The American population increased by a million people in the first half of the eighteenth century, and more than tripled by the end of it. Population growth in this century occurred within an existing matrix of English communities, and so English remained the dominant language of the colonies.

As for American English, at the end of the colonial period Noah Webster published his *A Grammatical Institute, of The English Language, Comprising, an Easy, Concise, and Systematic Method of Education, Designed for the Use of English Schools in America* ([1783](#)). Webster will be treated in more detail in the [next chapter](#) , but suffice it to say here that he was a promoter extraordinaire of American nationalism. While the *Grammatical Institute* as a whole may not have been universally adopted for schools in America, part of it, *The American Spelling Book* , certainly was, and it became one of the most popular textbooks of all time.

Examples of Colonial American English

Formal American discourse during the Colonial Period advances from the language of Shakespeare, and so it sounds quite modern to us today. The following passage from the " Sinners in the Hands of an Angry God " (1741) by fire-and-brimstone preacher Jonathan Edwards (1703 – 1758) can serve as an example (you can listen to the passage online, a4.2). Edwards was born in Connecticut, and was educated at Yale University. He participated in religious revivals, which serve as evidence that Americans were not uniformly pious.

The use of this awful subject may be for awakening unconverted persons in this congregation. This that you have heard is the case of every one of you that are out of Christ. – That world of misery, that lake of burning brimstone, is extended abroad under you. There is the dreadful pit of the glowing flames of the wrath of God; there is hell's wide gaping mouth open; and you have nothing to stand upon, nor any thing to take hold of; there is nothing between you and hell but the air; it is only the power and mere pleasure of God that holds you up. You probably are not sensible of this; you find you are kept out of hell, but do not see the hand of God in

it; but look at other things, as the good state of your bodily constitution, your care of your own life, and the means you use for your own preservation. But indeed these things are nothing; if God should withdraw his hand, they would avail no more to keep you from falling, than the thin air to hold up a person that is suspended in it.

Gone are the features of Shakespeare that can give pause to modern readers, like unfamiliar pronouns and verb forms. Still, the language is not quite what someone would use today, even in a sermon. “Unconverted persons” in the first line, and “this that you have heard” in the second line, are not uninterpretable by modern readers but may strike us as odd turns of phrase. The spelling of “any thing” at the end of the first paragraph as two words, not one, is not how we spell it now. Edwards wrote that “you probably are not sensible of this” in paragraph two, but today we might use the word “aware” instead of “sensible.” Finally, Edwards uses the semi-colon more than people today might use it. These are relatively subtle differences in comparison with Shakespeare a century before. It is worth noting that Edwards himself was not always as fire-and-brimstone as he appears here. He was very interested in natural history and the emerging sciences of his time, such as the work of Isaac Newton. Freedom of religion was a hallmark of the new American experience, but that did not mean that every citizen lived religious lives all the time.

We can observe a more colloquial version of the English at the end of the period in the diary of Amos Farsworth, a soldier in the Revolutionary Army (you can listen to the passage online, a4.3):

Saturday May ye 27 (1775). went on hog island And Brought of Six hoses, twentyseven hornd Cattel And fore hundred And Eleven Sheep. about the midel of the afternoon went From hog island to Noddles island and sot one Hous and Barn on fiar, kild Some hoses and Cattel Brought of two or thre Cows one horse. I with five men got of the horse And Before we got from Noddles island to hog island we was fird upon by a Privateear Schooner But we Crost the river and about fitten of us Squated Down in a Ditch on the mash and Stood our ground. And thare Came A Company of Regulars on the marsh on the other side of the river And the Schooner: And we had A hot fiar untill the Regulars retreated. But not withstanding the Bulets flue very thitch yet thare was not A Man of us kild. Suerly God has A faver towards us: And He can Save in one Place as well as Another. we left the island about Sun-Set and Came to Chelsea: And on Saturday about ten At night Marchd to Winnisimit ferry whare thare was a Schooner and Sloop Afiring with grate fury on us thare. But thanks be unto god that gave vs the Victry at this time for throu his Providence the Schooner that Plad upon us the day before ran Aground and we Sot fiar to hur And Consumed hur thare And the Ssloop received much damage. in this ingagement we had not A man kild: but fore wounded but we hope all will Recover. one of the fore was A tounsing man belonging to our Company the bulet went throu his mouth from one Cheek to the other. thanks be unto God that so little hurt was Done us when the Bauls Sung like Bees Round our heds.

Here we see many differences in capitalization and spelling from usage today. The use of “ye” in the date just means ‘the,’ since the *y* in “ye” is a replacement for the *þ* letter, pronounced as a *th* sound, that we saw in the [last chapter](#) in use in Old English. Some of these differences tell us about Farsworth’s pronunciation: when he wrote “Six hoses” in the first line, surely he was talking about horses, a sign that he did not pronounce *-r* after vowels as many people in Boston still do not today. In other places he wrote “horse,” not “hose,” so he knew that the word could be spelled with an *r* in it, he just did not do so consistently. The same thing happened for the word “marsh,” sometimes spelled with a *r* and sometimes without. In the third line he wrote “sot” as the past tense of *set*, a nonstandard verb form still heard today. Another nonstandard usage occurs in “we was fird upon,” which used the singular “was” where we might expect the plural “were.” There is an example of what is known as a *prefixing* near the end of the passage, “Afiring,” today a form still in vernacular use. A difference in usage occurs in the phrase “we had A hot fiar,” meaning ‘we had a hot battle.’ Still, we have less trouble with Farsworth’s language than with Shakespeare’s, so long as we allow for informal spelling and usage. Farsworth shows us about common speech in the period, whereas Jonathan Edwards showed us high style.

By the end of the Colonial Period, America consisted of the thirteen states that were party to the original Articles of Confederation, plus three others who joined the Union in the 1790s following ratification of the Constitution (Vermont, Kentucky, Tennessee). The population had reached 5 million people. Important port cities like Philadelphia (the largest), Boston, New York City, and Charleston served as focal areas for interior settlement. Plantation Virginia, too, though without a major city (Richmond was its most urban center), was an original colonial focal area from which settlers headed west. The east coast had its own culture, a little different in each region, that included higher education institutions and cultivated citizens as well as yeoman farmers in the interior. And in each region American English was firmly established, a little bit different in each region as the complex system of language would have us expect.

Summary

Colonial settlement of the American east coast came predominantly from Britain, which established the cultural matrix into which settlers from other places fit themselves. America did not have the European village plan, but instead coastal cities with people ranging into the frontier. Crèvecoeur described the American colonial experience, which possessed both formal (Edwards) and less formal (Farsworth) ways of speaking.

Key Terms

colonial leveling

Crèvecoeur

Doctrine of First Effective Settlement

Dynamic Model

Founder Principle

koinéization

Native Americans

postvocalic -r

strong ties

Audio Samples

Available at www.cambridge.org/williamakretzschmar .

a4.1 Plymouth Records (seventeenth to eighteenth century)

a4.2 Jonathan Edwards (late eighteenth century)

a4.3 Amos Farsworth (late eighteenth century)

Exercises

1. Go online (Wikipedia is fine) to look up the history of a state on the American east coast, any of them from Georgia north to Maine. Who were the first settlers? Did they stay and remain active? Was there a mixture of settlers from different countries?
2. Crèvecoeur wrote that “ Europe contains hardly any other distinctions but lords and tenants; this fair country alone is settled by freeholders, the possessors of the soil they cultivate, members of the government they obey, and the framers of their own laws, by means of their representatives. ” Is this a fair contrast for him to make? Is it all about the aristocracy who owned the land and tenants who worked it in seventeenth- and eighteenth-century Europe?
3. Look up the process of change for the English pronouns *thee/thou* and *you* . How did *thee/thou* disappear (and did it go out of use for everybody at once)? The pronoun *you* is supposed to be both singular and plural: has it always been that way? Are there any other forms of the *you* plural in use today?

Computer Exercise

[Exercise App3.4 in Appendix 3](#) explores how communities can have multiple terms for the same thing at different frequencies, following the idea of mixed speech communities discussed in this chapter.

Further Reading

Bernard Bailyn , *The Peopling of British North America* , New York : Vintage , 1986 . Bailyn ' s account of the early colonization of North America replaces earlier, more romantic views with a more modern history.

Richard Bailey , *Speaking American: A History of English in the United States* , New York : Oxford University Press , 2012 . Bailey ' s entertaining book selects a different place for every fifty-year period in American history for its chapters, from Chesapeake Bay before 1650 up to Los Angeles for 1950 – 2000, and provides a wealth of detail about the language in its place and time. The earlier chapters – Chesapeake Bay, Boston, Charleston, Philadelphia, New Orleans, and New York – touch on American places that had their own cultural regions during the settlement period, as mentioned earlier in this chapter.

Edgar Schneider , *Postcolonial English* , Cambridge : Cambridge University Press , 2007 . Schneider ' s Dynamic Model is the best current description of the common points of development for colonial varieties. He has also published a short textbook on the subject, *English Around the World* (Cambridge : Cambridge University Press , 2011) .

The National Period (up to the Civil War, 1800 - 1865)



In This Chapter

“ Go west young man, go west and grow up with the country ” (a famous quotation attributed to Horace Greely) tells the story of this chapter. Americans left the east coast to populate the territory as far as the Mississippi River and some parts beyond it. As immigration grew so did the effects it had on American English, though not always as scholars have thought about it. This chapter also describes the beginnings of Standard American English through the influence of Noah Webster.

Timeline

1800

Population 5,308,438

1803

Louisiana Purchase (828,000 square miles)

1804

Lewis and Clark Expedition (1804 – 1806)

1808

Importation of slaves prohibited

1810

Population 7,239,881

1812

War of 1812 (1812 – 1815)

1819

Florida Purchase

1820

Population 9,638,543

1821

Santa Fe Trail (Missouri to New Mexico)

1823

Monroe Doctrine (no new European colonies in the Americas)

1828

Webster, *American Dictionary*

1830

Population 12,866,020

1836

Lone Star Republic (1836 – 1845); Oregon Trail (Missouri to Oregon)

1838

Underground Railroad established (escape routes for African Americans)

1840

Population 17,069,453

1845

Texas annexed

1846

Mexican War (1846 – 1848)

1847

Mormons in Utah

1849

California Gold Rush

1850

Population 23,191,876

1852

Harriet Beecher Stowe, *Uncle Tom 's Cabin*

1860

Population 31,443,321

1860

The Civil War (1860 – 1865)

1863

Battle of Gettysburg; Emancipation Proclamation

1865

Lee 's surrender at Appomattox; Lincoln assassinated; 13th Amendment outlaws slavery

The situation for American English after its initial emergence as settlement proceeded inland in the nineteenth century is somewhat different from the Colonial Period. The complex systems of speech in inland American localities were established, again, by mixed populations of speakers, including some people who had been resident in the original colonies, some speakers who had arrived at ports of entry and stayed some time there (a frequent occurrence), and some speakers who proceeded more directly to the frontier. Some Native Americans were present in the northern parts of the American East. There were still not many nearer the coast because of the spread of epidemics originated by Spanish explorers, but settlers met more Native Americans as they went west to areas not struck by disease. In the Southeast the Native American population had had a longer time to rebound after the epidemics had run their course but the survivors were displaced. In the state of Georgia in the nineteenth century the state militia forced Native Americans out, and new settlers participated in land lotteries to acquire 200-acre sections for homesteading. Under these conditions of the time, the largest proportion of the speakers who settled in any one locality was certainly formed by those who had lived further to the east along the settlement route that allowed new settlers to get to the frontier. The remaining Native Americans and people who came more immediately to available homesteading areas contributed linguistic variants which could become common in a locality, but which had to compete with variants that were already in frequent use in established complex systems of speech further east.

Settlement Patterns

There was some contact between regions in the colonial period because coastal cities were transportation centers, but the difficulty of such long-distance transportation tended to create focal areas that extended out from the cities. In the nineteenth century, settlers streamed inland from the coastal cities as the terrain allowed them to. As settlement proceeded inland from the coastal outposts, the speech habits of the coastal communities were carried to the interior by residents of the established colonies who wanted new opportunities, and by new immigrants who landed at the coast and acquired speech habits as they made their way to the frontier (which for some immigrants took years).

Settlement proceeded generally westward in three large geographical bands as far as the Mississippi River, corresponding to what is now the **Northern** tier of states, a **Midland** region, and the **Southern** region (see the arrows in [Figure 5.1](#)). In the North the stream of settlement in Upstate New York had to go around the southeast part of the state inland from New York City (originally Dutch in settlement), and followed the Hudson River (also river systems through Connecticut) far enough north to reach unsettled territory. In the early nineteenth century the Erie Canal, completed in 1825, was built to connect the Hudson River at Albany with Lake Erie at Buffalo. The waterway promoted westward settlement along the Great Lakes as far as Northern Illinois, Wisconsin, and Minnesota, a region we can call the **Inland North** . This region was separated from **New England** by the Appalachian mountains, and so settlers coming to New England through the port of Boston occupied New Hampshire, Vermont, and Maine to the east of the mountains. Thus the Northern region had two separate settlement areas, New England and the Inland North.

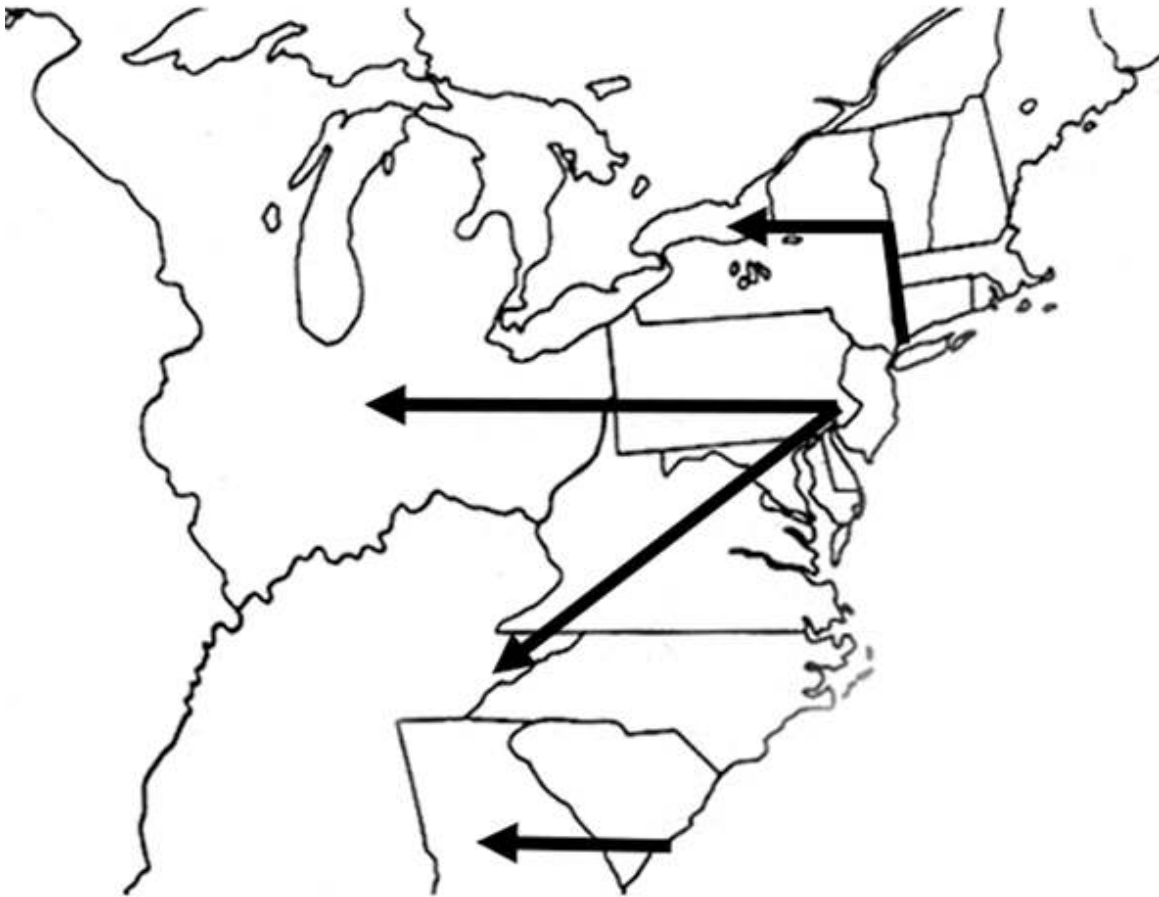


Figure 5.1 Settlement pathways from the American East Coast.

The South had no convenient waterway to facilitate travel to the interior, and the varied topography of the land – mountains, the piney woods, wiregrass – was not all well suited to the pattern of plantation agriculture that dominated the colonial economies of Virginia and the Carolinas. Southern settlement thus proceeded more slowly, in a patchwork of communities across Georgia and Alabama until settlers reached plantation lands in the plains and Mississippi Basin areas of Tennessee, Mississippi, Louisiana, and East Texas. The Florida Purchase of 1819 established American control from its former Spanish owners, but Florida only became a state in 1845. Development of plantations there was hampered by battles with the Seminole tribe of Native Americans, which ended only in 1858.

Philadelphia was the cultural center for the stream of settlement in the Midland region, which proceeded west in two different directions. The National Road was built to run due west from Philadelphia through Pennsylvania, eventually as far as central Illinois, close to the present-day route of Interstate 80 in southern Pennsylvania. Settlement took place along the road, and settlers could also reach the Ohio River valley at Pittsburgh and then use the waterway to settle farther inland. Because river travel was much easier than road travel, this meant that settlement often occurred sooner along the Ohio River than it did on land further from the river. This **North Midland** settlement pathway is often merged with the Northern region by those who would create just two American regions, North and South. The more southerly stream of Midland settlement, sometimes merged with the South by those who want just two regions, followed the course of the Shenandoah River southwest through Virginia towards the Cumberland Gap in Tennessee. Most of the **South Midland** settlers were subsistence farmers, and they occupied whatever land could support them throughout the Appalachian Mountain region and, eventually, the uplands as far west as Arkansas, and also in the lowlands of the Southern states where the land was not suitable for plantations. These historical patterns of settlement – North, Midland, and South – created the basic framework of regional American speech that we can still hear today (see [Chapter 8](#) for discussion of regional dialects).

Beyond the Mississippi, the Louisiana Purchase in 1803 greatly expanded territory nominally under American control (most of it was occupied by Native Americans) by over 2 million square kilometers. Thomas Jefferson commissioned the Lewis and Clark Expedition to explore the new territory, and the explorers reached the Pacific Ocean at the Columbia River (the present-day border between Oregon

and Washington) in late 1805. Beginning in 1823, the Monroe Doctrine recognized existing European colonies but declared that no further colonies could be created or states be controlled by Europeans. South of the Louisiana Purchase, settlers began to follow the Santa Fe Trail in 1821. The Lone Star Republic declared independence from Mexico in 1836, and Texas became a state in 1845 (its annexation was confirmed by the Mexican War from 1846 to 1848). Also in 1845 settlers began to take wagon trains across the Oregon Trail. Mormons settled in Utah beginning in 1847. The California Gold Rush began in 1849, and California became a state in 1850. Oregon became a state in 1859. [Figure 5.2](#) indicates the extent of American settlement and the trails west as they were in 1850.

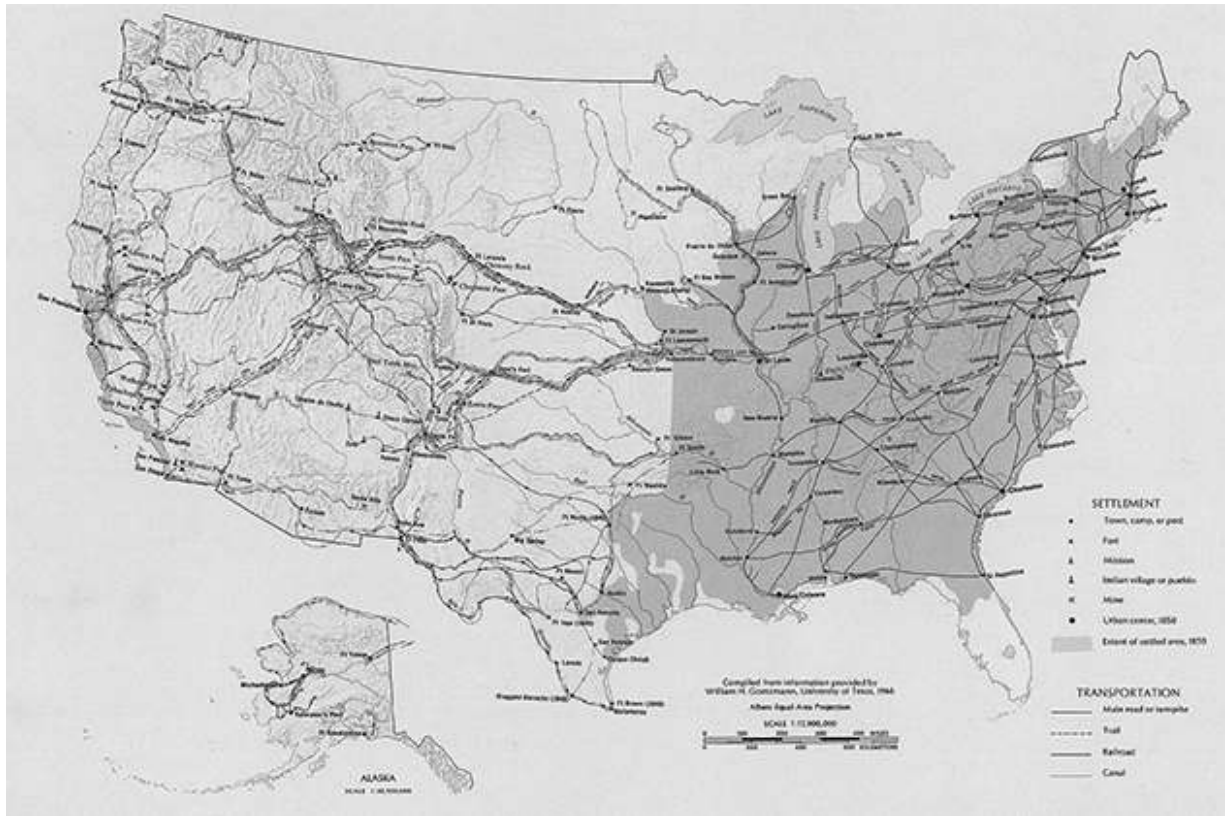


Figure 5.2 American Settlement by 1850.

[Figure 5.2 long description.](#)

Source: *The National Atlas of the United States of America*. Arch C. Gerlach, editor. Washington, D.C.: U.S. Dept. of the Interior, Geological Survey, 1970, viewed at <https://legacy.lib.utexas.edu/maps/histus.html>.

Differences in language between these regions were already in evidence by the early nineteenth century. For example, emergent regionalisms appear in the writing of Anne Royall, a travel and society writer. She wrote in 1831 (cited in Mathews [1931](#) : 95):

I saw a piece in the papers not long since, which went to satirize the Tennessee dialect. I would advise such people to look at home. Those who live in glass houses, ought not to throw stones. Let us compare this with the dialect of Virginia ... ' you know da is heap of baw [bear] on da Kenhawa; so [we] are all goin to Kenhawa to hunt baw - Kenhawa mighty far - so we walk - we walk - last we come to da Kenhawa - Kenhawa b-i-g river, for true - Tell you what, it skears me - well, I goes out into de woods - I hear noise - I look up tree, and see a baw! ...' Now for the Pennsylvania dialect: ' Jim, where are you and Sam; why but ye 's pit [put] you cow in the pester [pasture]; ' am sure a towled ye 's the mornin. - Ye 's cruel bad children - and there a fine job ye 's done to leave you gears out by. ' The Yankee: ' Flora you want [ought] to wash them clothes right away. You hadn 't ought to left ' em so. ' ' What say? '

We see in this report that by the early nineteenth century there was common knowledge of dialect variation between the states. Further, we see that some features that we associate with those regions still today were present then, such as loss of postvocalic -r and other matters of pronunciation (represented with nonstandard spellings), lexical choices still at issue like *hadn 't ought* or the second-person pronoun *ye* , and also grammatical choices like “ what say, ” “ for true, ” or “ am sure a towled ye ' s the mornin. ”

An Experiment in the Spread of Dialect Words

In order to measure the spread of dialect words, we first need to know how words are typically distributed across the land. [Figure 5.3](#) shows a map based on the distribution of the word *cloudburst* in the Linguistic Atlas of the Middle and South Atlantic States (LAMSAS) survey (page 6, line 1 of the questionnaire).

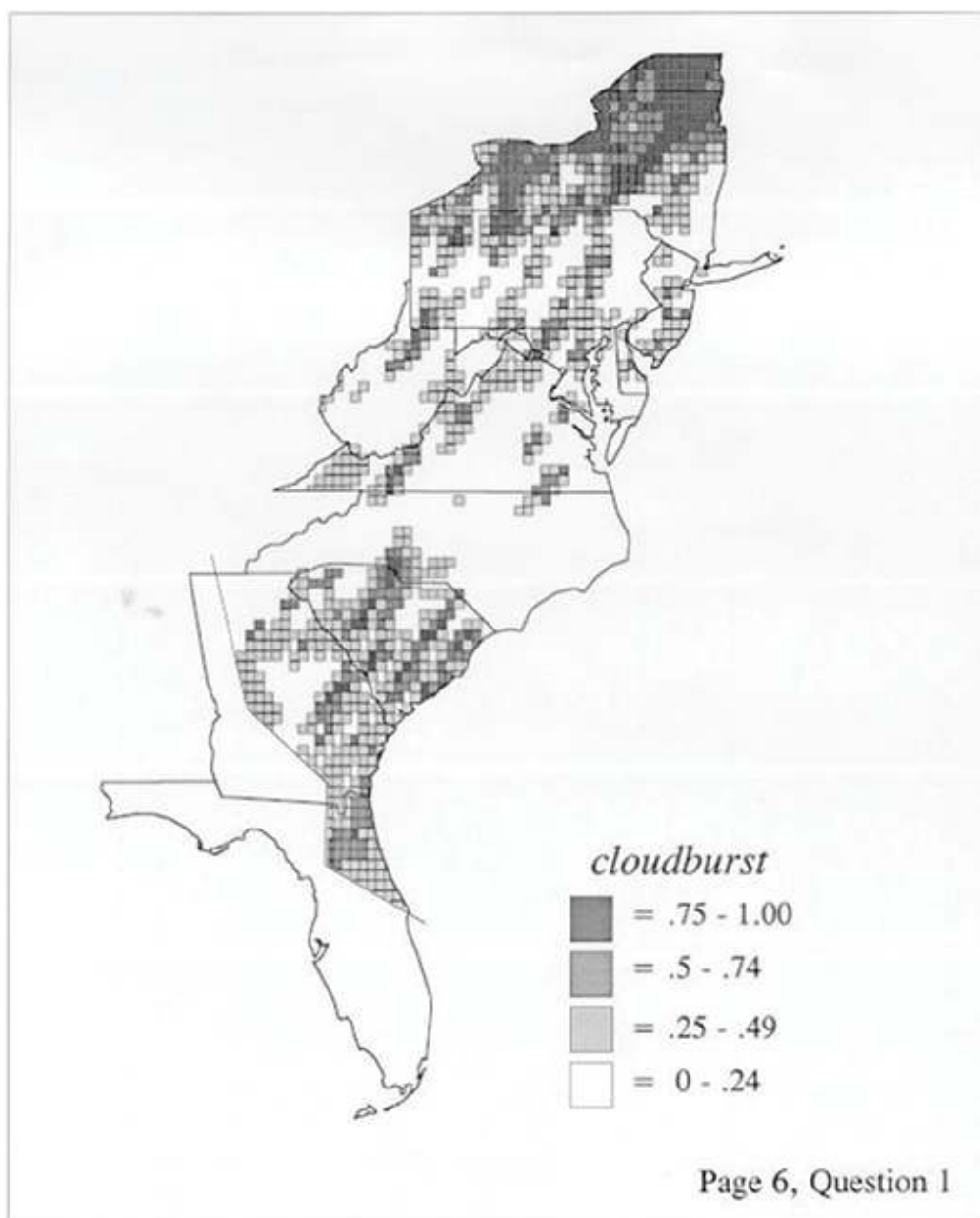


Figure 5.3 *cloudburst* in LAMSAS (density estimation).

The map shows a small square, in four degrees of shading from dark to light, for each 0.2 degree of longitude and latitude throughout the LAMSAS survey region (about 3,000 squares); the angular cutoff in Georgia and Florida separates the western and southern parts of those states that were not part of the survey area. Using a **density estimation** statistic to estimate the status of all the squares from the available data points (by looking at the nearest neighbors that do have data for the squares that do not contain an informant), the darkest squares show the highest probability of finding *cloudburst* (75 percent to 100 percent), with two lighter shadings to indicate lower probabilities; parts of the survey area without shading have a 0 percent to 25 percent probability of finding *cloudburst*. The main benefit of these probability maps is that each map gives a comprehensive analysis of the word whose distribution it illustrates. The set of maps (available online at emergence.libs.uga.edu) provides comprehensive coverage of 115 words processed in this way, each one a word that occurred at least fifty times in the LAMSAS survey. The general impression one gets from the whole set of maps is that words do not just exist in neat regions. The pattern for *cloudburst* is the most common, patchy distributions across the map. Some words have

dense, dark coverage throughout almost the entire survey area, such as *dry spell* or *wardrobe* ; others are widely scattered like *drought* ' dry spell, ' or strongly localized like *chifforobe* ' wardrobe. ' The overall statistical finding from this data is that all of the items show clustering (as opposed to data at random locations or evenly separated locations; see Kretzschmar [1996a](#)).

In order to find out about the influence of settlement, we can check the probability of occurrence of each of the 115 words in each of twenty cities (as first reported in Kretzschmar [1996b](#)): New York City and Rochester (NY); Philadelphia, Harrisburg, and Pittsburgh (PA); Baltimore (MD); Washington (DC); Charleston (WV); Richmond, Norfolk, and Roanoke (VA); Wilmington, Raleigh, and Charlotte (NC); Charleston, Columbia, and Greenville (SC); and Savannah, Augusta, and Atlanta (GA). In accordance with the shading on the maps, for each variant we can assign a value of 0 (no shading), 1 (light shading), 2 (moderate shading), or 3 (dark shading) to each city for each word.

[Table 5.1](#) shows the number of words from the list that were strongly associated with each of the cities (i.e., when a word had the highest probability, 3, of being found there). There are not very many words that are never strongly associated with a city (7/115; *going down* , *thundersquall* , *back stick* , *chifforobe* , *week from Sunday* , *rich pine* , and *white frost*), and there are also not that many that are strongly associated with all the cities (14/115; *night* , *bureau* , *drizzle* , *sofa* , *closet* , *feet* , *frost* , *clear* , *half past* , *wardrobe* , *attic* , *thunderstorm* , *blew* , *three years old*). There are only six words strongly associated with a single city, so that it is not the case that we see what some people might have expected, that each city would have its own set of words not shared with other cities. On average, any given word was likely to be found in nine or ten cities. Again, on average, the typical probability of occurrence for a word in a city was level 2 (50 percent to 75 percent). Instead of each city having its own words, the distribution of words belongs to the realm of probability as we expect in the complex system of speech, a distribution of more and less rather than all or none. In these probabilistic terms, we can say that most variants tended to be widely distributed across American cities, especially if we consider that words often have a weaker association with a place than what [Table 5.1](#) tabulated.

Table 5.1 Distribution of words by number of cities

Number of cities	Number of words
0	7
1	6
2	6
3	6
4	13
5	7
6	6
7	4
8	5
9	3
10	2
11	5
12	3
13	3
14	5

Number of cities	Number of words
15	3
16	6
17	2
18	4
19	5
20	14

[Table 5.2](#) shows a breakdown by city of the number of words with some probability of occurrence (those in levels 1, 2, or 3).

Table 5.2 Distribution of variants by city

City	Number of words
Greenville (SC)	74
Charleston (SC)	69
Roanoke (VA)	66
Augusta (GA)	63
Charlotte (NC)	62
Columbia (SC)	59
Richmond (VA)	56
Raleigh (NC)	56
Wilmington (NC)	54
Atlanta (GA)	54
Savannah (GA)	52
Baltimore (MD)	51
Norfolk (VA)	51
New York City	50
Charleston (WV)	48
Philadelphia (PA)	48
Washington (DC)	47
Pittsburgh (PA)	47
Rochester (NY)	47

City	Number of words
Harrisburg (PA)	42

The order of the cities suggests that the American South has a broader vocabulary than the North (as Metcalf [1997](#) first reported). The first eleven cities in the list are Southern, the first thirteen if we consider Baltimore, where slaves were common, to be Southern. The number of variants from each city ranges from 74/115 (64 percent) to 42/115 (37 percent), with an average of 55 (48 percent). Still, rather than having an exclusive set of words, each city participates in the pool of available words. While variation is not evenly distributed in American English, it is widespread and normal. One reason that Southern cities have more variants is a technical aspect of the LAMSAS survey: Raven McDavid, the main fieldworker in the South, collected more variants than other fieldworkers did. On the other hand, it is also possible that the complex social structure of the South, with plantations and slavery and yeoman farmers all playing a role, tended to preserve more variants than the relatively simpler farming culture of the North.

As for evidence from the settlement patterns of the National Period, we can look at four pairs of cities, each pair consisting of one of the coastal focal cities from the Colonial Period and a city further inland: New York City and Rochester (NY), Philadelphia and Pittsburgh (PA), Richmond and Roanoke (VA), and Charleston and Greenville (SC). When we look at the words with the highest probabilities (level 3) that are most closely associated with the cities, in every case the inland city shares more of these words with the coastal focal city than with other cities. In one case, Rochester, the inland city shares the same number of words with Philadelphia and Pittsburgh (from the neighboring pair just to the south) as it does with New York City. Rochester is not “inland” of New York City in quite the same way as for the other pairs, but even so New York City is one of its closest relatives. Amidst all the variability in vocabulary between all of the cities, these pairs still regularly show the effect of the settlement pathways: language followed the people moving west.

Immigration and Language

The American population increased rapidly during the National Period. From about 5 million people in 1800, the overall population grew to more than 30 million by 1860. In the first few decades of the nineteenth century foreign immigration was relatively limited, in part from the disturbance of the War of 1812 (1812 – 1815), so population growth came mainly from the established citizens, but settlement by foreign immigrants accelerated, starting in the 1830s. The largest sources of immigrants were Ireland and Germany, followed by England and France. At the end of the period, a great number of Spanish speakers, former Mexicans and others in Texas, the Southwest, and California, became Americans. Besides these large groups, settlers arrived from all across Europe, indeed the world. The California Gold Rush attracted about 100,000 people, not only Americans from the eastern states but also foreign immigrants from Europe, Australia, and China. The importation of slaves from Africa was officially halted in 1808 but the population of African Americans continued to grow, to reach about 4 million slaves by the time of the Civil War, plus another half million “free” African Americans. While slaves were concentrated in the Southern states, all of the different contributing groups of the population were heavily mixed. Large groups like the Irish and Germans did establish significant ethnic clusters in cities, like the Irish in New York and Germans in many new Midwestern cities. Owing to the time when large numbers of Scots and Scots-Irish got to America, they formed a large part of the population in the Appalachian Mountain region. Over time, other ethnic groups formed clusters in other areas that were open to settlement at the time when a large number of them immigrated (see [Chapter 6](#)). These clusters, however, existed within a heavily mixed population overall and were still governed by the Principle of First Effective Settlement (see [Chapter 4](#)).

The process of complex systems offers an answer to the problem of scattered evidence for ethnic influences on American English. Michael Montgomery, a meticulous scholar, worked hard to connect Scots-Irish immigration with dialect features in Appalachia ([1989](#), [1991](#), [1997](#)), but he was only able to find small traces of Scots-Irish English in the Southern mountains. We know that large numbers of Scots and Scots-Irish came to the Appalachian region in the eighteenth century and thereafter, and we can certainly find cultural connections with the Scots and Scots-Irish in Appalachia, from housing and farming patterns to ballads and songs. Montgomery found that **plural verbal -s** (like *they works*) had been retained in Appalachian English as a low frequency feature, and so had the use of **multiple modal auxiliary verbs** (like *might could* and *may can*), but a great many other possibilities that Montgomery checked could not be connected in this way. The operation of the complex system tells us how such grammatical variants could be retained at low frequencies on the A-curve, in competition with top-ranked usages of verbal -s and auxiliaries. The complex system also explains why the *needs*

washed construction (as opposed to the more common *needs to be washed*), another variant with a Scots and Scots-Irish history, is *not* found in Appalachia but *is* found in western Pennsylvania. Owing to the random interactions of the system, some variants will become common in some places and not others. The presence of speakers from some pre-existing cultural group creates the opportunity for variants to be introduced to the system, but does not require that any particular variant will become common in the regional complex system. Indeed, given the extension of eastern complex systems to the west, we might expect, on the odds, to find just what we see: the retention at low levels of variants from significant cultural groups in the population, within an overall pattern dominated by variants carried west from the coastal areas.

We can see a parallel problem with the distribution of lack of postvocalic -r (whether the -r is pronounced in words like *car*, *barn*) in primary American settlement areas. One theory to account for the fact that postvocalic -r was historically often lost in New England, New York City, and the Coastal South, proposed by George Krapp ([1925](#)), is that such r-lessness in both Britain and America “ was a natural and early change in language which took place in popular speech unaffected by learned or standard influences ” (cited in Stephenson 1968: 64).

The most common causal explanation, as in Kurath (see [Figure 5.4](#)) and McDavid [1961](#) , is that the areas that lost postvocalic -r stayed in closer contact with England than the places that did not lose postvocalic -r, notably Philadelphia, and thus lost their -r as the change expanded in England. This theory has its attractions: we know that the social elite of coastal cities did send some of their children to be educated in Britain, and that they looked back to Britain, specifically London society, as an important source of style and custom. We also know that the Quakers of Pennsylvania had the reputation of rejecting social flummery, as in their maintenance of *thee/thou* in rejection of the honorific use of *you* as a singular second-person pronoun. And, as Raven McDavid argued, the demographics of the Plantation South, in which a very small white elite managed an overwhelming African-American majority of slaves and fostered the spread of r-lessness in plantation areas, fit the notion of strong influence by a social elite ([1948](#)).



Figure 5.4 Hans Kurath.

As before, however, the facts of the case do not correspond to expectations, as demonstrated in a classic detailed study of North Carolina by Edward Stephenson (1968). An earlier article by Archibald Hill had shown that loss of postvocalic -r often occurred in Middle English in three environments: in unstressed syllables (like the final syllable in *father*, *brother*), through dissimilation in words with a second syllable with r (like *murder*), and in consonant clusters before non-labial, non-velar consonants like /s, t/ (like *first*, *burst*). Stephenson says that all areas of colonial America could thus be expected to have some kinds of r-lessness, and he finds examples in North Carolina. Still, Stephenson points out that more general r-lessness remains to be explained for the colonies. His careful study of variant spellings in eighteenth-century North Carolina documents indicates that, while Hill's r-lessness was present near the beginnings of settlement in North Carolina, the more general kind of r-lessness began to appear there only later in the eighteenth century. Further, the areas of general r-lessness in central North Carolina probably arose through settlement from Virginia, and general r-lessness is not present in areas of Eastern North Carolina that should have had it if either the theory of elite contact with Britain were true (as through the port of Wilmington) or if McDavid's theory of diffusion from South Carolina planters were valid (as in eastern North Carolina where settlements have come from South Carolina). Stephenson also points out that, even if general r-lessness entered Virginia from the social elite in Richmond, it was immediately a property observed in all social groups in North Carolina – which must cast doubt on the likelihood of any gradual melting of the feature through the population. We can share Stephenson's conclusion that “the causes of the loss of postvocalic /r/ in North Carolina are complex, and no simple version of either the Krapp theory or the Kurath-McDavid theory will suffice to account

for the development ” (1968: 70). As in the case of Scots-Irish influence in Appalachia, a better answer comes from the complex system of speech. Speakers could, but did not have to, drop their postvocalic -r, and as a result of feedback from interactions between speakers, the probability that they would do so emerged at different levels in different places. The loss of postvocalic -r does not require a particular cause, just the operation of the complex system with differing results in different places as we might expect.

Albert Marckwardt has provided us with lists of words that English-speaking Americans borrowed from groups speaking other languages ([1958](#)). Of course, borrowing here is not something that will be given back, just the term that linguists use for acquiring a word from a different language. From the opposite point of view, linguists also talk about loanwords, but of course these loans are not paid back any more than the borrowings are. Marckwardt ’ s point of reference was that these words existed in “ present-day American English ” (for him the 1950s), so he did not offer specific dates for the borrowings. Many of these could be looked up in the *Oxford English Dictionary* (online) or the *Dictionary of American English* (1936 – 1944). In this chapter, words from different groups are presented, but not all of the words were necessarily borrowed (or loaned) during the National Period.

Borrowings from Native Americans began as soon as Europeans arrived in North America, as mentioned in the [previous chapter](#) . Of course Native Americans did not all speak the same language; in fact, they spoke hundreds of different languages, such as those in the Algonquian and the Iroquoian (including Cherokee) language families in the North and Central regions, and the Muskoghean family in the South. Other Native American language families in the West become relevant later in the National Period (like the Siouan family) and thereafter. A great many place names came from Native Americans. Some Native American borrowings were their names for native trees or plants, like *hickory* , *pecan* , and *squash* . Others animals: *chipmunk* , *moose* , *possum* , *raccoon* , and *skunk* . Some came from items of food or culture: *hominy* , *succotash* ; *powwow* , *squaw* , *moccasin* , *tomahawk* . Many more words from Native American languages were borrowed into American English but would be less familiar to most English speakers (like *scuppernong* , a native grape). Many Native American words were used in a local area and never made it into general use in American English, and other words may have been in wider use at one time but now no longer. In the complex system of speech it is easy for individual speakers to use a word they may have heard, and perhaps their neighbors may begin to use it, too. The word may catch on in wider and wider populations. But it may not. A novel word may never get established even at the neighborhood or local level, much less nationally. And a word that has become common in a population may, without any particular reason, become uncommon again.

One aspect of Native American speech that became popularized in Hollywood films and television shows is Indian grammar. “ How, ” a chief might say when he meets a cowboy. A fluent English speaker might rather have said “ How are you? ” Tonto, the Indian friend of the Lone Ranger on radio and television in the 1950s (but not Tonto as played by Johnny Depp in the 2013 movie; you can see the original version on YouTube), used to say “ Me understand, kemosabe. ” While there is dispute about what *kemosabe* could mean (‘ trusty scout, ’ ‘ idiot, ’ ‘ white man ’), Tonto ’ s grammar was always a little different, such as his use of *me* instead of *I* as the subject of a sentence. When speakers of two different languages have to communicate with each other, say for trade purposes, it has often happened around the world that the speakers in a less-powerful position begin to use a limited form of the language from the more powerful group, a **pidgin** language. A pidgin is a language with simplified grammar, and with a limited vocabulary mainly drawn from the words of the more powerful group. The “ How ” is an example of a simplified greeting. Native American pidgin language has been discussed by scholars mainly with respect to speakers in the Pacific Northwest (a relatively late development), so Hollywood may have overgeneralized the contact situation between Native Americans and European Americans (see Meek [2006](#) for more about representations of Native American English). It is highly likely, however, that contact between English speakers and Native Americans did involve limited interactions when someone fluent in both languages was not available to translate. [Chapter 11](#) offers information about the current status of Native American languages and the “ Reservation Accent. ”

The German immigrant group came to America in several waves. The wave in the Colonial Period is responsible for the group usually called the Pennsylvania Dutch, with Anabaptist religious convictions. This inward-oriented group has to this day maintained German as the matrix language of their communities, though with many loans from English; members of these communities are bilingual in German and English, especially in localities where German is now only used in church. Subsequent waves of German immigrants starting in the 1830s did not have religion to hold their communities together, but they often did establish German-language church services and newspapers in urban areas, and the German language continued in family or local use for some time. In the author ’ s own family, the first German immigrants settled in Illinois in the mid-nineteenth century, and some of their children moved northeast to Michigan in search of cheaper land. The author ’ s grandfather, born near 1900 and living his life entirely in central Michigan, retained only a few words of German and trotted them out to annoy his grandchildren. Community use of German outside conservative religious

communities has survived the longest in Wisconsin and Texas, but even in these places it declined in the twentieth century in parallel with negative perceptions of German created by World War I and World War II.

Marckwardt reports a long list of food words coming to English from German, including *delicatessen* , *hamburger* , *lager beer* , *pretzel* , *pumpernickel* , and *sauerkraut* . Words in the field of education, a German strongpoint in the nineteenth century, include *festschrift* , *semester* , and *seminar* . *Christmas tree* is a German loan. A number of little colloquial words came from German: *bum* , *hex* , *loafer* , *nix* , *ouch* , and *phooey* . In areas with German populations one can hear borrowed grammatical constructions like “ make the light out, ” or “ come by ” to visit someone, or words perhaps less common in English like *liverwurst* or *schnitzel* . Some loanwords come from a related language, Yiddish, spoken by Jewish settlers. Yiddish as a language began in the Middle Ages, consisting of a German core with additions from Hebrew and Aramaic; it later spread to Eastern Europe, with further influences from Slavic languages there. In America, *kosher* and *kibitz* are the most familiar words, but in Jewish groups a great many more Yiddish words are common. In the mid-twentieth century many more such words were widely known, following the success of Jewish American comedians in the media.

Dutch settlement was first concentrated in downstate New York and northern New Jersey, inland from originally Dutch New York City. Later the Dutch settled in western Michigan, for example in the town of Holland, near Grand Rapids. Even though the numbers of settlers were smaller than the number from Germany, Dutch gave American English very common food terms like *cole slaw* , *cookie* , and *waffle* . Dutch *Santa Claus* is much more common than the German *Kris Kringle* . Other common words include *caboose* , *scow* , *sleigh* ; *boss* , *Yankee* ; *dope* , *dumb* (meaning ‘ stupid ’), *snoop* , and *spook* .

French loans into American English are complicated by the long history of the relationship between French and English owing to the Norman Conquest and its aftermath. The aristocracy in England was French-speaking for hundreds of years after the conquest, and even after that the kings of England laid claim to much of southern France for centuries further. England retained control of the mainland port of Calais until 1558. In North America the French were early settlers of Canada, and explorers in the Great Lakes region and the Mississippi River. American cities *Detroit* , *St. Louis* , and *New Orleans* were founded by the French. In the National Period, the French sold the United States their inland territories, largely unoccupied by Europeans, as the Louisiana Purchase. Some French loanwords to American English came from the North: *caribou* , *crappie* (a fish), *gopher* , *pumpkin* , *portage* , *prairie* , *toboggan* . Many more came from the Louisiana Delta and New Orleans: *bayou* , *jambalaya* , *levee* , *praline* . Words like *bureau* , *cent* , *depot* , *dime* , and *rotisserie* are not associated with a specific region.

Spanish borrowings in America are mostly associated with Texas and the West, although Spanish explorers first came to North America in Florida and explored through the (future) Southern states in the sixteenth century. They were responsible, by accident, for the introduction of smallpox and other European diseases with horrible effects upon the Native American population, resulting in the depopulation of large areas east of the Mississippi River (before the arrival of other Europeans). St. Augustine, Florida, is the longest continuously occupied European settlement in mainland North America, founded by the Spanish in 1565 (San Juan, Puerto Rico, was founded in 1521). The Spanish were also involved in New Orleans. Marckwardt lists no fewer than eighty-eight different Spanish loanwords in American English. Among plants and animals: *alfalfa* , *marijuana* , *bronco* , *cockroach* , *coyote* , and *mustang* . Spanish loans for food and drink make up staple fast foods in America today, like *chili* , *enchilada* , *taco* , *tortilla* . Western ranches provided many words: *corral* , *lariat* , *lasso* , *poncho* , *ranch* , *rodeo* , *sombrero* , and *stampede* . The words *canyon* , *fiesta* , *pronto* , and *tornado* are also very common.

African Americans did not come to the country as immigrants but instead were brought as slaves. Some came direct from Africa, others by way of the Caribbean islands such as Barbados (claimed by the English in 1625 and a center of the slave trade). Words such as *gumbo* and *voodoo* are said to be borrowed from African languages and many more words may have come from that source, but a relative lack of knowledge of African languages by European and American scholars has complicated the explanation of these word origins (but see Lorenzo Turner ’ s [1949](#) *Africanisms in the Gullah Dialect*). In later years a great deal of language associated with the African American community has become mainstream, such as the words *jazz* , *juke box* , and *hip hop* (see [Chapter 9](#) for more information).

Again, as mentioned above in connection with Scots-Irish borrowings, the presence of speakers from some pre-existing cultural group creates the opportunity for words and other linguistic features to be introduced to the complex system of speech in America, but that does not mean that any particular word or feature will become common. What we see, overall, is the retention of some words and features from significant cultural groups in the population, within an overall pattern dominated by English.

Webster and Standard American English

Standard American English is not a product of the same process that creates and continues to change American English. Regional and social varieties and the American variety as a whole emerge from all the linguistic interactions between members of regional and social groups, and, at the top level of scale, by all participants in American culture. Standard American English, on the other hand, is an institutional construct. It has no native speakers. It is, however, a fact of life for American speakers in formal settings, especially in the educational system (see [Chapter 12](#)).

The main push behind the idea of a standard variety of a language (like **Standard English**) occurred in the nineteenth century, not only in England but elsewhere in northern Europe (see Milroy [2000](#)). The development of notions of purism and a focus on educated speech in the nineteenth century led to the expectation that the standard language would be uniform in structure, and mainly treated the written language instead of the more highly variable use of language in speech. Standard languages, therefore, can be associated with the language of capital cities, not because the speech of the capital city provides a natural model for a national language, but because the political and social importance of the capital gives national status among the *literati* to written language originating in the capital. Standard English is not to be taken for granted as some sort of default form of the language, and neither should it be brushed aside as unreal. Standard English arises from particular historical circumstances and processes of thought, and it is now completely ingrained in the American educational system (and that of other countries as well).

Standard American English began with **Noah Webster** (see [Figure 5.5](#)). Webster had published his own *Grammatical Institute* ([1783](#)) soon after other grammars (e.g., by Robert Lowth in 1762) that launched the Standard English movement. He was interested in the creation of a specifically American variety of English, a national language for a new country:

The author wishes to promote the honor and prosperity of the confederated republics of America This country must in some future time be distinguished by the superiority of her literary improvements, as she is already by the liberality of her civil and ecclesiastical constitutions. Europe is grown old in folly, corruption and tyranny. For America in her infancy to adopt the maxims of the Old World would be to stamp the wrinkles of decrepit old age upon the bloom of youth, and to plant the seeds of decay in a vigorous constitution.

(written in 1783, cited in Commager [1958/1962](#) : 1)

As clearly expressed in this passage, and neatly characterized by Commager, “ The driving force in Webster, the compulsion that explains all particular expressions of his ambitions and his energies, was nationalism ” (Commager [1958/1962](#) : 5).

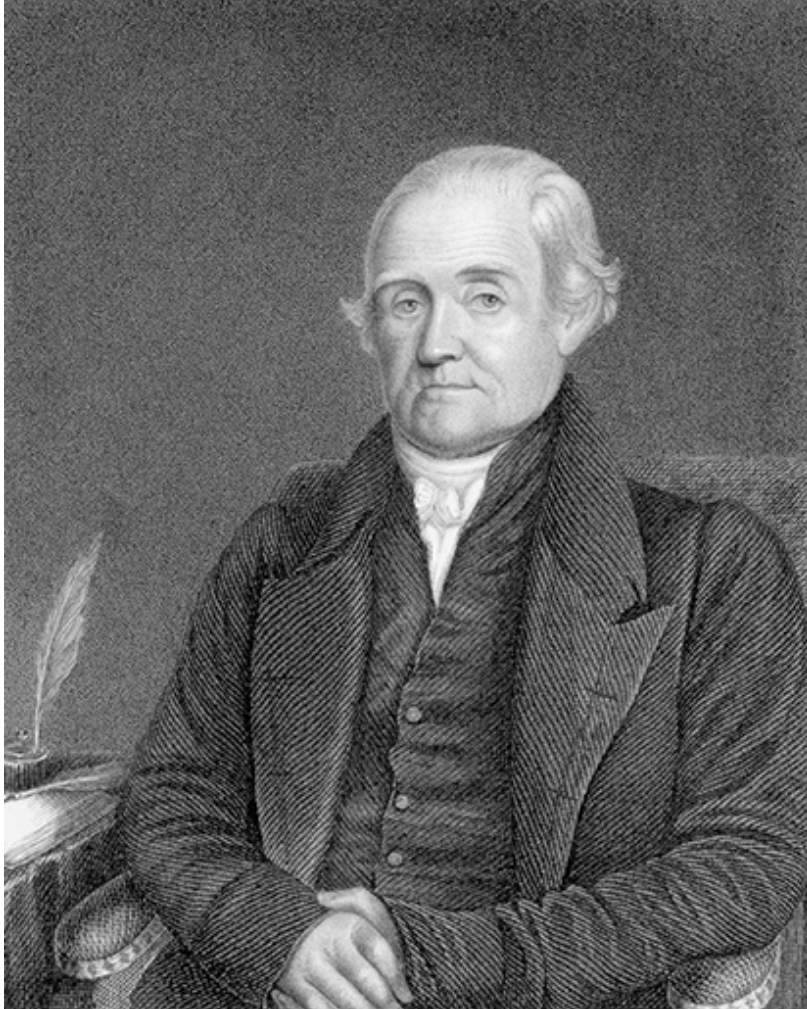


Figure 5.5 Noah Webster (1758 – 1843), American lexicographer.

Source: Bettmann/Getty Images.

Commager explains ([1958/1962](#) : 7):

But if nationalism was to work in the United States – and in 1800 that was still very much an open question – it would have to get along without the Monarchy, the Church, the Military, and the many other institutions that provided common denominators abroad, and work with more democratic ingredients and build on popular support. It would have to frustrate those class and religious and racial divisions which were potentially so dangerous; it would have to overcome differences not merely of accent but of language itself. The United States, dedicated to the unprecedented experiment of republicanism in a vast territory, a heterogeneous population, and a classless society, could not afford differences of accent or of language.

As we have seen in previous chapters, variation in language naturally self-organizes out of a radically mixed population in a complex system. Thus, regional and social varieties of English were inevitable developments in the United States. A uniform standard, however, was then and still remains a politically attractive idea. That there were fewer differences between the speech of American states than there were differences between British regions might well have been taken as evidence at the time that a standard language was actually developing in the speech of America. Such a notion is as much an example of wishful thinking now as it was then.

The development of Standard American English nonetheless took place, if not naturally in the complex system from which American regional varieties emerged, then by Webster ' s salesmanship. John Adams did lead an unsuccessful attempt to create an American Academy on the model of the Académie Française (see Mathews [1931](#) : 39 – 43), and Webster himself helped to create a

Philological Society, but Commager again states the crucial fact: " The Academy was never born; the Society withered and died; but they were not necessary. Webster ' s books did their work " ([1958/1962](#) : 8). Webster ' s *American Spelling Book* (see [Figure 5.6](#)) began its career as a part of his *Grammatical Institute* but was later published widely as a separate volume. A footnote (dated March 1818) in the preface of the 1831 edition of *The American Spelling Book* claimed that sales to that point " amount to more than FIVE MILLIONS of copies, and they are annually increasing " ([1831/1962](#) : 15). Webster wrote that his book had become " the principal elementary book in the United States. In a great part of the northern States, it is the only book of the kind used; it is much used in the middle and southern States; and its annual sales indicate a large and increasing demand " ([1831/1962](#) : 15). The justice of his claim is shown by Mathews ' estimate that *The American Spelling Book* had sold 50 million copies by 1865 ([1931](#) : 45), and by Pyles ' estimate that over 100 million copies were sold before it was replaced by other books ([1952](#) : 98).

THE
AMERICAN
SPELLING BOOK;

CONTAINING,

THE RUDIMENTS
OF THE
ENGLISH LANGUAGE,

FOR THE
USE OF SCHOOLS
IN THE
UNITED STATES.

By NOAH WEBSTER, Esq.

JOHNSON'S SECOND REVISED IMPRESSION.

PHILADELPHIA:

PUBLISHED BY JACOB JOHNSON & CO.
NO. 147, MARKET-STREET.

1804.

Figure 5.6 *The American Spelling Book*.

[Figure 5.6 long description.](#)

Source: MPI/Stringer/Getty Images.

More famous than *The American Spelling Book* but less successful in sales was Webster's *American Dictionary of the English Language* (1828). Pyles reports that "Unfortunately Webster, who was extremely good at the promotion of his books ... was not a very good man of business" (1952 : 98). Webster had sold the rights to *The American Spelling Book* and thus did not accrue royalties on most of the millions sold, and he had to borrow money to finance both the first and second editions of the *American Dictionary* so that they, in Pyles' words, "did not pile up much of a profit" (1952 : 120). Still, the success of Webster's promotional efforts created one of the most successful textbooks of all time and made his name, in America at least, synonymous with the dictionary. Pyles offered the following summary assessment (1952 : 123):

It has been remarked that Webster may have taught us how to spell but taught us nothing else. With this it is difficult to agree. Webster was certainly one of the most influential commentators upon language who ever lived. More than any other single person, he shaped the course of American English, for he supplied us with the schoolmaster's authority which we needed for linguistic self-confidence. He was largely responsible for the dissemination in this country of an attitude toward language that prevails to this day, even among the rank and file of our people – an attitude which, while it is by no means exclusively American, is yet notably so.

Standard American English is Webster's legacy, but not primarily for the particular features of American spelling he advocated, but rather for the association of language with nationalism, uniformity, moral virtues, and authority, especially within the school setting.

The 1831 edition of *The American Spelling Book* had simply referred to "the most accurate rules of pronunciation, and the most general usage of speaking" (1831/1962 : 16). At the same time that this edition headed all of its pages with "An Easy Standard of Pronunciation," its preface further asserted that, "A perfect standard of pronunciation, in a living language, is not to be expected; and when the best English dictionaries differ from each other ... where are we to seek for undisputed rules? And how can we arrive at perfect uniformity?" Webster and his revisers through numerous editions were interested in uniformity, authority, and the rules of English, even though they recognized variation in actual practice. It is interesting to note that grammar was not a large part of the system. The 1831 edition tells us that the abridged grammar originally included in the book had been omitted, along with the geographical tables, because "Geography and Grammar are sciences that require distinct treatises" and "It is believed to be more useful to confine this work to its proper objects, the teaching of the first elements of language, spelling and reading." Authoritative treatment of grammar was not yet part of the American paradigm for elementary language teaching in these books.

The main content of the book is presented in numerous tables. Many of these consist of words deemed to belong to a "class" (e.g., one syllable, two syllables accented on the first, three syllables accented on the second, etc.), in which the spelling and syllabification of the words is accompanied by diacritical marks to indicate pronunciation. The earliest tables consist of single syllables, some of which are words in their own spelling (*h ē*, *sh ē*). Others are only syllables (*h ī*, *p ī*), considered valuable for later word formation. Many tables also contain example sentences, including very short ones in the early tables and more complex ones later. As the sentences get longer they begin to have useful content, such as "The world turns round in a day" or "The best paper is made of linen rags." Moral lessons were also popular, such as "A rude girl will romp in the street" and "Bad boys love to rob the nests of birds," or "I love the young lady that shows me how to read" and "The Holy Bible is the book of God." Each sentence for a table tells its own story:

Strong drink will debase a man.
Hard shells incase clams and oysters.
Men inflate balloons with gas, which is lighter than common air.
Teachers like to see their pupils polite to each other.
Idle men often delay till to-morrow things that should be done to-day.
Good men obey the laws of God.

When sentences were introduced, they were explicitly religious and moral:

Lesson I
No man may put off the law of God:
My joy is in his law all day.
O may I not go in the way of sin!
Let me not go in the way of ill men.

Lesson II

A bad man is a foe to the law:
It is his joy to do ill.
All men go out of the way.
Who can say he has no sin?

Thus Webster and his revisers created Standard American English out of nationalism, and linked it explicitly with moral and religious teachings presented as reading instruction. The legacy in America of *The American Spelling Book* is an ideology of standard spelling and pronunciation, if not complete uniformity in either, as an expression of morality and patriotism.

It is now clear why an institutional language construct like Standard American English is not the same sort of thing as a natural language variety. The claim that there is a “ standard ” in the sense of a “ default ” variant for any linguistic feature is not compatible with the complex system of language in use. The only problem with the incorporation of Standard American English in the American educational system, beginning with Webster and continuing through the present day, is the unexamined assumption that Standard American English has an empirical basis in language in use. It does not. Standard American English is actually just another manifestation of a particular culture, amongst the many regional and social cultures in pluralistic American society (see [Chapter 12](#) for more information).

At the end of the National Period came the greatest disturbance ever for the American social experiment, the Civil War. The northern Union states opposed the practice of slavery, and eleven southern Confederate states (with two other states represented in the Confederate Congress) insisted on states ’ rights, really the continuance of slavery. The Confederate states had economic interests in plantations and cotton production that dominated their politics, although large numbers of their residents were small farmers in areas not well suited to plantation agriculture. Plantations were where large numbers of slaves were needed; small farmers often had no slaves. Opposition to slavery in the north had a long history beginning in the eighteenth century. The Underground Railroad (a means of escape from the South for African Americans) was founded in 1838, and Harriet Beecher Stowe ’ s anti-slavery novel *Uncle Tom ’ s Cabin* was published in 1852. During the four years of the war (1860 – 1865) as many as 750,000 soldiers died, about 50,000 alone at the Battle of Gettysburg (1863), and an uncounted number of civilians. The war ended in 1865 with General Robert E. Lee ’ s surrender, Lincoln ’ s assassination, and the passage of the Thirteenth Amendment to the Constitution which outlawed slavery. The confederate states were readmitted to the union between 1866 and 1870. Much of the fighting had occurred in the southern states so that the infrastructure of the South was destroyed and its way of life changed forever. Changed but not forgotten. To this day many Southerners look back to the genteel society of the mid-nineteenth-century South, and prefer to remember that gentility instead of the treatment at the time of African Americans. The South has remained a socially stigmatized region ever afterwards.

Summary

During the National Period America grew from coastal colonies into a large nation, and its population ended the period six times larger than when it began. Settlement patterns formed out of westward immigration from coastal port cities, and language features followed the people west. American English borrowed words from Native Americans and many European languages. Influences from other languages, however, were always subject to the operation of the complex system of speech. Noah Webster began the institutionalization of Standard American English that still obtains today.

Key Terms

American Spelling Book

density estimation

Inland North
Midland
multiple modal auxiliary verbs
Noah Webster
New England
North Midland
Northern
pidgin
plural verbal -s
South Midland
Southern
Standard English

Audio Samples

The following samples of the primary American regions were recorded in 1928 (available at www.cambridge.org/williamakretzschmar). Each is a recording of the Grip the Rat passage. Can you hear any differences?

a5.1 Inland Northern – 1928

a5.2 Midland – 1928

a5.3 Southern – 1928

Exercises

1. Try to rewrite the chapter ' s Anne Royal passage in modern colloquial English.
2. Look up the Mexican War (also called the Mexican-American War). How did it affect the territory of the United States? What do you think its consequences were for American English?
3. What do you think of *The American Spelling Book* as the most popular textbook of all time, given the passages mentioned in the chapter? Would it be permitted in schools today? Do you think it goes along with the American experience as a social experiment?

Computer Exercise

[Exercise App3.5 in Appendix 3](#) explores variation in individual communities, as discussed in the experiment about dialect words in this chapter.

Further Reading

Albert Marckwardt , *American English* (New York : Oxford University Press , 1958) ; Thomas Pyles , *Words and Ways of American English* (New York : Random House , 1952) . These are two earlier textbooks of American English, each notable in their own ways. Marckwardt ' s book was later revised and republished by Joey Dillard, which only diminished the value of the book. A more recent book by Walt Wolfram and Natalie Schilling , *American English: Dialects and Variation* , 3rd ed. (Oxford : Wiley-Blackwell , 2015) focuses on sociolinguistic aspects of American English.

James Milroy, " The Ideology of the Standard Language, " in Laura Wright , ed. *The Development of Standard English 1300-1800* (Cambridge : Cambridge University Press , 2000), 11 – 28 . Milroy ' s essay clearly describes how the idea of a standard arose and become entrenched in schools. His earlier book with Lesley Milroy , *Authority in Language: Investigating Standard English* , 3rd ed. (London : Routledge , 1998) , provides a longer account, especially including the " complaint tradition " in England.

Gilded Age to World War II (1866 - 1945)



In This Chapter

The industrialization of America created a Gilded Age of wealth and excess, at the same time as the Great Plains and West were settled and the population grew at a tremendous rate. Industrialization enlarged cities, which created new urban neighborhoods for new immigrants. The Great Depression caused a pause in this rapid growth, which again accelerated for World War II.

Timeline

1867

Purchase of Alaska

1870

Population 38,818,449; Standard Oil Company founded

1873

Twain and Warner, *The Gilded Age*

1876

Bell telephone, barbed wire invented

1880

Population 50,155,783

1885

Stanford University founded

1886

Statue of Liberty dedicated; Coca-Cola merchandised

1890

Population 62,947,714

1892

University of Chicago founded

1896

Edison introduces motion pictures in the United States

1899

Carnegie Steel Company organized

1900

Population 75,994,575

1903

Wright Brothers fly

1909

first mass produced Model T Ford

1910

Population 91,972,266; NAACP founded (African American organization)

1917

The United States enters World War I; emergence of Hollywood

1919

H. L. Mencken, *The American Language*

1920

Population 105,710,620; first commercial radio broadcast

1927

The Jazz Singer, “ talking pictures ” ; Lindbergh flies New York to Paris

1929

Stock market crash: Great Depression

1930

Population 122,775,046; first supermarket

1939

Regular trans-Atlantic air service

1940

Population 131,669,275

1941

World War II (1941 – 1945)

After the terrible divisions of the Civil War, America was symbolically joined in 1869 by the driving of the Golden Spike at Promontory Summit, Utah, which connected the railway systems of the eastern and western states. Leland Stanford, who later founded

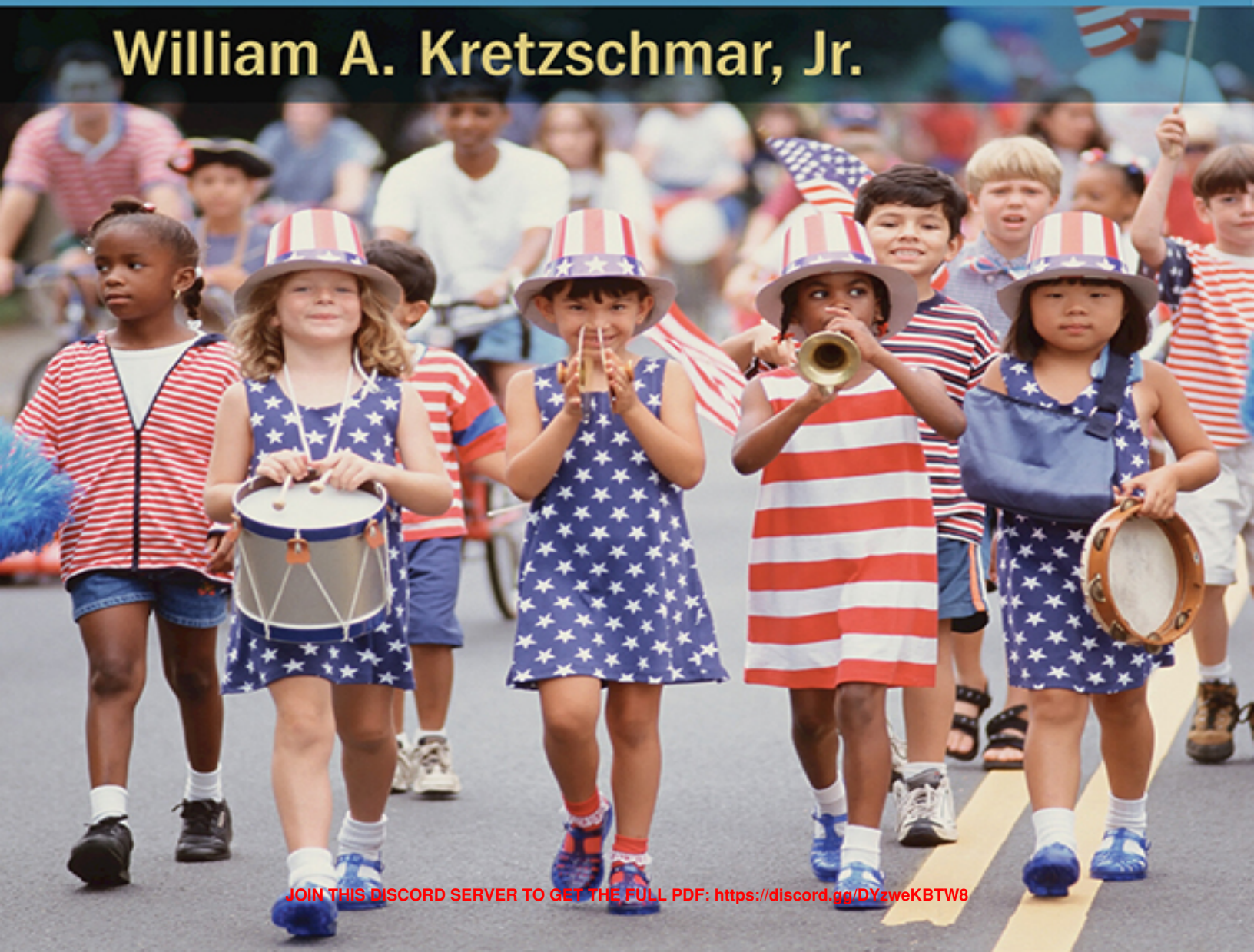
Stanford University (1885), drove the ceremonial spike. The whole event stands as an emblem of schizophrenic times in America: occupation of the full area of the original forty-eight states and acquisition of territories (Alaska, Hawaii) that would become the last two states, the advance of industry and technology, and parallel advance of higher education and culture, as against the importance of “ gilded ” ceremony, and the ruthlessness of robber barons out to acquire wealth and power. Near the beginning of this period, **Mark Twain** and co-author Charles Warner wrote the novel *The Gilded Age* ([1873](#)) to satirize the extremes of greed and corruption of the time, both in politics and industry. As they say, “ if the shoe fits wear it, ” and so Twain and Warner ’ s title has become the first part of the title of this chapter. If we take the **Great Depression** beginning in 1929 as the end of the Gilded Age, we can also see emerging what has been called “ the American Century ” of new involvement in world affairs, confirmed by America ’ s role in the second part of the title, World War II.

Robber Barons

Perhaps the first of the robber barons was Cornelius Vanderbilt (1794 – 1877) (see [Figure 6.1](#)). He made his fortune as a shipping magnate. He began his career as a ferry operator between Staten Island and Manhattan, and over the years came to dominate the new steamboat business around New York City owing to a combination of business ability, fiercely competitive prices, and accepting payments not to compete with rivals. He expanded to ocean-going steamships, and again in cutthroat fashion won a monopoly on the California steamship trade. He was later instrumental in the construction of railroads, eventually buying the New York Central Railroad (1867), which became one of the largest in America.

The Emergence and Development of American English

William A. Kretzschmar, Jr.



THE EMERGENCE AND DEVELOPMENT OF AMERICAN ENGLISH

William A. Kretzschmar, Jr.
University of Georgia





Shaftesbury Road, Cambridge CB2 8EA, United Kingdom

One Liberty Plaza, 20th Floor, New York, NY 10006, USA

477 Williamstown Road, Port Melbourne, VIC 3207, Australia

314 – 321, 3rd Floor, Plot 3, Splendor Forum, Jasola District Centre, New Delhi – 110025, India

Cambridge University Press is part of Cambridge University Press & Assessment, a department of the University of Cambridge.

We share the University's mission to contribute to society through the pursuit of education, learning and research at the highest international levels of excellence.

www.cambridge.org

Information on this title: www.cambridge.org/9781009161213

DOI: [10.1017/9781009161220](https://doi.org/10.1017/9781009161220)

© William A. Kretzschmar, Jr. 2026

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 & Assessment.

When citing this work, please include a reference to the DOI [10.1017/9781009161220](https://doi.org/10.1017/9781009161220)

First published 2026

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

Library of Congress Cataloging-in-Publication Data

Names: Kretzschmar, William A., Jr., author.

Title: The emergence and development of American English / William A. Kretzschmar, Jr., University of Georgia.

Description: Cambridge ; New York, NY : Cambridge University Press, 2025. | Includes bibliographical references and index.

Identifiers: LCCN 2024057522 | ISBN 9781009161213 (hardback) | ISBN 9781009161237 (paperback) | ISBN 9781009161220 (ebook)

Subjects: LCSH: English language – United States – History.

Classification: LCC PE2809 .K74 2025 | DDC 427/.973 – dc23/eng/20241231

LC record available at <https://lccn.loc.gov/2024057522>

ISBN 978-1-009-16121-3 Hardback

ISBN 978-1-009-16123-7 Paperback

Additional resources for this publication at www.cambridge.org/williamakretzschmar

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

For EU product safety concerns, contact us at Calle de José Abascal, 56, 1º, 28003 Madrid, Spain, or email eugpsr@cambridge.org

Contents

[List of Figures](#)

[List of Tables](#)

[Acknowledgments](#)

[Introduction](#)

[1 The Idea of American English](#)

[American English as Language](#)

[American English as Culture](#)

[American English in Politics](#)

[" Spoken in the United States "](#)

[2 Emergence](#)

[Complex Systems](#)

[Evidence of Emergence](#)

[Consequences of Emergence](#)

[3 Old World Origins for American English](#)

[Ancient History](#)

[Origins of English](#)

[Great Vowel Shift](#)

[4 The Colonial Period \(1600 – 1800\)](#)

[Demographics](#)

[Pattern of Settlement](#)

[Eighteenth-Century Immigration](#)

[Crèvecoeur and the American Experience](#)

[Schneider ' s Postcolonial English](#)

[Examples of Colonial American English](#)

[5 The National Period \(up to the Civil War, 1800 – 1865\)](#)

[Settlement Patterns](#)

[An Experiment in the Spread of Dialect Words](#)

[Immigration and Language](#)

[Webster and Standard American English](#)

[6 Gilded Age to World War II \(1866 – 1945\)](#)

[Robber Barons](#)

[Demographics](#)

[The Great Depression](#)

[Common Language](#)

[Mencken and The American Language](#)

[Grip the Rat](#)

7 [The Information Age \(1945 – Present\)](#)

[America as a World Power](#)

[Information and Technology](#)

[Demographic Patterns](#)

[Language in Use](#)

8 [Regions and Localities](#)

[Traditional Dialect Patterns](#)

[More Recent Dialect Maps](#)

[Perceptions of Regional Dialects](#)

[The American South](#)

[Regional Differences in Frequency Profiles](#)

[Listening to Regional Voices](#)

9 [African American English](#)

[Race and Slavery](#)

[Demographics and Migration](#)

[Features of African American English](#)

[Academic Ideas about African American English](#)

[Language in Use](#)

10 [Social Differences in American English](#)

[Social Class](#)

[North American Sociolinguistics](#)

[Multidimensional Social Behavior](#)

[Roswell](#)

[Social Differences in the Complex System of Speech](#)

11 [Heritage Languages and American English](#)

[Ideas about Language Contact](#)

[Language Use across Generations](#)

[Language Learning](#)

[Heritage Languages in Communities](#)

12 [Standard American English](#)

[Mavens](#)

[Pronunciation](#)

[World English versus American English](#)

[Standards and Urbanization](#)

Appendix 1 [*Terms and Concepts for Studying the English Language: Expression of Words with Sounds*](#)

[*Words*](#)

[*Speech Sounds*](#)

Appendix 2 [*Terms and Concepts for Studying the English Language: Beyond Expression to Content*](#)

[*Words in Patterns*](#)

[*Patterns beyond Sentences*](#)

Appendix 3 [*The Linguistic Atlas Project and Excel: Working with Survey Data*](#)

[Linguistic Atlas Project \(LAP\)](#)

[LAMSAS](#)

[LAGS](#)

[Other Atlas Projects](#)

[Getting Started Online](#)

[Data Download Center](#)

[LICHEN](#)

[Tallies](#)

[Working with Spreadsheets](#)

[COUNTIF](#)

[VLOOKUP](#)

[Computer Exercises](#)

[Glossary](#)

[References](#)

[Index](#)

Additional resources for this publication available at www.cambridge.org/williamakretzschmar

Figures

- [1.1 The American states.](#)
- [1.2 American regions.](#)
- [1.3 Dennis Preston.](#)
- [1.4 North America.](#)
- [1.5 A schematic, three-dimensional representation to visualize Zelinsky ' s cultural systems.](#)
- [1.6 Cutting potatoes.](#)
- [2.1 The break in pool.](#)
- [2.2 A dragonfly.](#)
- [2.3 A-curve for *dragonfly* variants.](#)
- [2.4 A-curve for *dragonfly* variants, after removing plurals and inappropriate responses.](#)
- [2.5 *dragonfly* variants just for men, and just for women.](#)
- [2.6 *dragonfly* variants for regional groups of speakers.](#)
- [2.7 *dragonfly* variants for groups of speakers by age.](#)
- [2.8 Flexible and understandable.](#)
- [3.1 Indo-European tree of languages.](#)
- [3.2 Alsace and Germany.](#)
- [3.3 Early regions in Britain \(showing the modern borders for Scotland and Wales\).](#)
- [3.4 Phase 1 of the Great Vowel Shift.](#)
- [3.5 Phase 2 of the Great Vowel Shift.](#)
- [4.1 European settlement pattern near Leicester \(England\) in the Middle Ages.](#)
- [4.2 Settlement and transportation by 1800.](#)
- [5.1 Settlement pathways from the American East Coast.](#)
- [5.2 American Settlement by 1850.](#)
- [5.3 *cloudburst* in LAMSAS \(density estimation\).](#)
- [5.4 Hans Kurath.](#)
- [5.5 Noah Webster.](#)
- [5.6 *The American Spelling Book*.](#)
- [6.1 Cornelius Vanderbilt.](#)
- [6.2a Andrew Carnegie.](#)

- [6.2b Andrew Mellon.](#)
- [6.3a Leland Stanford.](#)
- [6.3b John D. Rockefeller.](#)
- [6.4 Russell Patterson \(1893 – 1977\), “Where There ’ s Smoke There ’ s Fire,” ca. 1920s.](#)
- [6.5 Settlement by 1890.](#)
- [7.1 United States population density \(2000\).](#)
- [7.2 Red and blue states as of 2020.](#)
- [7.3 Vaux survey, map for “ sandwich ” responses \(#64\).](#)
- [8.1 Kurath ’ s dialect map.](#)
- [8.2 Variants of *dragonfly*.](#)
- [8.3 Isoglosses.](#)
- [8.4 Hempl ’ s dialect map.](#)
- [8.5 Labov ’ s dialect map.](#)
- [8.6 The Northern Cities shift.](#)
- [8.7 The Southern shift.](#)
- [8.8 Raw Value Map for /ay/ before voiced consonants \(e.g. *bide* \) on Formant 2.](#)
- [8.9 Local Autocorrelation Map for /ay/ before voiced consonants on Formant 2.](#)
- [8.10 HCA Dendrogram based on Factors 1, 2, 3, and 4.](#)
- [8.11 Two perceptual maps.](#)
- [8.12 Percentage estimates of the South.](#)
- [8.13 Vowel system of a sample of Southern non-African-American men.](#)
- [8.14 A-curve of 6,214 examples of \[u\] from twenty-three Southern non-African-American men.](#)
- [8.15 A-curve for LAMSAS variants for *curdled milk* .](#)
- [8.16 A-curve for New York City names for *curdled milk* .](#)
- [8.17 A-curve for Philadelphia names for *curdled milk* .](#)
- [9.1 W. E. B. Du Bois.](#)
- [9.2 Race?](#)
- [9.3 Martin Luther King, Jr. at the Lincoln Memorial.](#)
- [9.4 Percentage of African Americans vs. all Americans by income class. Household distribution by income.](#)
- [9.5 Raven and Virginia McDavid.](#)
- [9.6 Lorenzo Dow Turner.](#)
- [9.7 John Baugh.](#)
- [9.8 John Rickford.](#)

- [9.9 The Southern shift.](#)
- [9.10 Atlanta African American Male vowel means vs. Kent and Read national means \(from the Atlanta Survey\).](#)
- [9.11 Atlanta African American Female vowel means vs. Kent and Read national means \(from the Atlanta Survey\).](#)
- [9.12 Roswell African American male front vowel means vs. Atlanta means.](#)
- [9.13 Roswell African American female front vowel means vs. Atlanta means.](#)
- [10.1 William Labov.](#)
- [10.2 Sali Tagliamonte.](#)
- [10.3 Class/Style model for -r in New York City \(redrawn from Labov 1972b\).](#)
- [10.4 fog overall in LAMSAS.](#)
- [10.5 fog for men \(765\) and women \(346\).](#)
- [10.6 fog for farmers \(545\), housekeepers \(265\), managers \(94\), and professionals \(52\).](#)
- [11.1 Native American Languages spoken in the United States.](#)
- [11.2 Joe Salmons.](#)
- [11.3 Carmen Fought.](#)
- [11.4 Separate balls, separate languages.](#)
- [11.5 Cake.](#)
- [11.6 Batter.](#)
- [11.7 Locative constructions among interviewers and learners.](#)
- [11.8 Levels of scale, domains of use.](#)
- [11.9 Levels of scale, domains of use, reorganized.](#)
- [11.10 Learning by self-organization.](#)
- [11.11 Type frequency, early vocabulary.](#)
- [12.1 William Safire.](#)
- [12.2 Bryan Garner.](#)
- [12.3 Antonin Scalia.](#)
- [App1.1 Places of articulation.](#)
- [App1.2 American English vowel system in F1/F2 space \(following Kent and Read 2002\).](#)
- [App1.3 \[i\] pronunciations in F1/F2 space, sixty-four DASS speakers.](#)
- [App1.4 Frequency profile of pronunciations of the \[i\] vowel, sixty-four DASS speakers.](#)
- [App1.5 Shaded cells for where sixty-four DASS speakers said the \[i\] vowel.](#)
- [App1.6 Vowel space for sixty-four DASS speakers, shown with ellipses.](#)
- [App3.1 Opening page of the LAP website.](#)
- [App3.2 LAP projects.](#)

- [App3.3](#) [Data Download Center: LAMSAS link.](#)
- [App3.4](#) [Spreadsheet of LAMSAS speakers \(first twenty rows\).](#)
- [App3.5](#) [LAMSAS field book page.](#)
- [App3.6](#) [Portion of spreadsheet from LAMSAS page 4.](#)
- [App3.7](#) [Portion of audio spreadsheet for LAGS020.](#)
- [App3.8](#) [LICHEN opening screen.](#)
- [App3.9](#) [LICHEN map of LAP speakers.](#)
- [App3.10](#) [LICHEN search tab.](#)
- [App3.11](#) [LICHEN search for LAGS middle-aged, highly educated, upper class women.](#)
- [App3.12](#) [LICHEN display for LAGS 024.](#)
- [App3.13](#) [Map of LAGS middle-aged, highly educated, upper class women.](#)
- [App3.14](#) [LICHEN items tab.](#)
- [App3.15](#) [Dragon fly chart \(partial\).](#)
- [App3.16](#) [Map for *skeeter hawk* .](#)
- [App3.17](#) [Excel file for *dragon fly* tally, after CSV download \(partial\).](#)
- [App3.18](#) [Adjusted Excel tally with chart inserted \(partial\).](#)
- [App3.19](#) [Excel with LAMSAS page 60 A file open \(partial\).](#)
- [App3.20](#) [Sorted LAMSAS page 60 A file \(partial\).](#)
- [App3.21](#) [New sheet for responses to line 4 of page 60 A file \(partial\).](#)
- [App3.22](#) [Results of deleting duplicates in Column L \(partial\).](#)
- [App3.23](#) [Tally for dragon fly item \(partial\).](#)
- [App3.24](#) [Dragon fly tally with chart inserted.](#)
- [App3.25](#) [VLOOKUP results for Sex added to the data file for dragon fly \(partial\).](#)
- [App3.26](#) [VLOOKUP results for Sex and Age added to the data file for dragon fly \(partial\).](#)

Tables

[2.1 Top ten names for *dragonfly*](#)

[2.2 All the names for *dragonfly*](#)

[5.1 Distribution of words by number of cities](#)

[5.2 Distribution of variants by city](#)

[6.1 Differences between American and British English](#)

[7.1 Twelve “ Southern ” features for Roswell residents](#)

[8.1 Variants for “ extra bed on the floor ”](#)

[8.2 Variants for “ cornbread ”](#)

[8.3 Top LAMSAS variants for *curdled milk*](#)

[8.4 New York City names for *curdled milk*](#)

[8.5 Philadelphia names for *curdled milk*](#)

[9.1 When the plantation accent developed \(following Bailey 1997\)](#)

[10.1 Variants for *fog* overall in LAMSAS](#)

[10.2a *fog* for men \(765\)](#)

[10.2b *fog* for women \(346\)](#)

[10.3a *fog* for farmers](#)

[10.3b *fog* for housekeepers](#)

[10.3c *fog* for managers](#)

[10.3d *fog* for professionals](#)

[11.1 L-vocalization in the Australasian region \(adapted from Table 2, Horvath and Horvath 2003: 147\)](#)

[11.2 No nouns \(one child at age two, twenty-five most frequent words\) \(adapted from Tomasello 2003: 82\)](#)

[12.1 Standard American English Vowels \(adapted from Kurath and McDavid 1961: 6 with IPA symbols used in Upton and Kretschmar 2017\)](#)

[App1.1 IPA symbols for English sounds](#)

[App2.1 Sentence patterns](#)

[App3.1 Community/Age Word Table](#)

[App3.2 Community Word Table](#)

[App3.3 Community/Job Word Table](#)

[App3.4 Community/Type Word Table](#)

[App3.5 Community/Race Word Table](#)

App3.6 [Community/Sex Word Table](#)

App3.7 [Community/Education Word Table](#)

Acknowledgments

My first acknowledgment is to my students, who have put up with my efforts to teach them in a different way and who have made many suggestions for how to do it better since my work on complex systems has begun to appear. But those were students in my History of the English Language classes: I have been unable to teach American English for nearly a decade because of my need to cover other courses at my university. Then, in Autumn 2019 I had the opportunity to teach American English again as Fulbright Distinguished Chair at Adam Mickiewicz University in Poznań, Poland. In Autumn 2020 I did teach American English again at my own university, though remotely during the pandemic so students had much to cope with.

My greatest debt is to my teachers and friends, particularly those who have participated with me in the American Dialect Society. Raven and Virginia McDavid gave me my first opportunity to study American English, and what a chance that was! Lee Pederson, another of Raven's students with whom I met regularly for lunch over two decades, greatly influenced my thought about American English – and provided the timelines in [Chapters 3](#) through [7](#). I have had fewer chances to connect with another of Raven's students, Roger Shuy, but I value greatly the chances I have had to talk with and learn from him. Finally, Richard Bailey was a teacher I could have had but never did when I was an undergraduate at Michigan, and who became a good friend only later in life. He encouraged me by exclaiming to others that my current research was “ exactly what we needed, ” and his own writing in a series of books provided an example for detailed, urbane, and witty research. I have been fortunate to live my academic life with such people, and I am – as complexity science would say – a product of our interactions.

I am very grateful for numerous good suggestions from anonymous readers of the manuscript for Cambridge University Press. Any remaining errors are of course my own.

Introduction



This book is about American English, a textbook meant to be a relatively brief, highly teachable volume designed for undergraduate courses in the area. *The Emergence and Development of American English* (*EDAE*) is meant to be an all-in-one volume, and so it includes introductory treatment of basic terms and concepts for language study in the first two Appendices. *EDAE* takes a historical perspective in that it offers a set of chapters that bring readers from the origins of English up to the present day in America. It also has chapters that flesh out the modern situation for American English: regions, social groups including a separate chapter on African American English, heritage languages, and Standard American English. The book is meant for undergraduates who lack training in English language studies or training in linguistics but of course can also be used by people who have more training. *EDAE* is designed for global readers, with an awareness throughout of the global reach of American English. There is a strong demand for new approaches suitable for a wide range of faculty with some training in language studies who want more comprehensive modern coverage. These teachers will benefit from the structure of chapters, modeled after the structure in the Cambridge Introductions to the English Language series (CIEL). This book is a companion for *The Emergence and Development of English* in CIEL, a brief but general coverage of history of the English language, and *EDAE* provides more audio and computer opportunities for teachers and students.

The key challenge for students and instructors in *EDAE* will be the incorporation of the science of complex systems into the mainstream coverage of American English. The book pursues a narrative thread throughout the chapters on “ emergence.” Emergence is the key term from the study of complex systems, a new (literally only a few decades old) science currently useful in physics, genetics, evolutionary biology, and economics, but also a perfect fit for the humanities. The science of complexity describes how massive numbers of random interactions can give rise to order, self-organization of regularities that “ emerge ” from the interactions without specific causes. The drive of twentieth-century linguistics to make the study of language more scientific by means of grammatical and exceptionless “ rules ” has never been as successful as linguists might have hoped. The reason is that speech, language in use, is a complex system, as demonstrated from first principles and copious evidence in the author ’ s *The Linguistics of Speech* (2009) and *Language and Complex Systems* (2015), foundational books in the field. *Exploring Linguistic Science* (Burkette and Kretzschmar 2018) is a complete textbook meant to offer an easy introduction to complexity science and linguistics. Emergence in American English is not once-and-done; it continues in every place where Americans talk or write, in every locality and in every kind of conversation or text. Thus, in this book, while the text will apply the common terms and concepts of contemporary language study and linguistics, the story of the language will be about continual emergence and re-emergence of lexical, phonological, grammatical, and discourse forms of English out of the interaction of its speakers and the contingencies of their history. Complex systems are adaptable and so this method predicts linguistic change. The central aim of *EDAE* is to produce a compelling account of American English that does not leave out the people in favor of paradigms and rules, and that casts the important facts of the language as regularities that exist within a matrix of variation, subject to continual change. Of course, this book may be taught without engaging with complex systems if an instructor wishes to do so.

The subject of complex systems is explained briefly and non-technically in [Chapter 2](#) ; additional aspects of complex systems will be introduced in later chapters, but nowhere are students and their instructors subjected to heavily mathematical or otherwise technical discussion. Complex systems can describe the process by which we perceive our language behavior to be associated with our communities and practices; thus, the study of speech as a complex system addresses language as an aspect of culture that emerges from human interaction. The key point about the nonlinear A-curve and the property of scaling (see [Chapter 2](#)), signs that a complex system has operated in a speech community, is that these are understandable on a conceptual basis. Moreover, the book cannot replace normal linguistic terminology because the complex systems approach leads to discussion of emergence, and exactly what has emerged in the

language must be described in linguistic terms, introduced in basic terms and concepts in [Appendix 1](#) and [Appendix 2](#) for those who have not encountered them. These discussions are quite compressed, and so they provide a framework for teachers to explain using their own backgrounds, not a comprehensive resource about linguistics. A more thorough and detailed approach to complex systems in relation to linguistic terms and concepts can be found in *Exploring Linguistic Science* (Burkette and Kretzschmar 2018).

The point to emphasize about *EDAE* is that the theme of emergence will not throw the baby out with the bath water. This book is unique in its historical approach, and covers the same linguistic ground as other American English textbooks, but through emergence it does a much better job than other texts of talking about natural and inevitable change in the language, and about the fact that English is different in different places and social situations even while we can still talk about it as one language. Emergence provides an improved quantitative model for sociolinguistic analysis of language in communities (see [Chapter 10](#)), so that sociolinguists might reconsider some findings in a new light. Emergence also offers historical linguists an improved way to think about evident variation in the historical record. Complex systems does not replace sociolinguistics and historical linguistics, but instead stands beside them with the chance of improving our understanding of social and historical change. Complexity science tells us what *change* really means in quantitative terms, rather than the qualitative view of structural change often applied in linguistics. While some students (and teachers) may think originally that *EDAE* as a title refers to the progressive march of English towards its contemporary institutional standard, they will learn that the complex system of speech offers instead a richer description of our language in which the institutional standard is only a part.

[Appendix 3](#) is different in that it explains how to use data from the Linguistic Atlas Project (LAP). LAP is the oldest and largest survey research project on American English. It has collected information about Americans' everyday words, pronunciations, and grammatical choices in thousands of interviews across the country. Most of these interviews are concentrated east of the Mississippi River, in America's area of highest population density. The LAP website provides a great deal of this data, in text, audio, and images. The website has different parts, a Data Download Center and the LICHEN user interface, to provide the data to users. [Appendix 3](#) describes access to these sections. It also provides detailed instructions about using Excel (or similar programs) to access all the data provided in spreadsheet form. These instructions will also enable readers to create their own spreadsheets and analyze them, based on their experience with LAP data. Students can test their skills on a series of exercises, enough that instructors can assign one exercise per chapter as students progress through the full text. The Computer Exercises in [Appendix 3](#) take students from introductory exploration of the LAP website in the earlier exercises, to the opportunity to do their own research on data from the site. While each individual student's findings may be unpredictable, use of the structured exercises by the author in classes over many years has shown that, in a class of students, their overall findings always go along with the teaching in the text. [Appendix 3](#) thus does for linguistic analysis what is meant by the old saying, "if you give someone a fish you feed them today, but if you teach someone to fish you feed them for a lifetime." [Appendix 3](#) looks forward to students and teachers doing their own research through instruction about spreadsheets based on LAP. My own experience teaching American English with LAP data is that students really enjoy the chance to look at primary data, and to make their own maps and tables.

Each chapter in *EDAE* is provided with Exercises (according to the CIEL pattern). The volume is also provided with online audio supplements (available at www.cambridge.org/williamakretzschmar) in addition to its instruction in the use of the online LAP resource. A special section at the end of every chapter offers students a chance to listen to relevant short audio passages. As referenced in the text of the volume, readers and teachers can access many audio samples from Jess Bessinger and Diane Bornstein, *A History of the English Language* (1973), from Cabell Greet's 1928 recordings, from a 1967 NCTE album that illustrates American speech, and from various LAP projects, in the Cambridge University Press online companion to this volume.

1

The Idea of American English



In This Chapter

American English is not a simple thing to define. The United States is a big place, with many different regions. American English is certainly different from British English, and yet it is hard to set boundaries on the differences. American culture also plays a role in American English, and some say that politics does as well. In the end, the multitude of voices of Americans of whatever belief and whatever region come together to emerge as what people around the world recognize as American English.

Mitford M. Mathews started his book called *The Beginnings of American English* with the following statement ([1931](#) : vii):

The expression ‘ American English ’ is used in this work in its generally accepted sense of ‘ that variety of English which is spoken in the United States of America. ’

This definition can also serve to launch the present book. Mathews ’ definition contains two key components:

- the idea that American English is a “ variety of English ”
- the idea that American English is “ spoken in the United States ”

Pretty obvious, you might think, perhaps not worth saying at all – until you start to think more closely about these ideas. Just what should we think of “ a variety ” when it has to do with a language, especially the American variety of English? What makes how some English speakers talk “ American ” (as something recognizably different from other speakers of English around the world)? How did it happen that a language like English came to have different varieties, especially the American variety? And what should we think about the relationship between the speech of a place and the place itself? Do English-speaking people from elsewhere around the world automatically begin to speak American English as soon as they arrive within the physical borders of the United States, or is there more to it than that? Unraveling these questions constitutes the purpose of this book.

The United States of America is a very large place. A convenient way to talk about America is to refer to the individual states, as on the following map ([Figure 1.1](#)).

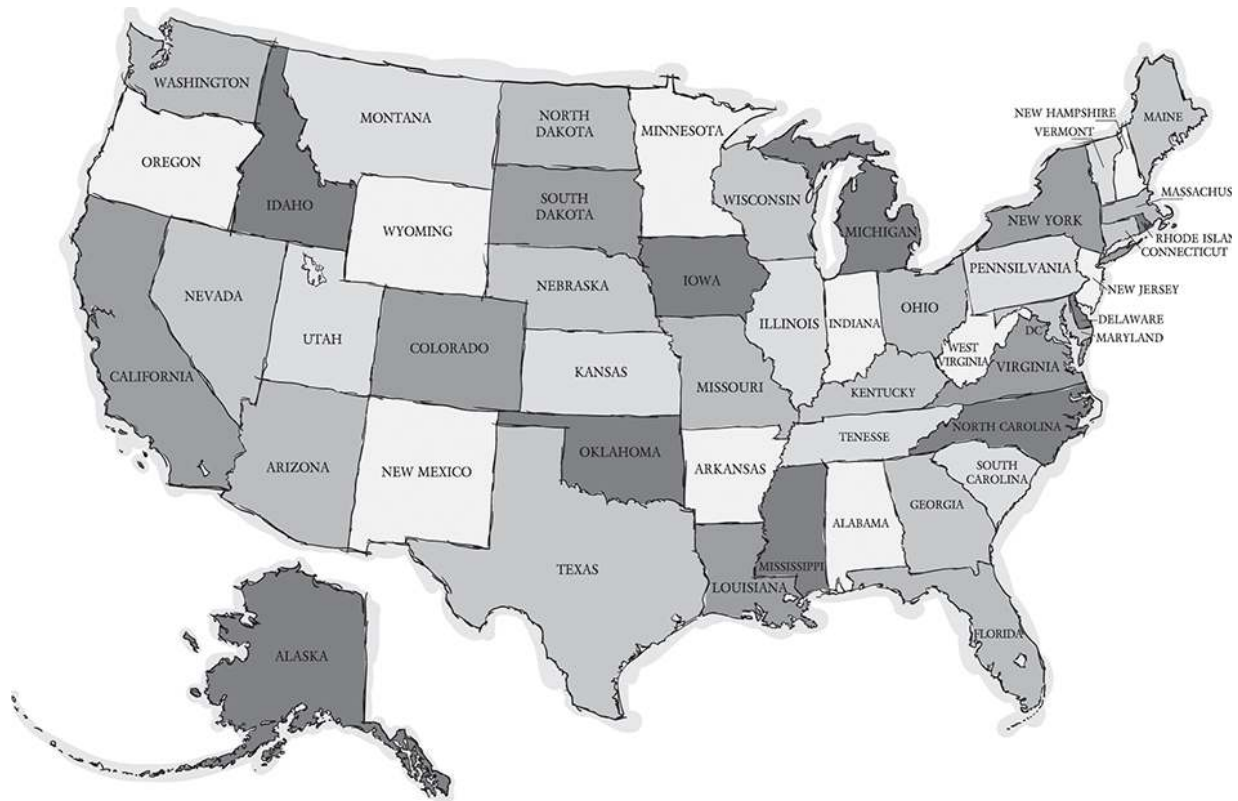


Figure 1.1 The American states.

Source: Jobalou/Getty Images.

There are also names for **regions**, collections of states. New England is the group of states east and north of the state of New York. Everybody talks about the “ South, ” but there is no general agreement about which states belong to it. One definition is east of the Mississippi River (the very large river that runs from north to south, along the western borders of Illinois, Kentucky, Tennessee and Mississippi), and from Tennessee and North Carolina South to the Gulf of Mexico, as in [Figure 1.2](#) . Others would include the old Confederate states (from Civil War days in the 1860s) of Virginia, Kentucky, Arkansas, Louisiana, and Texas. Still others might include Oklahoma. The “ Midwest ” is the same: some people would say it includes Ohio, Indiana, Illinois, Michigan, and Wisconsin, while others would also include Minnesota, Iowa, and Missouri across the Mississippi, and still others might include the Dakotas, Nebraska, and Kansas, as in [Figure 1.2](#) .

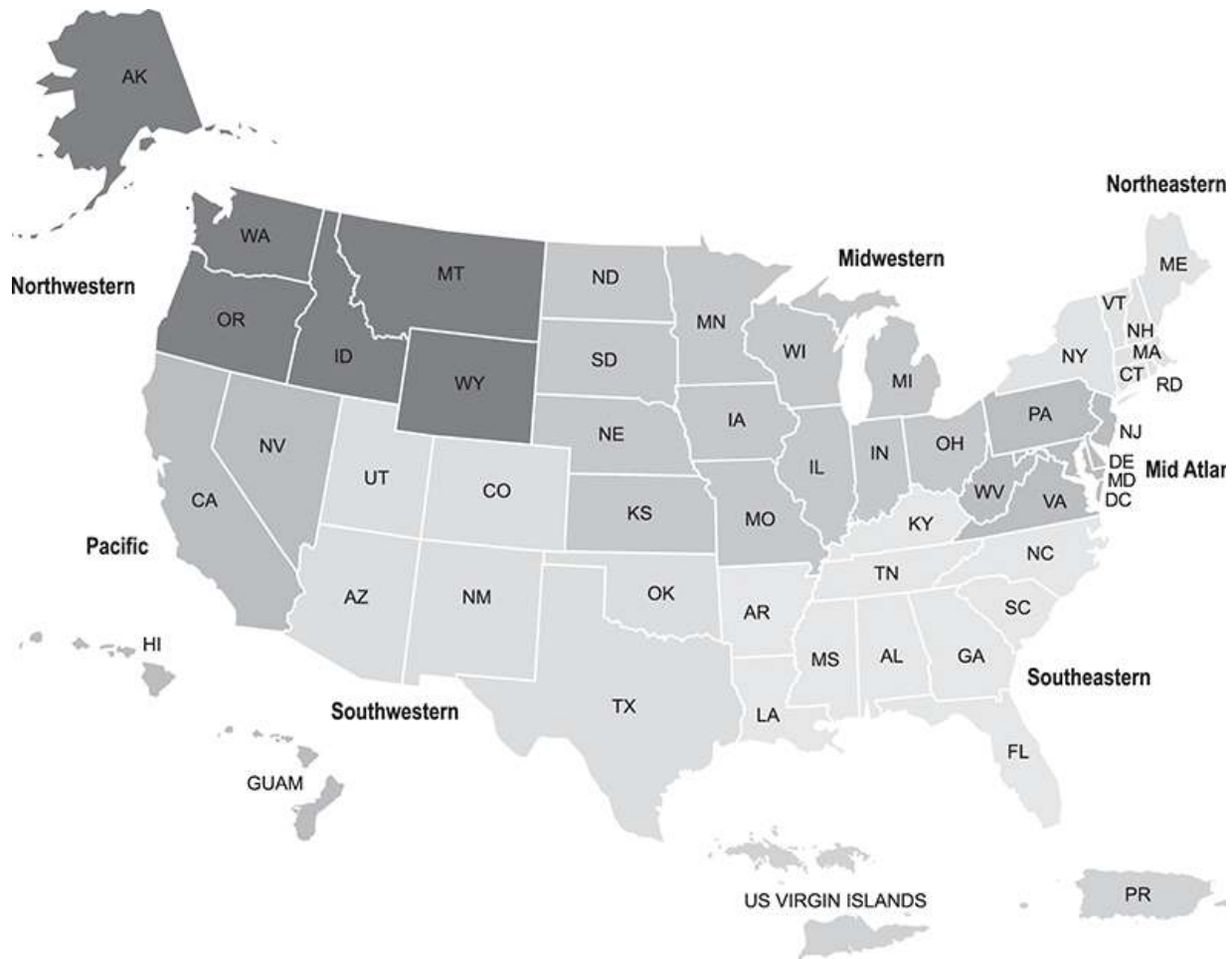


Figure 1.2 American regions.

Source: Getty Images.

The “ West ” might be all the states west of the Mississippi, but other people might start it with Montana, Wyoming, and Colorado, where the Rocky Mountains divide the continent. [Figure 1.2](#) puts California and Nevada in a Pacific region. Texas is often considered to be in a category by itself, as is the state of California. Other regional names, like “ Southwest, ” and “ Northwest ” (as in [Figure 1.2](#)) and “ Great Plains ” (as separate from the “ Midwest ”) are in common use, but again without precise definitions of what states belong to them. American geography across the states played an important role in settlement patterns, where rivers were conduits for travel and mountains blocked the way. In the rest of this book the names of states and prominent land features will be named – if you are not familiar with the places and features, they are easy to look up online.

American English as Language

The reason that a great many people are satisfied with their own impressions of American English, instead of wanting to make a study of it, is that their impressions are so clear. American English has a certain concrete reality for them, based on their experience with Americans speaking English in comparison with non-Americans speaking English. Citizens of the United States know that their own talk is not the same as the English used by somebody from another English-speaking country, say English in Britain – even if they have never traveled far from home. Since we hear people ’ s pronunciation all the while that they are talking, it is only natural that this characteristic of speech, often called **accent** , becomes identified with the behavior of the people doing the talking.

The term **Americanism** was coined in 1781 by John Witherspoon to describe “ use of phrases or terms, or a construction of sentences, even among persons of rank and education, different from the use of the same terms or phrases, or the construction of similar sentences, in Great Britain ” (Mathews [1931](#) : 17). This term seems perfectly appropriate to most people as the designation for words and phrases of American origin, but since the English language first appeared in Britain it may seem strange to some people to consider a word or phrase to be a **Britishism** . John Algeo, the foremost student of Britishisms, defines them as expressions with a form or use that originated in Britain after 1776 or one that is more characteristic of British than of American English ([2006](#)). Algeo distinguishes a more common kind of Britishisms, those that appear in American sources but in material by or about the British, from a more subtle variety, those that appear in American sources in native contexts. Among the latter, Algeo ([2006](#)) lists

<i>gaol</i> (Am <i>jail</i>)	<i>skinhead</i>
<i>now do you?</i> (a “ tag question ”)	<i>loo</i> (Am <i>toilet</i>)
<i>the occasional</i> (Am <i>an occasional</i>)	<i>on average</i> (Am <i>on the average</i>)
<i>Filofax</i> (Am <i>portfolio</i>)	<i>flat</i> (Am <i>apartment</i>)
<i>infra dig</i> (Am <i>undignified</i>)	<i>roundabout</i> (Am <i>traffic circle</i>)
<i>value for money</i> (Am <i>good deal</i>)	<i>flog</i> (Am <i>try to sell</i>)

While the terms “ Americanism ” and “ Britishism ” commonly refer to the origins of words, Americanisms and Britishisms are used in both countries, just at different rates. The words *flat* and *apartment* , for instance, are both used in both Britain and America, but *flat* is the more common word in Britain while in America people more commonly say *apartment* . As we shall see in later chapters, frequency differences like this (as opposed to all or nothing usage) are characteristic of how groups of people use language.

While many English speakers would find it difficult to cite particular differences in usage between, say, British and American English, most of them could also offer an imitation – more or less effective – of the speech of a British or American English speaker. Imitation here is not flattery but a declaration of differences: even people who give very bad imitations believe that there is a difference and try to enact it.

Dennis Preston ([Figure 1.3](#)) has studied what he has called **folk linguistics** or **perceptual dialectology** ([1989](#) , [1993](#) ; Preston and Niedzielski [2000](#)). He has found that people are not slow to form perceptions of how other people speak, and that the perceptions are bound up with how these folk (by which Preston means nothing bad, just that his subjects are not trained to analyze speech) see themselves as English speakers. We can accept individual people for themselves without abandoning our stereotypes. And we can maintain the stereotypes even if we cannot readily make a list of actual differences between them, whether in pronunciation or lexicon or syntax. This, then, is what most people mean by “ a variety of English. ” For most people a **variety of a language** is constituted by the perception of a difference.

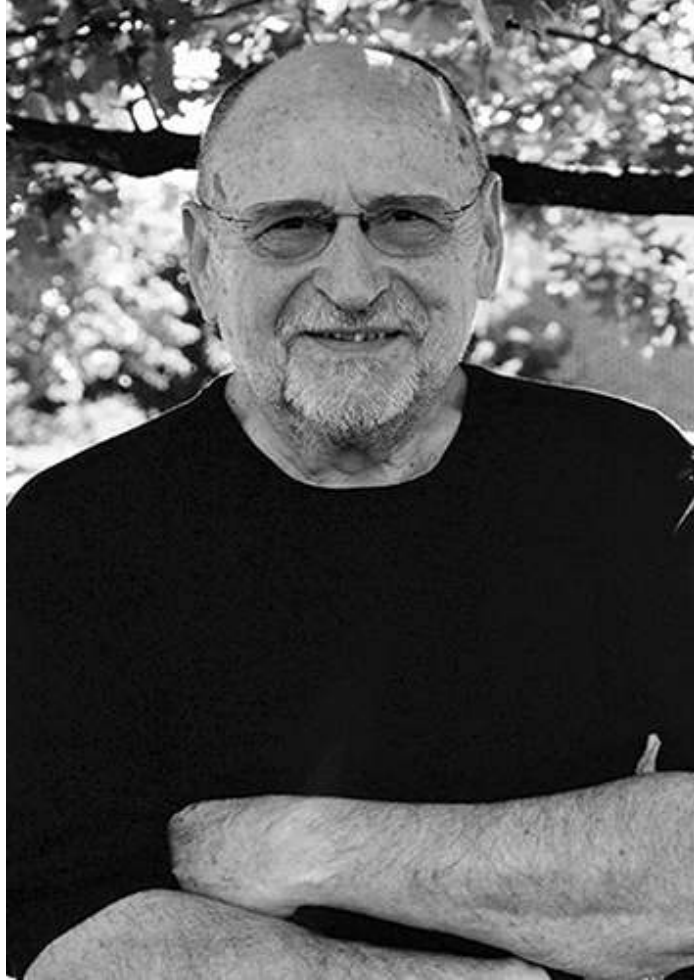


Figure 1.3 Dennis Preston.

Source: <https://linguistics.as.uky.edu/users/dpr235> . Courtesy of Dennis R. Preston.

The boundaries of such a variety are usually convenient designations of linguistic borders, rather than accurate assessments of linguistic evidence. It is very convenient, for instance, to use national boundaries as definitions for varieties of languages, like British English and American English. The problem remains even at the national level, as we can see from Canadian English. For British English speakers, Canadian English often gets lumped together with American English – rightly so, because Canada is also part of North America (see [Figure 1.4](#)), and the United States need not, though in practice it usually does, grab the label “ American ” all for itself.



Figure 1.4 North America.

Source: bergserg/Getty Images.

Besides the facts of geography, however, non-North-Americans perceive the pronunciation of Canadians to be essentially similar to that of US speakers. One prominent difference between American and Canadian English is the vowel sound in words like *out* and *knife*, so-called **Canadian raising**. The vowel sound in such words begins with the vowel found in *hot* for Americans, but Canadians begin it with a vowel more like that in *love*; the vowel for both Americans and Canadians ends with an *oo* or an *ee* sound, respectively (see [Appendix 1](#) for more accurate phonetic descriptions). Americans typically hear Canadian *out* as *oot*, but do not seem to notice as much that words like *knife* are pronounced differently by Canadians. The Canadian pronunciation may now be spreading in the Northern United States. This and many other differences are discussed in Charles Boberg's *The English Language in Canada* (2010).

We now can see that the idea that American English is "spoken in the United States" is problematic because what is "American" is defined less by the national border than it is by people's perception and point of view. The idea of a variety of a language is hopelessly entangled in perceptions, unless and until we can conduct a rigorous study of the parts of a language variety, of the features that speakers of the variety commonly use. Features of pronunciation, lexicon, syntax, and discourse (for more information on these, see [Appendix 1](#) and [Appendix 2](#)) all come together to form the whole of a language or a variety. Since we cannot take into consideration all of the actual conversations that people have, instead we have to concentrate on the features of language that are constantly repeated to form those conversations, as we derive them from examples of speech. The modern study of linguistics accepts four different ways for studying such features of a language, the names of which have already been introduced: **pronunciation**, **lexicon**, **syntax**, and **discourse**. As for pronunciation, each language and variety has a range of sounds that are commonly used in the expression of its words. There is also an inventory of words, a lexicon, that belongs to every language and variety. Each language and variety has characteristic patterns, syntax, with which its words can be arranged in sentences. Finally, each language and variety has characteristic habits of arrangement of words and sentences to form meaningful discourse. Pronunciation, lexicon, syntax, and discourse, then, tell us where to look for particular features that may be produced differently in different varieties. As we will see in [Chapter 2](#), the features of pronunciation, lexicon, syntax, and discourse in different varieties are matters of "more and less," not "on and off," so we will always be looking for tendencies, not sure indicators of a difference.

That said, given an assertion of the existence of a language variety on perceptual grounds, we should examine evidence from the speech of people who are said to speak it so that we can discover what we can about their pronunciation, lexical, syntactic, and discourse features. We will not be interested solely in features that we may find strange, different from what we consider to be normal in our own language variety, but instead we will want to build our knowledge of features in order to know more about the range of sounds, the lexicon, and the characteristic patterns of the language variety under study. Linguists have developed an array of technical terms and concepts for the study of linguistic features, as well as methods for collection and analysis of linguistic evidence (as in [Appendix 1](#) and [Appendix 2](#)).

American English as Culture

Even when we know a good deal about the linguistic features of a variety, we still must account for how people come to have their perceptions of the variety. Our perceptions of speech are often bound up with our perceptions of behavior, and this clue can lead us to consider how our speech is bound up with the whole range of social behavior, often known as **culture**. The cultural geographer Wilbur Zelinsky proposed a three-dimensional plan that could be used as a template for the analysis of cultural systems (1992: 72; [Figure 1.5](#) is a schematic cube for illustration). In his graphic representation of the plan it takes a moment to locate "Language": it is one of the **mentifacts** down near a bottom corner, just one slice of a much bigger cultural matrix, grouped together with religion, magic, the arts, and folklore. Mentifacts, which Zelinsky describes as "cerebral, psychological, or attitudinal in character" are just one of the "intrinsic components" that compose one dimension of his plan, say the righthand side of the cube in [Figure 1.5](#). **Artifacts** have to do with people's livelihood within their culture, from material things like tools or food, to means of production like farming or industrial activity, to more abstract concerns like technology or transportation systems. **Sociofacts** are elements of interpersonal relations, like kinship or politics. These three aspects of culture, taken together, constitute one way of describing the entire range of human behavior in a culture, an entire side of the cube. Besides these intrinsic components, Zelinsky also proposes dimensions for location, the "spatial dimension" (say, the

left-hand side of the cube), and for “ subcultural components ” (say, the top side of the cube), which correspond to different occupations or ideologies such as (again in Zelinsky ’ s words, [1992](#) : 72) “ males and females, farmers, ditchdiggers, Presbyterians, mountain climbers, convicts, Freemasons, bowlers, and drug addicts. ” There is, then, according to Zelinsky, practically an unlimited number of ways to divide and to describe cultural activity. The important point about this set of cultural divisions is that it is comprehensive – any aspect of culture can be described as either an artifact, a sociofact, or a mentifact, whether in some particular location or over the entire geographic extent of a culture, and whether limited to a subculture or widely diffused throughout a culture. The role of language within such a comprehensive model is as just one slice of the whole, and this tells us that language is necessarily bound up with other mentifacts like religion, the arts, and folklore, as well as with kinship and politics (sociofacts), and with people ’ s livelihood, what they eat and make and create (artifacts). Moreover, language is also bound to vary according to subculture (occupations, religions, sexual orientation, and many others) and according to the different locations or regions in which the intrinsic components and subcultural components are happening. From a model like this one, we can understand that we are all bound to perceive a language variety as the particular and recognizable form of speech that is associated with speakers who have particular cultural characteristics, whether in mentifacts, sociofacts, and artifacts, or in their subculture, or in their spatial situation – or in all of these at once!

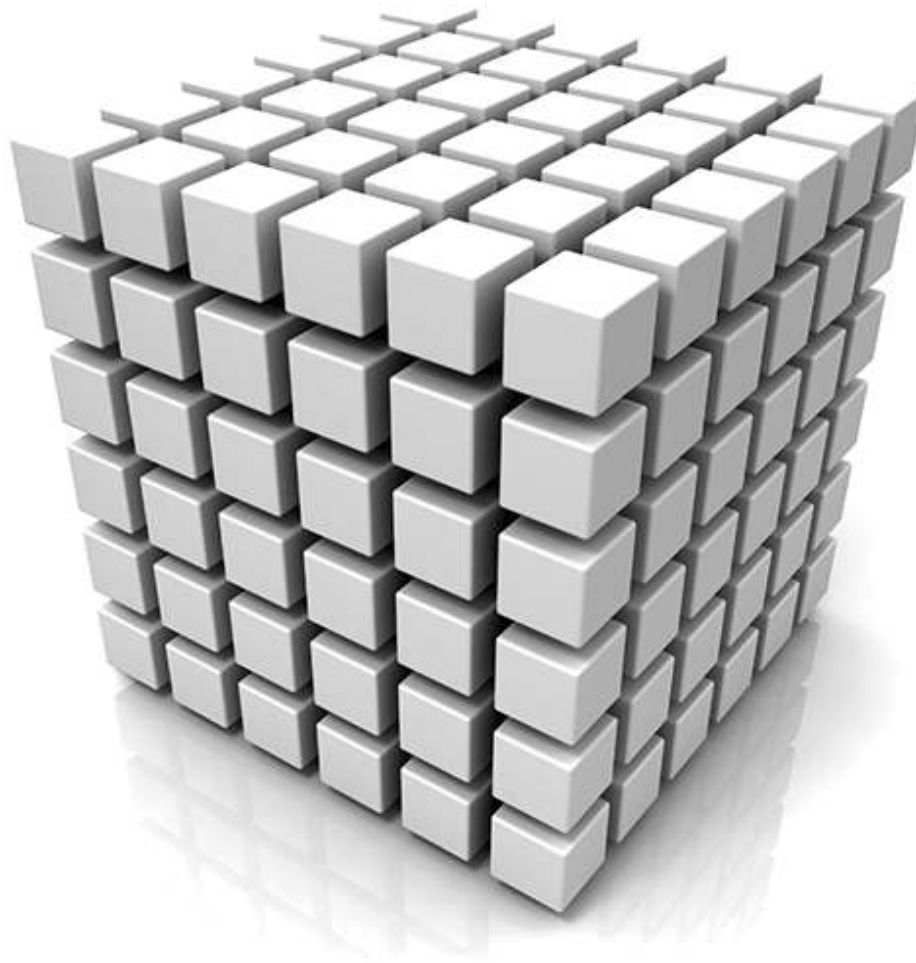


Figure 1.5 A schematic, three-dimensional representation to visualize Zelinsky ’ s cultural systems (Zelinsky [1992](#) : 73).

[Figure 1.5 long description.](#)

Source: Kuklev/Getty Images.

Zelinsky ’ s cube represents one entire culture, but the culture is not represented by the surface of the cube: Zelinsky proposes that we slice it in three different ways, by intrinsic components, by geographical groupings of people, and by social groupings of people. That

is to say, for any given culture region in the spatial dimension, it is possible to consider the whole range of artifacts, sociofacts, and mentifacts. So, too, for any given culture region and particular set of artifacts, sociofacts, and mentifacts, it is possible to observe variation in the dimension reserved for subcultural groups. On the cube in [Figure 1.5](#), you could choose to work on a whole side, or one layer of a side, or even on a single one of the smaller cubes that together make up the whole. Before this all begins to seem too complicated, it may be worthwhile to think of Zelinsky's model in terms of something very common and mundane: how you might want to cut up a potato in the kitchen. You can make slices in one direction, thin ones for potato chips (*crisps* in Britain) or thicker ones for cottage fries and potato casseroles. Alternatively, you can make slices in two directions and end up with pieces that are longer than they are wide, french fries, skinny like McDonalds or fat like the ones in a steakhouse. You can also cut the potato in three different directions and end up with diced pieces, big ones for stew or smaller ones for soup. The more times you cut, the more sides of each piece of potato you expose, and this creates different possibilities for the cook (see [Figure 1.6](#)).



Figure 1.6 Cutting potatoes.

Source: MarkAndrewPhotography/Getty Images.

To return to Zelinsky's cultural model, the more slices of culture you examine, the more sides of cultural activity you can reveal. More is not necessarily better – the slicing needs to match the intended result, whether for potatoes or culture. Potatoes cut up for stew will not make good potato chips! Besides the number of sides, you also have to think about how thick to make the slices. You can cut thicker or thinner, whether to make stew or soup with the potato, or to strive for more or less precision for cultural analysis. With either potatoes or culture, the more slices you want, the more work you have to do and, just as for the number of directions to cut, slicing thick or thin may be good for different purposes. Finally, it must be said that you can boil a potato whole, or mash together a whole collection of potatoes. So, too, it is possible to make gross generalizations about a culture or even a group of cultures when the occasion calls for it. Zelinsky's multidimensional model allows us to see that there is more than one way to examine culture, and that all of those different dimensions are still there waiting for us even if we choose not to cut in all the directions right away.

From Zelinsky's perspective, the cultural geography of the United States, language is a relatively small component of the whole; for the purposes of this book language takes center stage – but not the whole stage. When we choose language as our slice of American culture to examine, we cannot forget that American English is an integral component of American culture; the language of its speakers both helps to form the culture and is also formed by it. Cultural geographers, Zelinsky says, find it “more efficient and profitable ... to extract major subsystems from the total culture, then treat them independently of other aspects of the larger system, holding other things constant” ([1992](#): 74). For our purposes here, when we focus on language we are not obligated also to treat religion and folklore in depth, or to treat every culture region or subcultural component in detail, but neither should we forget that they are relevant. Indeed, because language is just one slice of the culture at large, we cannot expect to describe American English adequately without some discussion of different aspects of American culture. American English is not just “spoken in the United States,” but rather is spoken by people who are involved with American culture. When we focus on American English, we are not obligated to treat the English of other places (i.e., of other culture regions like Britain or Canada) in any depth, although they remain relevant, and we should be aware of the possibilities within American English for subsidiary cultural divisions and subcultural influences, like geographical regions, or occupational or ideological differences. As soon as we grant that language and culture are inextricably bound together, we have an answer for how to approach people's perceptions, and we can no longer be satisfied just with features of pronunciation, lexicon, syntax, and discourse as the sole target for our study. Zelinsky concludes that ([1992](#): 74)

It is only by taking into account the relevant multiplicity of components and dimensions at the particular scale chosen for observation, and also the fact that they are changing through time, that a realistic understanding of a given culture may be reached.

We can agree with him, and say that a realistic understanding of American English can only be achieved by locating its linguistic features in the context of the other dimensions of American culture.

American English in Politics

As we shall see in chapters to come, the United States began as a political (some might also say, religious) experiment. In the decades and centuries that followed, waves of immigrants brought into the new American ideal as it was enacted for them in North America by people who already lived in the country. Even today, many Americans subscribe to an American political ideal – about half the country to one version of it (the one currently expressed by Republicans) and the other half of the country to another, quite different version of it (currently expressed by Democrats). A surprisingly small number of Americans find themselves to be independent of these two points of view, free thinkers who might vote either way in an election, and this segment of the population often decides the direction of the government in Washington DC. This kind of split in American politics has always been present, whether between Royalists and Revolutionaries at the end of the eighteenth century, or between upholders of States Rights (in the South) and Abolitionists (in the North) in the nineteenth century. America has never spoken with a single voice. And that is an American hallmark: freedom of opinion, freedom of choice, whether as regards religion or for any of many other social options. At the same time, Americans have generally thought of themselves as different from the common ideas of the Old Country (whichever Old Country that was). Property rights have been a prime issue, since in America one can own one's own land while in the Old Country a few people might own the land while others worked it, or in other places nobody owned the land and strongmen struggled for control of it. The American Constitution and Bill of Rights began to codify this American difference into rules of law, and later Amendments to the Constitution and other laws have explored finer points. Neither the Republicans nor the Democrats today maintain the true and original ideal – no matter what they say! – since the American ideal has had to change over the centuries to fit emerging conditions in North America and the world at large.

Politics per se has little to do with the American variety of English except for the fact that different political groups have their own characteristics in speech, as in the terms for their preferred political issues. While some politicians may claim that American English is what holds American society together, actually the opposite is true. Yes, American English belongs to Americans, but it is the conversations and writings of Americans that create that relationship. There is no magical effect of an American standard language that makes Americans (as we shall see in chapters to come), but instead a bottom-up, grassroots process in which the interactions of people engaged in all of the different aspects of their daily lives (think Zelinsky's cube) produce what we can recognize as the American variety of English. Just as American politicians require the votes of their constituents to take office, American English requires the communication of people in America to be recognizable for itself among world varieties of English.

“ Spoken in the United States ”

To go back now to the second part of Mitford Mathews' definition, American English is a variety of English that is “ spoken in the United States. ” By this he meant much more than a mere coincidence of speech and geographical borders. Mathews' special topic was the developmental view of American English ([1931](#) : vii):

This form of English had its beginnings when the colonists and settlers began to adopt new terms and develop new senses of words, and, still later, it became more definite when the vernaculars of the various groups began to coalesce into one recognized form of language somewhat distinct from the English of the mother country.

We can observe in this statement different components in the separation of American English from British English. Mathews notes that features of the lexicon (and we may extend what he says to pronunciation, syntax, and discourse as well) are subject to a historical process. There were various groups that initiated new uses of words, and in time these originally separate groups came to “ coalesce ” to form a new, larger cultural entity – American culture. Following Zelinsky, we can understand Mathews' various groups of people originally to constitute different cultural (i.e., geographical) or subcultural (i.e., social) groups within English culture. In time, these originally separate groups came to share enough characteristics, whether in use of words or in the breakdown of previous geographical or

social barriers, so that they might be considered to form a new collective American cultural group that could be considered on its own terms as separate from the original English culture. Mathews does not mean by this that the identity of the original groups was necessarily lost, only that the groups came to participate in the identity of a larger American culture. Thus it makes sense to consider the “ beginnings ” of American English, and to consider that the characteristics of American English will necessarily be different at different moments in time, as American culture emerges, both develops and changes, over time.

In some ways the term “ American English ” is like mashed potatoes in our earlier metaphor: it groups together a large number of things to make a gross generalization. It is a valid generalization, certainly a useful one in discussions of World English, but mashing is not the only way to cook potatoes. This book is called *The Emergence and Development of American English* in order to emphasize that American English is not “ once and done, ” but that it continues to emerge and develop over time and across the culture. American speakers do not all speak alike. Americans come from different places across the wide expanse of the continent, they belong to subcultural groups too numerous to count, and they are free to hold many different beliefs and to lead their lives as they think best. Such pluralism and such freedom are undoubtedly the hallmark of American culture and the American experience, so it just seems wrong to name a book so that readers might get the idea that American English is something homogenous and exclusive, that there is some single way of speaking that all Americans must have, or else somehow be less than American. *The Emergence and Development of American English* instead emphasizes the inclusive quality of American English, that the multitude of voices of Americans of whatever belief and whatever region come together to emerge as what people around the world recognize as American English. This is the idea of American English to be explored in the chapters to come.

Summary

American English comes from a place, the United States, but that does not mean that all Americans talk the same way. Americans have somewhat different accents, lexicon, syntax, and discourse from place to place and from group to group. Still, American English can be recognized as its own variety of the language in comparison to other varieties of English around the world.

Key Terms

accent

Americanism

artifacts

Briticism

Canadian raising

culture

discourse

folk linguistics

lexicon

mentifacts

perceptual dialectology

pronunciation

regions

sociofacts

syntax

variety of a language

Audio Samples

In the online companion to this book (available at www.cambridge.org/williamakretzschmar), you can listen to audio samples that illustrate the state of the language. For this chapter you can hear three speakers from Roswell, Georgia. You will be able to hear that they talk differently, even though they all come from the same town just north of Atlanta (a big city known as an air travel hub and as the central place of the New South).

a1.1 Uptown-downtown in Roswell

a1.2 Civil War Story

a1.3 Baseball

Exercises

1. What regions can you name in the United States? Do your ideas go along with [Figure 1.2](#) , or would you put different states in the named regions? Or would you make other regions entirely, say one for New York City?
2. If our sense of a variety comes from our perception of a difference in how people use language, can you think of other ways in which our perception of differences gives us ideas? What about regions? What about kinds of foods? Styles of dress? Architectural designs?
3. Zelinsky ' s model of culture looks like a cube, in three dimensions. Can you think of anything he left out of the subdivisions of his cube (spatial, subcultural, intrinsic components)? Do you think that his multidimensional model, that allows you to slice and dice culture as you like, is a good representation of culture, or do you think it ' s harder than he says to take aspects of culture apart?

Computer Exercises

Computer exercises in [Appendix 3](#) are progressive, in that each exercise is intended to address a new skill or topic. They are not necessarily linked to the content of each chapter, although many of the exercises do parallel the content of the chapter. [Appendix 3](#) is the place that explains how to access data from the Linguistic Atlas Project website, in order to search, sort, and map it. In a classroom setting each individual user may get somewhat different results from examining the online data, so that it will be useful to discuss together what all the users found in order to understand the bigger picture. This, of course, is how science works, by adding together many observations to make a general point.

For [Chapter 1](#) it would be appropriate for the reader to do Exercise App3.1, which asks users to make maps online for features with different frequencies. The task is a good way to start using the website.

Further Reading

Preston , Dennis . 1989 . *Perceptual Dialectology: Nonlinguists ' Views of Areal Linguistics* . Dordrecht : Foris . " Folk Dialectology , " in *American Dialect Research* , edited by Dennis Preston . Amsterdam/Philadelphia : John Benjamins , 1993 . (with Nancy Niedzielski) *Folk Linguistics* . Berlin : de Gruyter , 2000 .

Preston has reinvigorated the idea that we should pay attention to what people *think* about language, not just how they say things differently. In particular, he has asked people where “ correct ” English is most likely to be found in America, and where the English in America is most “ pleasant. ” The answers are quite different! And Preston has found that people have very different ideas about where regional dialects can be found, even if many people do name the same general areas (like the “ South ”).

Zelinsky , Wilbur . 1992 . *The Cultural Geography of the United States: A Revised Edition* . Englewood Cliffs, New Jersey : Prentice Hall .

First published in 1973, Zelinsky ’ s classic brief textbook of cultural geography both outlines the field and comments on American culture. Part Three contains Zelinsky ’ s rethinking after twenty years of many of his original ideas, with some generally pessimistic comments on developments in American culture. Readers may or may not agree with the later comments, but will find no clearer presentation of the structures and patterns of American culture.

Videos: A number of video productions attempt to explore American English, among them *Do You Speak American?* (narrated by Robert MacNeil. New York: WNET, 2005) and *American Tongues* (Center for New American Media, 1988). YouTube also offers numerous short videos about American English. As a journalist, MacNeil sometimes prefers good TV to accurate reporting, as in the segment in which he looks for – and finds! – Shakespeare ’ s English in America.

2

Emergence



In This Chapter

The new science of complex systems explains why Zelinsky ' s cube is a good model of culture. It works well with economic markets – and also language in use. We can see the evidence that a complex system has operated in American English by looking at evidence from the Linguistic Atlas Project. Linguistic variants all show the same patterns of distribution, both overall in a population and in subset populations. These frequency profiles provide a challenge to traditional ways of thinking about language with grammars and dictionaries.

When we begin to make slices of Zelinsky ' s cube in order to investigate American English in all of its different spatial (geographical) and subcultural (social) aspects over time, we need to have a scientific model that supports such work. The best available model is called **complexity science** , or **complex systems** . The word “ complexity ” does not just mean ‘ complicated ’ but instead refers to the emergence of stable patterns out of the interactions of a great many different participants. Complexity science is still “ science, ” on a par with what most of us think of as science, but it works in a different domain from what many physical and natural scientists study. Aristotle gave us the basic idea of what science should be, when he advocated regular, systematic observation of the world around us. The most familiar domain of science today is **Newtonian Mechanics** . In this mode of analysis, the scientist looks for cause and effect relationships as individual elements interact with each other. You can think of planets at the large scale, and billiard balls at a smaller scale. The trick when you play pool is to strike the cue ball in such a way that it hits another ball and makes it move how you want it to, say into the corner pocket. In the modern physical and biological sciences, this emphasis on cause and effect has been carried further to what is known as **reductionism** . That is, scientists in the reductionist domain look for smaller and smaller constituents, under the idea that if you understand things at the lowest level of scale, you will better understand all the levels of scale. Complexity science, on the other hand, does not try just to reduce anything to basic principles but instead asks the scientist to observe every part of the whole for its own characteristics. Complex systems analysis can reach every slice of Zelinsky ' s cube, whether the cube as a whole or any small cultural segment. The status of different scales is not necessarily produced by one root cause. From the point of view of complexity science, we need to observe slices and scales individually instead of assuming that they all share essentially the same characteristics.

Complex Systems

Complexity science is a different domain for systematic observation and analysis. When we consider many interacting elements, not just one thing acting upon another thing, you might think that it would be possible to predict the behavior of the system by measuring what each of the individual parts does. The classic formulation of this problem is measuring the position, mass, and velocity of objects, in order to predict what they will do in relation to each other. Unfortunately, this analysis will not work. Henri Poincaré proved in the late nineteenth century that there is an infinite number of solutions even for the **three-body problem** , just three interacting objects. This means that we cannot use cause and effect to predict the behavior of a collection of many interacting parts – we know that individual interactions have causes and effects but we just cannot use that knowledge to predict what the system as a whole will do or even what any

individual element will do. This also means that we cannot use reductionism, because our measurement of the position, mass, and velocity of a single element cannot tell us what the whole set of elements will do. We cannot look for the smallest parts of a system and use them to understand the whole.

You might think again of a pool table for an example. The first shot of a game of pool is the “break,” that is, directing the cue ball against a triangular configuration of the other balls (see [Figure 2.1](#)). Most of us will strike the cue ball hard against the first ball in the triangle, and we cannot predict where all the balls will go – we hope one goes in a pocket so that we can keep our turn, and one often does, but we just do not know if that will happen.

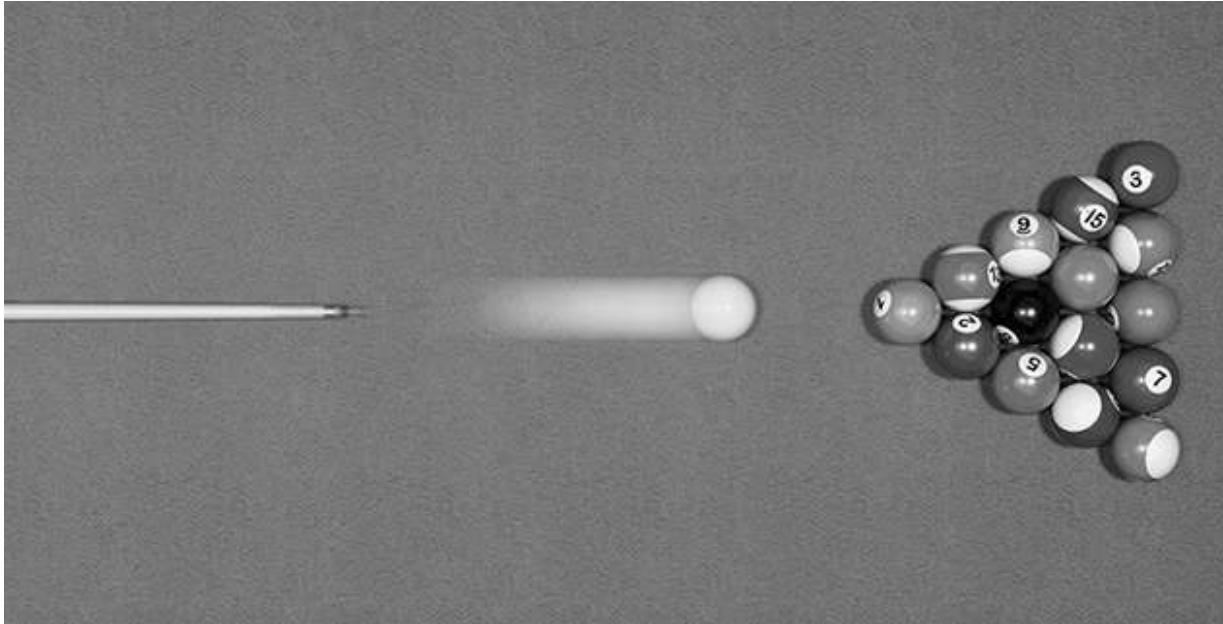


Figure 2.1 The break in pool.

Source: mevans/Getty Images.

Professional pool players have strategies for the break, say, trying for the smallest possible dispersion of the balls so that their opponent will have a more difficult shot. They do this by putting as little energy into the break as possible, but even then, the professionals cannot calculate where all the balls will actually end up. The break, therefore, is a good example of a complex physical system, one in which the behavior of each of many interacting elements is just not predictable. In biological and human systems, all of the balls, all of the elements in the complex system, are in constant motion affecting each other. We are all cue balls, making our own breaks.

The beginning of thinking about complex systems can be traced to Glasgow and to Adam Smith, who wrote about the famous **invisible hand**. In 1776 he wrote that a man of business

intends only his own gain, and he is in this, as in many other cases, led by an invisible hand to promote an end which was no part of his intention. Nor is it always the worse for the society that it was not part of it. By pursuing his own interest he frequently promotes that of the society more effectually than when he really intends to promote it.

Adam Smith was talking about the emergence of economic markets that satisfy the needs of society, not by the design (intelligent or otherwise) of some creator, but through the invisible hand of **self-organization** of activities that were motivated by self-interest, not society's interest. The fact that Smith spoke of some sort of “hand” showed that he believed the world to be a causal place, where an effect, like a market, must have a cause. Today, however, we should focus not on the hand but on his word “invisible,” because self-organization requires no causal hand. Complex systems have no simple causes for the effects that emerge from them. Rather, a complex system works through a process of interaction among a large number of components, as the process must cope with the contingencies of the environment in which the individual components are interacting. Cause and effect as in Newtonian Mechanics is a good explanation

for many aspects of the world around us, just not for everything. For circumstances that have many interacting components, like buyers and sellers or billiard balls in a game of pool, we need to let go of our assumptions about cause and effect and replace them with the idea of self-organization that leads to the emergence of patterns. Language is one of those circumstances.

First let us consider what happens in a complex system for it to produce self-organized results like an economic market. For any complex system to operate, we must have the random interaction of a large number of **components**. This interaction constitutes **activity**, which is essential to the operation of the system, for a complex system dies if the activity stops. So, for example, there is no longer any American market for domestic chestnuts because all of the trees died out and nobody can buy and sell the nuts. As the interactions continue the components affect each other in what might be called an **exchange** of information, which leads to **reinforcement** of behaviors among the components, and thus to the **emergence** of stable patterns in the complex system, all without any central control. That is, as people buy and sell products, the prices they pay are affected by their knowledge of what other people are paying, and over time a stable market price emerges where not everybody is paying the same price but prices in general are predictable. All of these things happen in relation to **contingency**, to local circumstances, so that complex systems are able to react to circumstances, to change over time as they need to. In Adam Smith's economic market the components are the things being bought and sold: bread, beer, pins, cloth, and everything else we use and trade. People are **agents**, in that they facilitate the process of the complex system, in economic markets by doing the buying and selling.

Let us think about a particular example of a complex system in action, say the market in apples, where the components are apples in all their different varieties. The activity is all the sales of quantities of apples, and for each sale there is information, such as the source and the size and the variety of the apples and the price they sold for. As the agents exchange this information, they reinforce their buying and selling behavior by setting prices. Some apples are plentiful in the market (like Delicious apples in America, or Cox apples in Britain) and the price may emerge at a low level; some apples may be the current favorite variety (like Honeycrisp apples in the United States, a relatively new variety) and a higher price may emerge for them. Over time, the prices will be relatively stable but will change according to contingency: if there was late freezing weather in Michigan, where many Honeycrisp apples are grown, the price will emerge at a higher level because the supply is lower. Indeed, the price of Honeycrisp apples will go up as soon as the agents hear about the freezing weather because they expect the supply will be lower at harvest: information is more than just the facts available at the moment.

This was a feature of a famous Wall Street movie starring Eddie Murphy and Dan Aykroyd called *Trading Places* (1983), where Murphy and Aykroyd manipulated the market for orange juice by getting advance information about a crop forecast. Thus we can have futures markets and all sorts of other specialty markets in which human agents buy and sell, and in so doing create a market for different commodities or services.

Let us think now about language as a complex system. This is not how we have all been taught to think about language. All through primary and secondary school, our teachers always told us about the grammar of our language, rules that we should follow and violate only at our peril. Sometimes our teachers told us about dictionaries, and many of us supplemented that teaching by playing the game *Scrabble*, where we used letter tiles to make words and where the dictionary was the authority that told us the legal words in the language. Grammatical rules and lists of words in the dictionary provided structure for our language. And that is how all of us think of it, language as a structured entity, where we can decide what is grammatical or not according to the **syntagmatic structure** of the language, and where we know where to find the list of legal words, the **paradigmatic structure** of the language (you can see more about these structures in [Appendix 2](#)).

These structures are not the place to start when we think about language as a complex system. Instead, let us consider that people just use whatever experience they have in order to talk with each other. People are talkers. A person is not the same thing as a language: some people can use their experience to talk in two or more languages. Indeed, all of us do that even if we do not realize it: we all use somewhat different language in all of the different language interactions that we have, spoken or written. Our conversations with family members have different words and different grammar than the conversations we have at work. Conversations we have with children have different words and grammar than conversations we have with doctors, lawyers, and other professionals, and we all know what to do to talk with children, if not always with professionals. The words and grammar are not entirely different in these various conversations and situations for writing; it is just more or less likely that the talker or writer would use particular features in a particular situation. We probably would not talk about "syntagmatic structure" and "paradigmatic structure" in a family setting, but they occur in the previous paragraph for the very good reason that readers of this book can be expected to be comfortable with those words – if only after a look at [Appendix 2](#)! Each of us speaks a somewhat different language in all of the settings for speech and writing that we encounter, based on our

experiences with such settings. We may not name these differences in our language by the same names we use for national differences, like American English or British English (or English as opposed to Spanish or Chinese), but nonetheless we can recognize the differences.

All of that happens because of the complex system of language. We speakers and writers are agents, not the same as any language but users of language, in the same way that buyers and sellers are agents, not money themselves but users of money. The components in the complex system are all of the possible variant realizations of linguistic features, different word and grammar choices we use for children and professionals, for engineers and linguists. The activity in the system consists of all of our conversations, and as a more limited case, all of our writing. The exchange of information is not the same as sharing the meaningful content of what we say and write (which is information in a different sense), but instead the implicit comparison of the use of different linguistic variants, different ways of articulating the same meaning, by different agents in different situations. We listen to *how* people say things, and see *how* they write things, not just understand what they mean. **Feedback** from exchange of information leads to reinforcement, so speakers and writers are more likely to use particular variants in future occurrences of particular circumstances for speech. Human agents can think about and choose what linguistic variants to use, but that does not change the fact that we make choices in relation to the system, usually without thinking too much about them. Emergence, the order that emerges in speech, consists of the configuration of components, whether words, pronunciations, or grammatical constructions, that come to occur in any of the circumstances in which we actually communicate. As for other complex systems, all of these are conditioned by contingency and so emergent patterns can change over time. The process operating in complex systems just explains better what we already knew: we tend to talk like the people nearby, either spatially or socially near, and we tend to use the same linguistic tools that others do when we are writing or saying the same kind of thing.

How we use the information from our emergent patterns to manage our talk is not precise and rule-based, or based on categories. Our brains are composed of neurons, and all they can do is fire or not fire. We do not have linguistic categories in our minds, as early notions of cognitive linguistics had it. Instead, we just have firing patterns of all the interconnected neurons that come to correspond to our experience, this because the neurons can become habituated to repeated situations (see [Chapter 11](#)). John Miller illustrates the inexactness of the process in the paragraph below (Miller [2015](#) : 23), after he has told us that letters on a page “ emerge ” in our perception from numerous small printed dots:

the letters, when placed near one another, take on new properties and meaning, and ultimately result in the emergence of words.

Such emergence is so strong that it persists even if we scramble the letter between each word ' s start and end, that is, such ecregmnece is so stnorg that it pessitrs eevn if we sabcmrlre the lltteres betewen ecah word ' s satrt and end.

We do not see the dots, we see letters. We still see words even if they are not spelled exactly right – and when you think about it, how else could we proofread anything. Our minds are not like computers that rely on exact matches of text strings in searching and sorting data. We know, and computers do not know except for the limited case of spell checkers, what word was meant when it appears with an odd spelling – and we all get frustrated with some of the spelling changes our cell phones make when we are writing texts! We have some latitude in how we put stimuli together to make language, whether when we see letter shapes and word spellings, or when we hear pronunciations and understand words from those. As users of language, we are always reaching for the best fit of what we hear or see. Sometimes we do fail to put things together in the same way that our conversational partner has meant them, and these situations are often memorable for us, often quite funny because of the unanticipated broken expectations.

Evidence of Emergence

Let us look at an example of how complex systems affect what words we say. Here is a list of the top ten different names that people used, in a mid-twentieth-century survey of 1,162 people from the American Eastern States, for the insect with two sets of wings that flies in damp areas and eats mosquitos ([Figure 2.2](#)) – what many people today might call a *dragonfly* (see [Table 2.1](#)). All of this data, and much more like it, is freely available at www.lap.uga.edu ([Appendix 3](#) explains how to use it).



Figure 2.2 A dragonfly.

Source: Ernst Himmelsbach/500px/Getty Images.

Table 2.1 Top ten names for *dragonfly*

Name	Number of uses
snake doctor	536
snake feeder	413
mosquito hawk	360
darning needle	294
dragonfly	196
skeeter hawk	175
devil ' s darning needle	158
spindle	23
snake waiter	19
devil ' s horse	13

The people in the survey used lots of different words, and they did not use one word most of the time with some rare creative names. It may be surprising that the word many people think of first, *dragonfly* , was only in fifth place in the list of ten words, when we arrange the list by how often the 1162 people said it. *Snake doctor* was first for this survey, followed by *snake feeder*, *mosquito hawk*, and *darning needle*. The survey shows the same results for all questionnaire items: there is always more variation in words than anybody might expect. Here below is the whole list of names for a dragonfly (see [Table 2.2](#) . Content warning: the table contains a taboo racial slur.

It will be distressing enough to readers that I have chosen not to spell it in full.). Some of the entries are simple plurals of other entries (like *snake doctors* as well as *snake doctor*). A few of the names might actually be for other kinds of insects, but we can trust the field workers for the survey to do a good job of putting the right name down in the right place. Still, we can see that there are far more than just ten names for a dragonfly.

Table 2.2 All the names for *dragonfly*

a

Name	Number of uses	Name	Number of uses
snake doctor	536	donnel feathers	2
snake feeder	413	dragon fly	2
mosquito hawk	360	drum hawk	2
darning needle	294	galley nipper	2
dragonfly	196	galli nippers	2
skeeter hawk	175	gally nippers	2
devil's darning needle	158	gnat bug	2
mosquito hawks	89	gnat catchers	2
snake doctors	77	jar fly	2
dragonflies	42	johnny crowhorse	2
snake feeders	35	knit needle	2
darning needles	28	needles	2
spindle	23	partridge	2
snake waiter	19	praying mantis	2
skeeter hawks	17	saltpeter fly	2
devil's darning needles	14	snake bugs	2
devil's horse	13	snake charmer	2
mosquito	12	snake cure	2
devil's riding horse	8	snake doctor fly	2
mosquitoes	8	snake eaters	2
devil horse	6	snake feed	2
devil's needle	6	snake fly	2
snake servant	6	snake leaders	2
skeeters	5	snake peters	2
gnat hawk	4	snake skeeter	2
gnats	4	snake weeder	2
June bug	4	snake worm	2
mosquitos	4	stinging bee	2
needle	4	bedbug	1
snake flies	4	big mosquito	1
snake guarder	4	big mosquitoes	1
snake master	4	bull bats	1
snake spindle	4	bull haver	1
galli nipper	3	chulabama	1
girl nipper	3	covered up her ears	1
skeeter	3	dobson fly	1
bottlefly	2	dragon flies	1
busy bug	2	flea	1
darning bug	2	flies	1
darning fly	2	gadfly	1
devil riding horse	2	gally nipper	1
devil's bug	2	girlie nipper	1
devils' horse	2	girlie nippers	1
devil's horses	2	granddaddies	1
devil's knitting needle	2	guinea fowl	1
devil's needles	2	harmony birds	1
humming bird	1	schlange heeder	1

[Table 2.2 long description.](#)

b

Name	Number of uses	Name	Number of uses
humming birds	1	sew up your ears	1
July flies	1	sew up your eyes	1
July fly	1	shite poke	1
June bugs	1	sing-gaily	1
Katydid	1	snake tender	1
locust	1	snake tenders	1
mosquito hood	1	snake waiters	1
n*****s	1	spider	1
n*****s call them	1	spidle	1
quail	1	spinners	1
sand flies	1	they catch skeeter	1
sand fly gnat	1	yard flies	1
schlange geeder	1		

[Table 2.2b long description.](#)

Besides the common terms at the top of the list, we see that there are lots of names that only occur once (forty-five of them) or twice (thirty-eight of them). There are, in fact, 119 different entries in the list! If we take out the thirty plural forms, we still have seventy-nine different names. If we take out some entries that we think might be names of other insects or otherwise inappropriate answers, call it fifteen more entries, we still have sixty-four different names. This number is wildly higher than anybody might have thought from their own personal experience.

If we chart all the different names, sorted by frequency, the survey always shows us the same picture (see [Figure 2.3](#)).

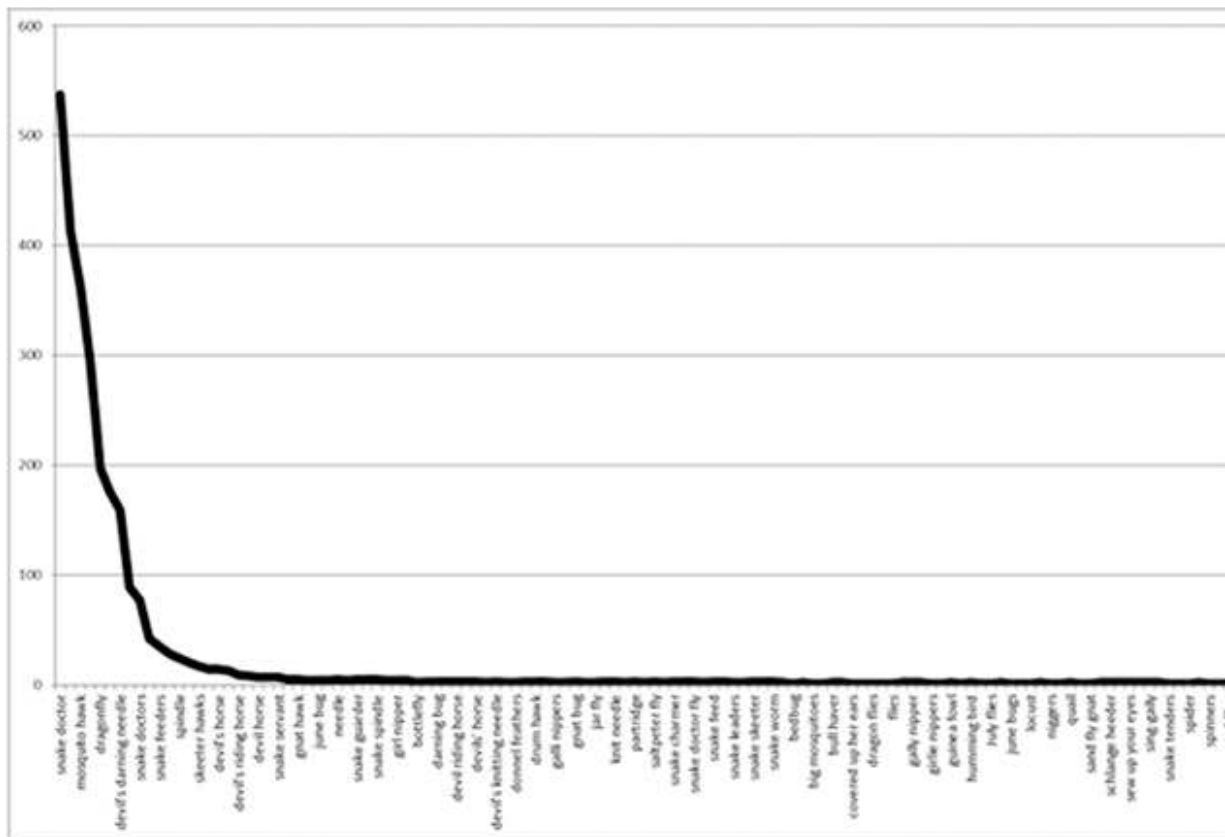


Figure 2.3 A-curve for *dragonfly* variants.

The curve always looks about the same for all the items in the survey, with a few forms at the left that occur frequently, a few more forms at the bend of the curve that occur fairly often, and a great many forms in the long tail of the curve that rarely occur. The technical name for this kind of curve is an asymptotic hyperbolic curve, but we will use a shorter name than that, **A-curve**. What about the list of forms after we take out the plurals and inappropriate responses? It looks pretty much the same ([Figure 2.4](#)):

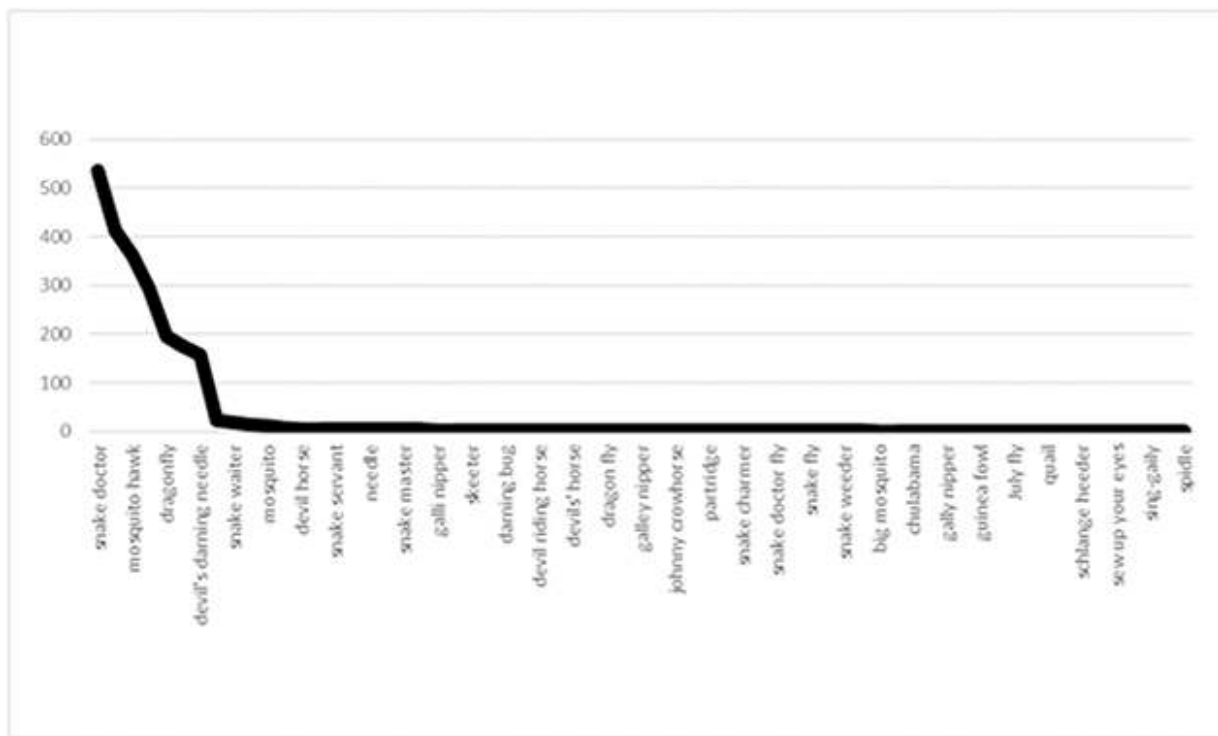


Figure 2.4 A-curve for *dragonfly* variants, after removing plurals and inappropriate responses.

The A-curve for the reduced set of sixty-four entries also has a few entries that occur frequently, some that occur fairly often, and a great many that hardly ever occur. The **frequency profile** of the different names for a dragonfly, or the variation observed for other items in the survey, is thus very robust since you can leave out numerous questionable entries and still see the same picture.

The frequency profile, shaped as an A-curve, is evidence of what has happened after the operation of the complex system of speech, after feedback has led to reinforcement of speakers' choices. The components are all the different words for "dragonfly." The activity in the system is people talking to each other in conversations that include dragonflies, and as they do so they use the different terms for the insect. It is easy for people to introduce a new term for a dragonfly, and people do that all the time. However, people do use some terms much more often than others in their conversations, and these are the terms in the top ranks of the A-curve. Is there some reason that *snake doctor* is a better term for "dragonfly" than *mosquito hawk*, or than *dragonfly* itself? No, it just emerged that people used *snake doctor* more often, as a result of feedback as people heard what other people said, which reinforced the frequency of the term. Sometimes we use the same term (for a dragonfly or for any other object) that other people use. Sometimes we use our own term. All of the activity and feedback in the complex system always produces an A-curve, whether for different terms for something, or in different pronunciations of a word, or in different ways of putting words together. While it is not predictable *which* term for an object will emerge as the one most often used in a population of speakers, we know that the frequency profile of all the terms that people used will be shaped like an A-curve.

What's more, the same picture appears when we look at different subgroups in the survey data. To be clear, in [Figure 2.5](#) we are looking at exactly the same data as we saw in the listing for all speakers, now just broken up into subgroups. Here we see the top ten different forms and the frequency profile for the whole list of forms for just the men in the survey, and for just the women in the survey.

Men (803; 81 different entries)

snake doctor	355
snake feeder	317
darning needle	210
mosquito hawk	203
devil's darning needle	118
dragonfly	116
skeeter hawk	112
spindle	23
snake waiter	18
devil's horse	8

Women (359; 47 different entries)

snake doctor	181
mosquito hawk	157
snake feeder	96
darning needle	84
dragonfly	80
skeeter hawk	63
devil's darning needle	40
mosquito	6
devil's riding horse	6
devil's horse	5

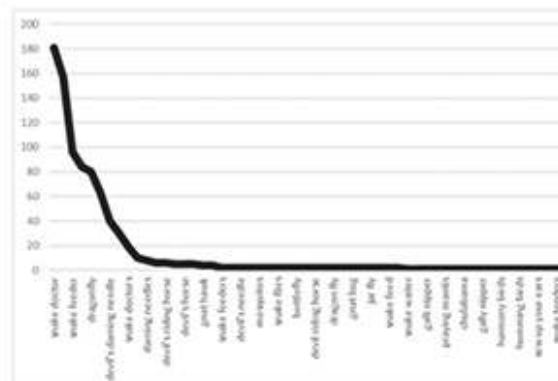
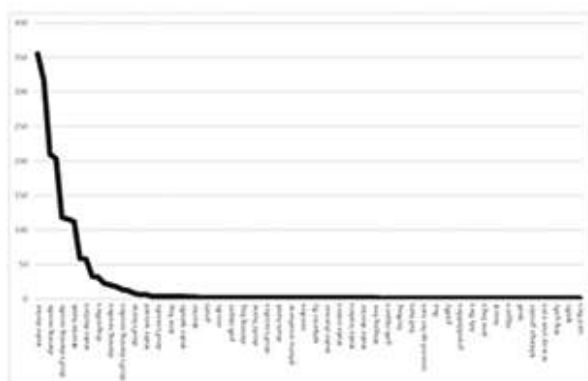


Figure 2.5 *dragonfly* variants just for men, and just for women.

There were 803 men in the survey and only 359 women, and we see that the men had eighty-one different entries for *dragonfly* and the women had only forty-seven different entries, yet the A-curve appears for both groups. Moreover, we see that, while most of the top ten different names are the same, the men have *spindle* and *snake waiter* that the women do not have, and the women have *mosquito* and *devil's riding horse* that the men do not have. In fact, people of both sexes used these forms, just not in the top ten. The forms that men and women both have in the top ten occur in a different order. *Snake doctor* is the most common form for both, but women use *mosquito hawk* more than the men and they use *devil's darning needle* less. This difference in order in the frequency profiles is what can make us think that men and women talk differently. They do so, however, within the same frequency framework, always an A-curve.

We see the same thing if we compare subgroups for three different regional groupings of speakers: New York, New Jersey, and Pennsylvania in the North; West Virginia, Maryland, Delaware, the District of Columbia, and Virginia in the middle; and North Carolina, South Carolina, Georgia, and Florida in the South (Figure 2.6). The A-curve is apparent below each list. Again, we see that most of the entries in the top ten lists overlap, and that the order of the entries is different. Six entries are on all of the lists – *darning needle*, *snake feeder*, *devil's darning needle*, *dragonfly*, *snake doctor*, and *mosquito hawk* – but in a different order each time. The other entries, like

skeeter hawk or *spindle* , would be found further down on all the lists if not in the top ten. Again, the order of the lists, how often speakers in the group use each name even though all the groups use it, is what allows us to think that speech is different in each of these areas.

<u>North</u>		<u>Middle</u>		<u>South</u>	
darning needle	288	snake doctor	321	mosquito hawk	276
snake feeder	170	snake feeder	164	skeeter hawk	131
devil's darning	118	mosquito hawk	76	snake doctor	124
needle		skeeter hawk	42	snake feeder	79
dragonfly	112	devil's darning	36	dragonfly	60
snake doctor	91	needle		mosquito	12
spindle	23	dragonfly	24	devil's horse	11
mosquito hawk	8	snake waiter	17	devil horse	6
snake servant	6	devil's riding	8	darning needle	4
devil's needle	4	horse		devil's darning	4
needle	4	gnat hawk	4	needle	
		darning needle	2		

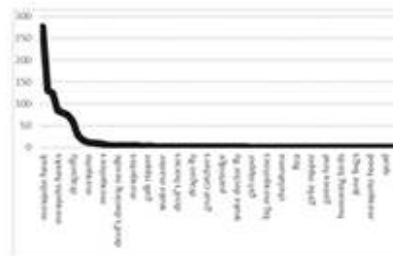
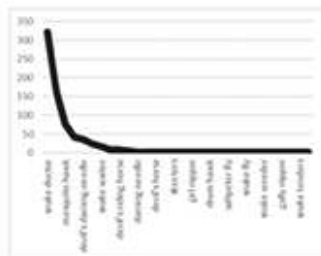
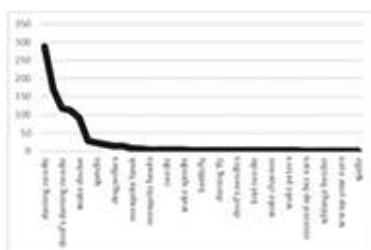


Figure 2.6 *dragonfly* variants for regional groups of speakers.

Let us look at one more set of subgroups, this time by age (Figure 2.7). The youngest group of speakers includes people up to forty-nine years old. The second group includes speakers between fifty and seventy-nine years of age. The last group has people between eighty and one hundred years old.

<u>Youngest (up to 49)</u>		<u>Middle (50-79)</u>		<u>Oldest (80-100)</u>	
snake doctor	126	snake doctor	339	snake doctor	71
snake feeder	114	mosquito hawk	241	snake feeder	70
mosquito hawk	71	snake feeder	229	darning needle	66
darning needle	50	darning needle	178	mosquito hawk	48
dragonfly	50	dragonfly	120	skeeter hawk	34
skeeter hawk	26	skeeter hawk	115	devil's darning	34
devil's darning	24	devil's darning	100	needle	
needle		needle		dragonfly	24
snake waiter	8	spindle	13	spindle	8
spindle	2	devil's horse	11	mosquito	7
mosquito	2	devil's riding horse	8	snake waiter	6

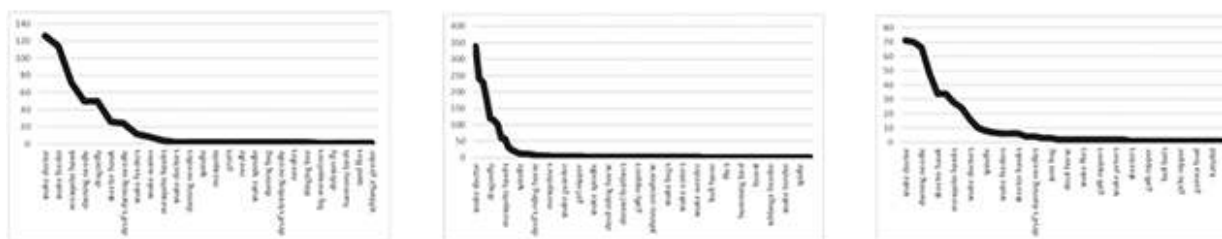


Figure 2.7 *dragonfly* variants for groups of speakers by age.

Again, the A-curve appears every time. For these groups, *snake doctor* is always the most common form, but after that the shared forms are in different orders in the frequency profiles. The same basic pattern occurs in the tallies for each group, whether overall or the smaller groups: there are a few words at the top that are very common, but the numbers pretty quickly decline to much smaller numbers. The constant presence of the A-curve pattern shows the characteristic **scaling** behavior (also known as **scale-free** behavior, in the same strange way that *flammable* and *inflammable* mean the same thing) that occurs in complex systems, where the A-curve pattern is repeated over and over in every subgroup of the data as well as in the data set overall. The A-curve and scaling properties that we see in speech match what is known in mathematics as a pattern with **self-similarity**. Fractal mathematics with self-similarity was named by mathematician Benoit Mandelbrot (e.g. 1982), and it works better than the mathematics we are usually taught (whether calculus or statistics) for many aspects of the natural world, including language. As the Fractal Foundation says,

A **fractal** is a never-ending pattern. Fractals are infinitely complex patterns that are self-similar across different scales. They are created by repeating a simple process over and over in an ongoing feedback loop Geometrically, they exist in between our familiar dimensions. Fractal patterns are extremely familiar, since nature is full of fractals. For instance: trees, rivers, coastlines, mountains, clouds, seashells, hurricanes, etc.

(<https://fractalfoundation.org/resources/what-are-fractals/>, viewed January 7, 2025).

The A-curve and the scaling properties of language are the best signs that language is self-similar as it arises from a complex system of interactions.

We can illustrate the notion of scale in economics. We all know that there are different markets at different levels of scale. In your neighborhood you can buy essential items (in America often at a “ convenience store ”), but you can also go a bit further away and participate in the town market to buy things at a large grocery store, or at a general-purpose “ big box store ” (e.g., Walmart in America) or one that may specialize in electronics or products for pets. Prices in the bigger stores are likely to be lower. If what you need is more specialized or exotic than what you can get in town (like your favorite imported mustard or a specialized repair service), you may have to go to the big city, which supports markets in exotic foods and special services. Thus markets organize themselves, everywhere, into different levels of scale. So it is, too, for language in use. It is possible to document characteristic uses of language by very small groups who are interested in the same activity, each known as a **community of practice** (that is, a group of people who “ share a concern or a passion for something they do and learn how to do it better as they interact regularly, ” as described in Wenger-Trayner (2015); see [Chapter 10](#)), and by larger groups of speakers who live in the same town or interact in the same social group, up through the national level of scale at which we can distinguish American English from British and other world varieties of English.

The idea of scale thus solves the problem of how we can have a national language variety at the same time that we can recognize regional and social varieties in the same population. It cannot be the case that speakers, or buyers, are uniquely associated with their smallest level of interaction. If you could only talk like your associates in a community of practice, how could you make yourself understood in wider communities or nationally? Speakers, and buyers, naturally participate at different levels of scale, as well as in different regional and social groups, by manipulating their choices among the same sets of variants for linguistic features. As for regions, a Southern American consumer can buy “ grits ” (a cornmeal product enjoyed for breakfast) at every level of scale, one or two kinds in the convenience store, additional kinds in the town grocery store, and fancy coarse-ground grits only in the big-city or online in the national marketplace. If the Southerner leaves her region, say to go to the North, she may find no grits at all in convenience stores, perhaps one or two kinds in a local grocery store, and more kinds in the big city, and she would have to go online to get her favorite coarse-ground variety. It goes without saying that the same is true for language in different regions. Regions and social groups, Zelinsky ’ s cultural slices, are relatively different between themselves, as well as being different within themselves by levels of scale. Speakers of a language can recognize and must negotiate levels of scale as well as differences they perceive between regional and social groups in language use.

Consequences of Emergence

There is always much more variation than we might have thought in a population of speakers, but usually we get things right because the ever-present A-curve in the frequency profiles of the variants offers us a huge perceptual advantage for what people usually say ([Figure 2.8](#)). Top-ranked words for a particular situation, the things that people normally say, are massively more likely than all the other possible things. Language is *flexible* because we can accommodate a great many possibilities in the long tail of the curve when we choose to use them, but language is *understandable* because we usually do not take advantage of the flexibility.

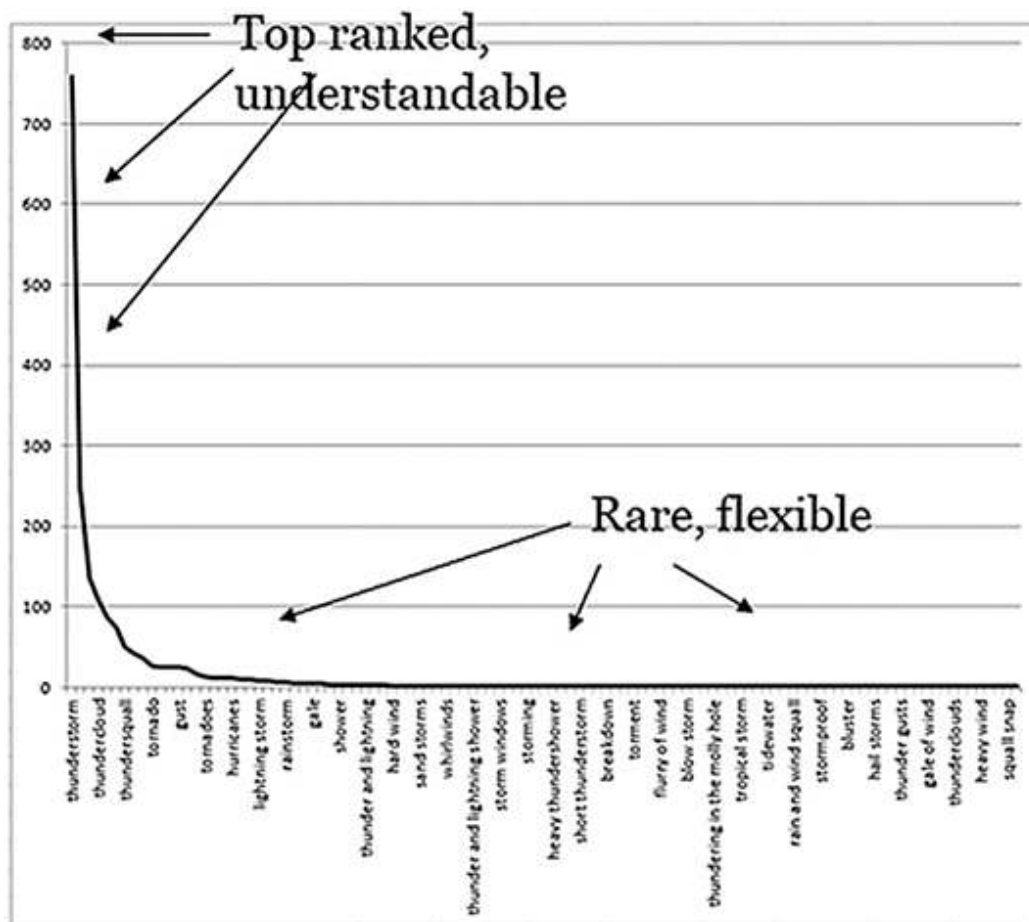


Figure 2.8 Flexible and understandable.

[Figure 2.8 long description.](#)

The A-curve frequency profile is thus not only a curious effect of a complex system but something functional, something that makes language work for us in every population of speakers. Wide variation in the components of speech, as processed in the activity of speakers with feedback and reinforcement, lets us understand each other and also express our individuality in American English – and in every other human language.

Perhaps the first person ever to notice this nonlinear frequency profile in speech was George Zipf, a mid-twentieth-century Harvard professor. **Zipf's Law**, so-called, says that if you count the frequency of words in any large text and then put the frequencies in descending order, there is an inverse relationship between each frequency and its rank in the order, roughly $P = 1/r$ where P is the frequency and r is the rank (see Kretzschmar 2009 : 190 – 198 for more information on Zipf's Law). So, in concrete terms, the second-ranked variant in a list will be half as common as the first one ($P = 1/2$), and the third-ranked variant will be one third as common as the first ($P = 1/3$), and so on. This formula yields a nonlinear plot of frequency and rank, what we have talked about in this chapter as the A-curve. **Nonlinear** just means 'curved,' like the A-curve, rather than straight. An A-curve, however, is not just any old curve: as it happens, if both axes of an A-curve chart use logarithms instead of simple counts of the data, the chart produces a straight line rather than the sharp curve. This is the special property of an A-curve, what makes the term *nonlinear* especially interesting for our study of language. Zipf's Law, however, is not a "law" in the same way that physics has natural laws. Zipf's formula produces a curve that follows the **80/20 Rule**, also called the Pareto Principle after an Italian economist who had noticed that 80 percent of the land in Italy was owned by 20 percent of the people. In speech, the 80/20 Rule predicts that 80 percent of the **tokens** (that is, the terms or other linguistic features that people actually say) come from 20 percent of the **types** (that is, the list of all the terms or features that people could say). However, when we count tokens and types in speech, we get a range of proportions, sometimes 90/10, sometimes 70/30. In every case there is a big quantitative difference between the one or a few terms/features at the top of the A-curve and the many terms/features that do not occur

very often in what is called the long tail (or fat tail) of the curve. Zipf ' s curve, then, is less a precise formula for a law and more like a guideline. Thus the A-curve: it avoids unnecessary implications of formulas and laws from Zipf while showing the characteristic quantitative difference in the frequency of terms/features as a nonlinear curve.

The complex system of language may actually work in a way that is not precise and rule-based but, ironically, the A-curve also creates our universal perception that language is structured. Grammar is a perceptual consequence of the complex system of speech, not a description of it. It is highly likely that the A-curve distributional pattern gave rise to the idea of grammar in the first place, because speakers of any language perceive that, for any question about how to put words together, there will be one or a few constructions that occur a great majority of the time, at the top of the A-curve. The idea that there is a fixed objective language hierarchy, a linguistic system, originates as an **observational artifact** , something that we just *perceive* to be there because we usually do one of just a few things. The problem with traditional grammar is the assumption that there is only one grammar for a language. Instead, we should think of grammar as derived from what we say and write, and think that there is a somewhat different grammar for every situation in which we say or write something.

The existence of complex systems in our cultural interactions allows us to be diverse, and at the same time allows us still to show ourselves through our behavioral choices to be members of our regions and groups at every level. Complexity science thus describes the process by which we perceive our language behavior to be associated with our communities and practices; it is the underlying process for the creation of what we call language varieties or dialects. Complex systems, therefore, offers a model that can explain the multidimensional layering of cultural regions and groups described by Zelinsky. The complex systems approach accommodates the decisions that speakers make about their language in every kind of conversation and situation for writing. Complex systems allow us to recognize and honor the linguistic and cultural decisions that every individual has to make, and at the same time to understand how such decisions result in local and larger cultural patterns.

Summary

Complexity science provides an effective scientific model for how economic markets work and also for how language varieties work. Speakers of a language have frequency profiles for the variants they can use for any feature, like names for *dragonfly* . Every group of speakers has an A-curve in the frequency of variants, and different groups have different orders for the variants on their A-curves. This previously unsuspected frequency characteristic of language accounts for why we perceive grammar in language.

Key Terms

80/20 Rule

A-curve

activity

agents

community of practice

complex systems

complexity science

components

contingency

emergence

exchange

feedback

fractal
frequency profile
invisible hand
Newtonian mechanics
nonlinear
observational artifact
paradigmatic structure
reductionism
reinforcement
scale-free
scaling
self-organization
self-similarity
syntagmatic structure
three body problem
tokens
types
Zipf ' s Law

Audio Samples

These audio samples (available at www.cambridge.org/williamakretzschmar) all come from American speakers from the Southern states. When you listen to them, imagine that you are hearing their words and pronunciations according to the model of a complex system: they can all use the same variants, but use them at different rates. They are all talking about their families.

a2.1 Speaker from Tennessee (LAGS 025)

a2.2 Speaker from Alabama (LAGS 387)

a2.3 Speaker from Texas (LAGS 847)

Exercises

1. How many different words do *you* know for a dragonfly? These days, you may be more familiar with different names for soft drinks, or for athletic shoes, or for sandwiches the come in long buns. Choose three different items, and list the variants you have heard (you can ask friends what they know, too).
2. People say that men talk differently from women, but can you name any specific differences? Perhaps how many colors they know? Are such differences associated with particular settings for conversations (like locker rooms or kitchens)? Do you think men and women mostly know the same words, but use some of them at different frequencies?

3. How does the principle of understandable high-frequency words vs. flexible low-frequency words play out in communities of practice? What about health-related words that doctors use as opposed to words their patients use? What about game-related words that people who play video games use that might be used much less by people who do not play? Can you think of other communities of practice who use some words at higher frequencies than people outside the community of practice do?

Computer Exercises

Exercise App3.2 in [Appendix 3](#) goes well with this chapter. It asks users to tally and chart the number of occurrences of each response type from three different items, in order to test the hypothesis that all of the charts will show an A-curve.

Further Reading

Mandelbrot, Benoit. [1977](#) . *Fractals: Form, Chance, and Dimension* , and [1982](#) . *The Fractal Geometry of Nature*. San Francisco: Freeman. These are the foundational books for the idea of fractals. There is lots of mathematics in them – nonlinear mathematics, at that – but the graphic designs are fascinating. The American public TV program called *Nova* produced a program on fractals called “ Fractals: The Hidden Dimension, ” available on YouTube. It has interviews with Mandelbrot.

Mitchell , Melanie . 2009 . *Complexity: A Guided Tour* . Oxford : Oxford University Press .

This book provides a thorough introduction to complexity theory, including its history and its application to the physical sciences. Mitchell illustrates her examples, making more detailed points about complex systems accessible.

Kretzschmar , William A. , Jr. 2009 . *The Linguistics of Speech* . Cambridge : Cambridge University Press , and 2015 . *Language and Complex Systems* . Cambridge : Cambridge University Press .

Burkette , Allison , and William A . Kretzschmar , Jr. 2018 . *Exploring Linguistic Science* . Cambridge : Cambridge University Press .

These books provide the foundational information about A-curves and the Linguistic Atlas Project. They can be challenging – especially [Chapter 6](#) in the 2009 book, which introduces complexity and dimensionality. The 2015 book applies complexity science to many subfields within linguistics. The 2018 book is an introductory textbook, both for complexity science and for linguistics. Kretzschmar, William A., Jr., Virginia McDavid, Theodore Lerud, and Ellen Johnson. [1993](#) . *The Handbook of the Linguistic Atlas of the Middle and South Atlantic States* . Chicago: University of Chicago Press.

The *Handbook* gives all the information you need about how the Linguistic Atlas of the Middle and South Atlantic States survey was conducted and who its speakers are.

Zipf , George . 1949 . *Human Behavior and the Principle of Least Effort* . Cambridge, MA : Addison Wesley . While Zipf was brilliant he was also a difficult person. He applied a principle of “ least effort ” based on his law to many things in society, and a number of these connections were more imaginative than substantial. As Bernard Mandelbrot wrote of Zipf ’ s [1949](#) book (Mandelbrot [1982](#) : 403),

It is one of those books ... in which flashes of genius, projected in many directions, are nearly overwhelmed by a gangue of wild notions and extravagance. On the one hand, it deals with the shape of sexual organs and justifies the Anschluss of Austria into Germany because it improved the fit of a mathematical formula. On the other hand, it is filled with figures and tables that hammer away ceaselessly at the empirical law that, in social science statistics, the best combination of mathematical convenience and empirical fit is often given by a scaling probability distribution.

3

Old World Origins for American English



In This Chapter

American English is part of a historical process. Within its own time, American English can be divided into periods that correspond to important stages in its development. Before that time, we begin with the ancient history of language and then move on to the beginnings of English. The chapter ends as American English begins, in the first years of the seventeenth century.

Timeline

449

Hengest and Horsa come to Britain: English begins.

1066

Norman invasion of Britain.

1400

Death of Chaucer.

1492

Columbus lands on several Caribbean islands.

1540

De Soto explores the South as far as the Mississippi River (1543).

1579

Drake claims New Albion (continent north of Mexico, at the Pacific).

1585

Roanoke colony founded.

1609

Hudson discovers Hudson River.

1616

Death of Shakespeare.

American English did not suddenly appear on July 4, 1776, as a new and fully developed variety of the language. It belongs to a process of change in the language that began over a millennium earlier and continues to this day. Still, American English could not exist before settlement of the New World, and so any account of the development of American English must mark a beginning at the time of the first permanent English settlements in North America. After that time different American voices began to take their own direction, which was different from the direction of linguistic change for English speakers in England and other places. The next chapters will trace the development of American English voices. First, in this chapter, we need to know about English before American settlement: where English came from, what it was like until the point that American voices began to branch off, and what circumstances influenced the branching process. In each of the following four chapters, we will consider one of the four major divisions in the development of American voices: the **Colonial Period** (beginnings to 1800), the **National Period** (1800 – 1865), the **Gilded Age to World War II** (1866 – 1945), and the **Information Age** (1945 – present). These periods are to some extent arbitrary divisions in the continuous history of the English language in America, and yet they do correspond to important cultural developments. The Colonial Period corresponds to the time when new North American settlements by English speakers retained their political and social focus on the British Isles, and therefore ends with the separation of political and social affairs in the American colonies from reliance on Old World culture. The National Period focuses on the creation of an American national culture, characterized by westward expansion across the eastern half of the continent and the creation along the way of regional cultural patterns. Regional differences culminated in the Civil War (1860 – 1865). The driving of the Golden Spike in 1869 marks the beginning of a new period, the Gilded Age. When the Union Pacific and Central Pacific railroads were joined, it also marked the connection between the West and the East (and other regions as well) that truly made the United States one nation. At the same time, the fact that the connection was made by an emerging industrial technology in transportation – railroads – marks the time when the American nation grew to become a world power, as shown by its involvement in World War II. The final division, the Information Age, builds on the foundations laid down in the earlier periods but is itself culturally distinct, characterized by new social and cultural patterns as new technologies like radio, TV, and computing accelerated the pace of communication across the country. These periods do not march towards some definite conclusion for the English language, whether in America or worldwide – it would be pretty conceited of us now to think that hundreds of years of American voices existed solely to produce our contemporary version of American English. To mark different periods in the history of American voices, including our own time, just helps to organize the facts of continuous change in the language into more manageable portions.

Ancient History

The English language is historically related to a family of languages called **Indo-European**. Nobody knows exactly where or when the actual people lived who spoke the first form of Indo-European, perhaps 6000 years ago, now reconstructed (there are no written records from that far back) as Proto-Indo-European. Written records from the Indo-European family go back as far as about 2000 BC, by which time the earlier Indo-European language had already begun to branch into what have become its main constituent language groups: Indian, Iranian, Armenian, Hellenic, Albanian, Italic, Balto-Slavic, Germanic, Celtic, Hittite, and Tocharian. Many of these groups in turn branched and rebranched into languages familiar in the modern era; some, Hittite and Tocharian, became dead languages when they no longer had living communities of speakers. To consider an example of what happens as groups continue to grow and change, the Italic group includes Latin (now no longer spoken by any living community but still taught as a historical language), which in turn developed into Romance languages such as Italian, French, Spanish, and others. Indo-European was not itself the first or only language spoken in early human cultures. Our earliest records of a written language, Sumerian, survive from about 3000 BC, for example, and Sumerian is not a member of the Indo-European family.

The next branch towards English from Indo-European is the **Germanic** languages, which arose in the northwestern part of the Indo-European area. The beginnings of the Germanic languages are still too old for there to be any written records. The various branches of the Indo-European language family, including Germanic, emerged and became distinct as a result of differential language change as people moved to settle new areas. That is, when groups of Indo-Europeans moved away from their original homeland, the members within each group would talk more to each other than they could talk to members of other groups. As the complex systems model predicts, such interaction allowed the emergence of different habits of speech in each of the groups. The central fact of language change is that new speech habits are always emerging, sometimes consciously but most times not through any deliberate intention; it happened for the Indo-Europeans and their descendants, and it is still happening today. These emerging habits tend to follow the residential and other cultural

groups to which people belong, then and now. The Germanic branch of Indo-European developed in just this way as the generations passed among the ethnically Indo-European people who settled the northwest. The same thing happened to Indo-Europeans who settled in other areas. The language habits of the Indo-European people who lived south of the Germanic group became Celtic, again with the passage of great stretches of time, and the language habits of the Indo-European people who lived east of the Germanic group in time became Balto-Slavic. As we saw in [Chapter 2](#), the regularities emerge from the operation of the complex system of language, in which there is room for a great many choices for words and sounds and in which, at the same time, speakers do tend to make similar choices.

The detective work in dictionaries and grammars that we call historical Indo-European linguistics had its great age of discovery only in the nineteenth century, and work continues today to unravel what must have happened to create the range of language branches and language habits existing today in the Indo-European region – and in all of the places to which Indo-European languages have been carried around the world. Most of this work attempts to explain the *differences* between language groups and languages, to make the branches of the Indo-European tree appear more separate and distinct, because people perceive that modern languages are separate and distinct (as discussed in [Chapters 1](#) and [2](#)).

Germanic is at the lower left of [Figure 3.1](#). Can you find English? It is important to keep in mind, however, that all of these groups and languages are still historically related to Indo-European and to each other. The language habits of the Germanic group are not entirely different from those of the Celtic group or the Balto-Slavic group. If they were, nobody could tell that these language groups were historically related to each other. The same is true for modern languages. There are systematic differences between them, to be sure, but there are also many similarities that testify to the connections between languages within branches and to the connections between branches within the Indo-European family. Consideration of the *similarities* and *connectedness* (as opposed to differences) focuses attention on the **linguistic continuum** within the Indo-European territory. Both then and now, people who live near to each other tend to be able to understand each other, as they must in order to carry on their daily affairs with each other. National boundaries even today most often do not prevent neighbors from talking to each other, and talking more like each other than might be predicted from their respective national languages as taught in schools or printed in books. For example, people who live in Alsace (today all in France) are part of a linguistic continuum which has, at different times, belonged to France or belonged to Germany. The line in [Figure 3.2](#) through the middle of Alsace shows where the German border was at the turn of the twentieth century. The historical development of the Indo-European languages was no different: near neighbors talked to each other, and the differences between particular daughter languages, and by extension the major Indo-European language branches, can be observed to emerge by historical linguists only as a function of the distance between the people who spoke them – we see the branches more clearly when we consider languages as they are spoken in their heartlands or capitals, not along the borders of the territories or countries in which they are spoken.

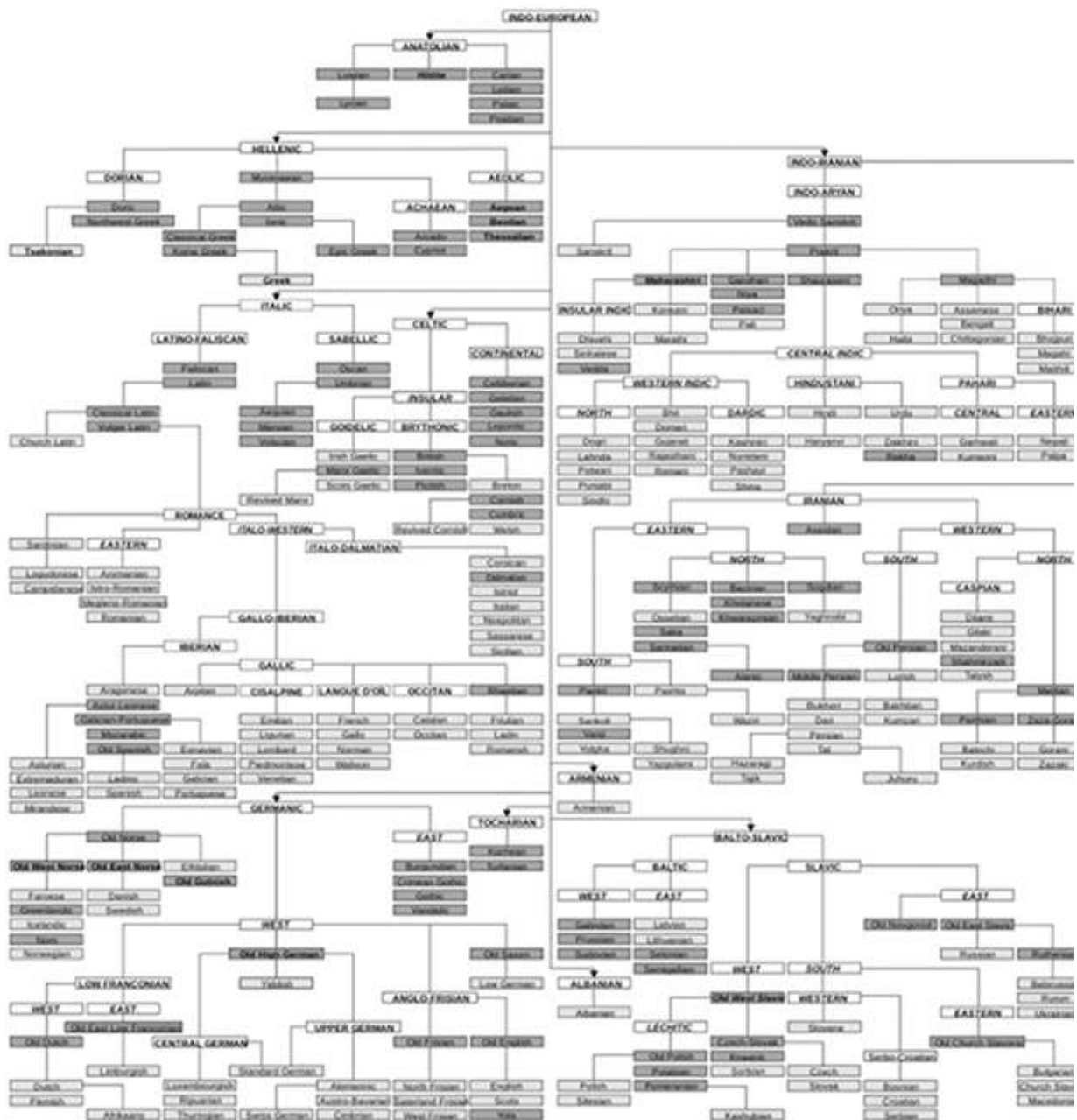


Figure 3.1 Indo-European tree of languages.

[Figure 3.1 long description.](#)

Source: Kretschmar, William A. Jr. 2018. *The Emergence and Development of English*. Cambridge: Cambridge University Press.

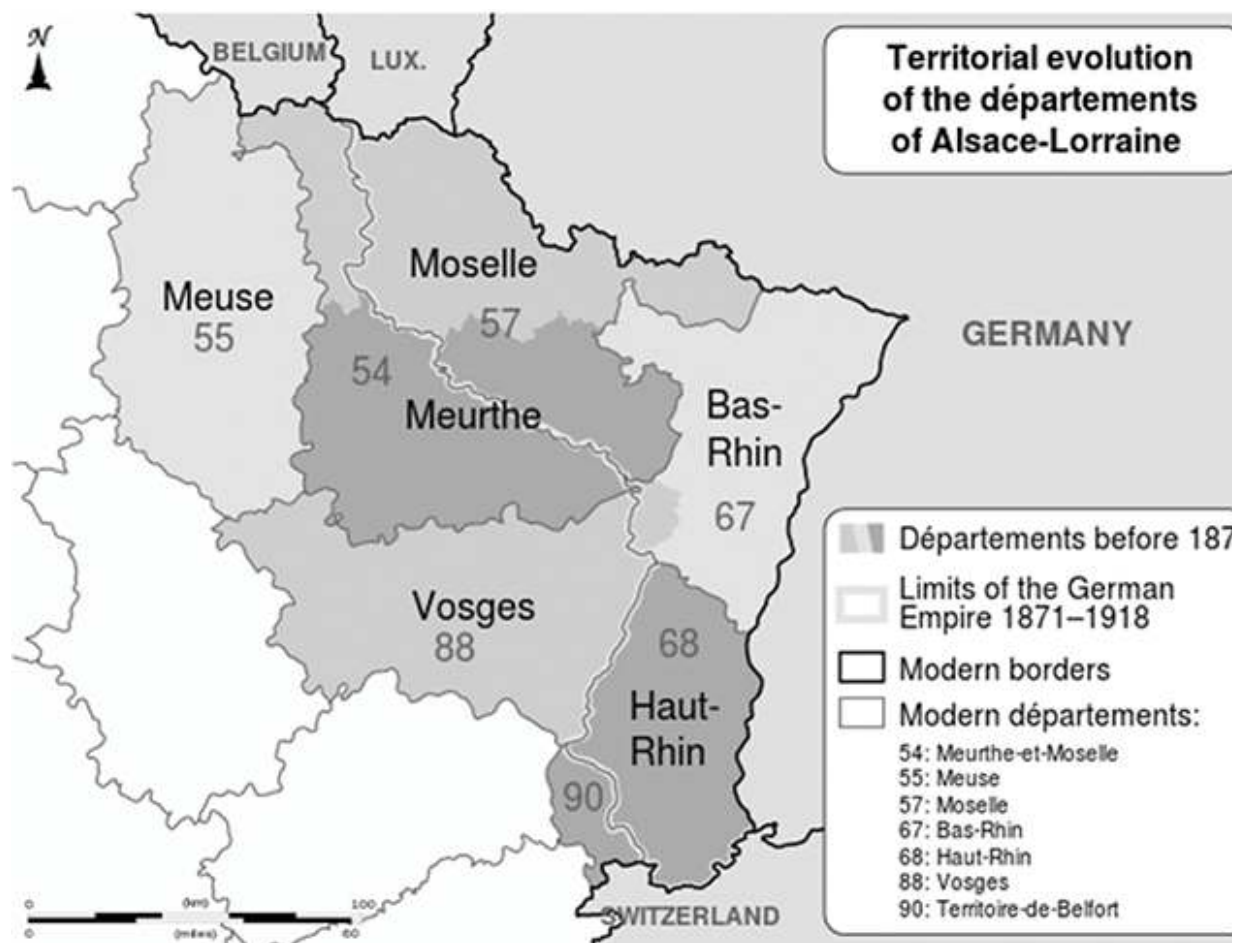


Figure 3.2 Alsace and Germany.

[Figure 3.2 long description.](#)

Source: Owen Blacker. 2011. 'Alsace Lorraine departments evolution map-en.svg'. Wikimedia Commons.

The idea of the linguistic continuum is a great match for the A-curve introduced in [Chapter 2](#), because the differences between heartlands and borders can be tracked in the frequency profiles: features that were rare in one place can become high frequency in another. So, for example, in Alsace we could count how often people said *Mann* or *Frau* (close to modern German) as opposed to *homme* or *femme* (close to modern French) for 'man, woman,' as a way to follow the continuum from central Germany towards central France. While it is sometimes useful to make binary distinctions, that a language is the same or different as in the Indo-European tree of languages, complexity science can explain the continuum of speech across time and territory that we always see when we observe more closely what people have actually said or written. Knowledge of the existence of a linguistic continuum is important for English because, historically, people who spoke the daughter languages that emerged from Germanic could often communicate with each other better, especially at the edges of their territories, than might be implied by the separate branches that historical linguists often draw for the Germanic family.

Origins of English

Unlike most other languages, English can date its origins with fair precision to about 449 AD. No written records of the language from that time still exist; the earliest written records of English come from about 700 AD. Still, between the **internal history** of the language (reconstruction of regularities in the features of a language, as for Indo-European and Germanic) and its **external history** (the historical record of cultural circumstances that affected the speakers of a language, and thus the conditions for change in the language), modern

observers can build a decent picture of what must have been happening before written records are available as evidence. The history of English is conventionally divided into three periods:

- Old English** 449 AD to 1150 AD
- Middle English** 1150 AD to 1500 AD
- Modern English** 1500 AD to the present

Thus, while the governor of the American state of Georgia once claimed that mountain people in his state spoke “ Old English, ” he was not using the term as we do in this book. These three periods are really just rough divisions in the history of English. Change in the language is continuous, both within the periods and across them. More specific references of the condition of the language often apply the labels “ early ” or “ late ” to the period name, and so Shakespeare ’ s stage of the language is often called **Early Modern English** (usually considered as coming from 1500 AD to 1700 AD). The earliest form of Old English is often called Prehistoric Old English (usually considered as coming from 450 AD to 700 AD). Periods in the history of English do give us specific boundaries in time to talk about, so long as we realize that, like the boundaries for periods in American English, they are arbitrary divisions.

Before the origin of English, the island of Britain was populated by a prehistoric culture that was displaced when members of the Celtic-speaking branch of the Indo-Europeans came to settle there. Much later, Julius Caesar invaded Celtic Britain in 55 BC, and Emperor Claudius conquered the island and made it part of the Roman Empire in 43 AD. Britain thus had roads and cities like the Romans, a literate culture, and new forms of religion (eventually including Christianity). The Romans created defensive walls and garrisons to protect the Romanized citizens from uncivilized Celts (the Welsh in the West, and later the Gaels, in Latin called *Scoti*, in the North) and Picts. Rome fell for the first time in 412 AD, and the disruption caused the Romans to withdraw their garrisons so that the Romanized British were no longer protected from the unRomanized Celts and Picts. The leaders of the British attempted to use the same mercenaries that the Romans had hired for defense, members of Germanic groups from across the North Sea on the continent. Hengest and Horsa were the leaders of these Germanic people, and they settled in Britain in 449 AD on their own isolated territory, the Isle of Thanet in the southeast. They did repel the Picts and Gaels, but then they began their own invasion of all Britain. It took the Germanic invaders nearly two centuries to complete their occupation of Britain, lacking only Scotland, Wales, and Cornwall, where some of the Romanized British sought haven with their ethnic relatives. It used to be thought that the British population was slaughtered by the Germanic invaders, but now there is evidence that many British people remained in England as second-class citizens, without the same rights or value as Germanic residents, as some early Germano-British legal codes show. Unfortunately for the victorious English people, by the end of the eighth century the **Vikings** , North Germanic raiders, had attacked the monastery at Lindisfarne and then the monastery at Monkwearmouth and Jarrow, and continued to attack other parts of Britain and Ireland for centuries. A new Germanic group thus threatened the people of Britain. But as before with the first wave of Germanic invaders, the Vikings eventually came to settle in Britain by about 900 AD, not just raid there, especially in the northeastern part of the island.

The English language is what has developed from the speech of the Germanic mercenaries, so we can say that the date of their arrival, 449 AD, is also the beginning of the English language. The Germanic mercenaries were members of a number of West Germanic groups, Angles, Saxons, Jutes, and Frisians, each certainly with their own speech habits but each able to understand speakers from the other groups. The names *England* and *English* come from the name of one of these groups, the Angles, but actually the Angles were historically no more important than the other groups. English grew more identifiable as something in itself, as something distinct from other West Germanic branches, over time as the various members of the Germanic groups settled most of the island of Britain. The Vikings, too, contributed to the English language, as they interacted from their own settlements in the Northeast of Britain with other Germanic groups.

The **Anglo-Saxon Chronicle** , prepared beginning in the ninth century and maintained for a long time afterwards in some locations, documents the volatile shifts in political power during this time. Here is what it says in the Anglo-Saxon Chronicle for the year 449:

449: Her Martianus 7 Ualentinus onfengon rice. 7 rixadon .vii. winter. 7 on þeora dagum gelaðode Wyrhtgeorn Angel cin hider. 7 hi þa coman on þrim ceolum hider to Brytene. on þam stede Heopwines fleot. Se cyning Wyrhtgeorn gef heom land on suðan eastan ðissum lande. wiððan þe hi sceolon feohton wið Pyhtas. Heo þa fuhton wið Pyhtas. 7 heofdon sige swa hwer swa heo common. Hy ða sendon to Angle, heton sendon mara fultum. 7 heton heom secgan Brytwalana nahtscipe. 7 þes lands cysta. He ða sona sendon hider mare weored þam oðrum to fultume. Pa comon þa men of þrim megðum Germanie. Of Ald Seaxum. of Anglum. of Iotum.

[Here Martianus and Valentinus seized the kingdom, and reigned seven winters. And in their days Vortigern invited the Angles here. And they came here to Britain in three ships, in the harbor called Heopwinesfleet. King Vortigern gave them land in the south-east of this country, on condition that they should fight against the Picts. Then they fought against the Picts, and had the victory wherever they came. They then sent to the Angles, ordered them to send more help, and had them told of the worthlessness of the Britons, and the virtues of the land. Then they soon sent here a larger army as help for the others. Then came men from three tribes in Germany, from the Old Saxons, from the Angles, from the Jutes.]

This passage describes events succinctly, but still includes the political statement that the Angles did fight and win against the Picts and that the British people were worthless. The Anglo-Saxon Chronicle says that the Jutes settled in Kent and Wessex, that the Old Saxons settled in Essex (between Mercia and Kent), Sussex (between Kent and Wessex), and Wessex, and that the Angles settled in Mercia and Northumbria ([Figure 3.3](#)).



Figure 3.3 Early regions in Britain (showing the modern borders for Scotland and Wales).

Source: Kretzschmar, William A., Jr. 2018. *The Emergence and Development of English* . Cambridge: Cambridge University Press.

We know, however, that a mixture of Germanic peoples lived in all of these areas, and that other Germanic groups such as the Frisians also participated in settlement, so that it is not possible to connect any of the four kingdoms exclusively with any Germanic group. Somewhat different varieties of Old English were spoken in these regions, however, owing to the emergence of somewhat different habits among speakers interacting with their neighbors in each one (again as the complex systems model predicts). Most surviving Old English texts, however, come from Wessex, the seat of King Ælfred and the place where manuscripts had a higher chance of survival. As for the language of the passage, it is quite different from Modern English at first glance. The passage has some letters that we no longer use (þ and ð, both used where we would use “ th, ” and 7, a symbol meaning ‘ and ’). But a closer look shows many similar words, like “ winter

” and “ lande, ” or like the verbs “ send ” and “ come ” though these have unfamiliar endings. This is not what the governor of Georgia thought his neighbors in the mountains were speaking! Old English does, however, create the foundations for English as we know it. You can listen to the sound of Old English online (a3.1, with transcripts in a separate file), in other passages from the Anglo-Saxon Chronicle.

When William the Conqueror took the English throne in 1066, it changed the course of emergence for English. William was the Duke of Normandy – of course “ Normandy ” means ‘ land of the North Men, ’ the same Vikings who had settled that region of France about the same time they were settling north-eastern Britain – and thus William had his Norse heritage in common with many Englishmen. But change did come because William, as a conqueror and not merely a successor, exchanged the nobility of the English state, and thus put speakers of Norman French into positions of authority all across Britain. While the common people in England continued to speak English, they now had to contend with an aristocracy who did not speak their language, and the consequence is a massive influx of French words into English. The Middle English period also saw the formation of English sentence patterns much more similar to Modern English. The most familiar Middle English author is from the end of the fourteenth century, Geoffrey **Chaucer** , who died in 1400. Here is the beginning of the General Prologue to *Canterbury Tales* , Chaucer ’ s most famous work.

Whan that Aprille with his shoures soote [
,
gentle, sweet
,
]

The droghte of March hath perced to the roote,
And bathed every veyne in swich licour
Of which vertu engendred is the flour;

...

Thanne longen folk to goon on pilgrimages,

And palmeres [
,
pilgrims
,
] for to seken straunge strondes

To ferne halwes, kowthe [
,
known
,
] in sondry londes;

And specially from every shires ende

Of Engelond to Caunterbury they wende [
,
go
,

]

The holy blisful martir for to seke,
That hem hath holpen whan that they were seeke.

A few of the words need to be provided with glosses; others may be spelled differently, or take a moment to recognize, like “ halwes ” ‘ hallowes, shrines. ’ Some French loan words are used with meanings we may no longer recognize, like “ licour ” ‘ liquid ’ when Americans use the word mainly for alcoholic drinks. And yet Chaucer ’ s English is not so different from Modern English that we cannot understand it after a little practice. You can listen to the sound of Chaucer ’ s Middle English online (a3.2, with transcripts in a separate file).

The Early Modern period from 1500 to 1700 saw the transition from English as a language of the common people to English as a language for all purposes. In order for this to happen, English acquired words from French and Latin: instead of using the words as parts of French or Latin sentences, these words became part of English sentences. So, for example, whereas law cases in England were conducted in French until 1362, pleadings after that were supposed to be carried out in English. French words became used as English words in legal situations: *justice, equity, jury, judge, plaintiff, defendant, attorney, larceny, torts, bail, parole*, and many others. **Loanwords** , or **borrowings** , are words used in one language, like English, that replicate words used in another language, like French. Of course, French lost nothing when English borrowed its words, and English will not be paying French back: the idea of a loan or of borrowing is a metaphor that describes what people do with features in languages. At the end of the sixteenth century **Shakespeare** made fun of those who mixed up Latin with their English in *Love ’ s Labor ’ s Lost* (V.i). The pedant Holofernes converses with the curate Nathaniel:

Holofernes :

Satis quid sufficit. [Enough is as good as a feast]

Nathaniel :

I praise God for you, sir. Your reasons [discourse] at dinner have been sharp and sententious [meaningful], witty without affection [affectation], audacious without impudency, learned without opinion [dogmatic view], and strange without heresy. I did converse this quondam [former] day with a companion of the king ’ s, who is intituled, nominated, or called, Don Adriano de Armado.

Holofernes :

Novi hominem tanquam te [I know the man as well as I know you]. His humor is lofty, his discourse peremptory [decisive], his tongue filed [polished], his eye ambitious, his gait majestical, and his general behavior vain, ridiculous, and thrasonical [boastful]. He is too picked [refined], too spruce, too affected, too odd, as it were, too peregrinate [foreign in manner], as I may call it.

Nathaniel :

A most singular and choice epithet.

While Nathaniel thinks that Holofernes has used a choice bit of description, another character, Moth, a serving boy, thinks that “ They have been at a great feast of languages, and stol ’ n the scraps. ” Holofernes and Nathaniel are “ book-men ” and mix their languages, mainly Latin with English, and Shakespeare pillories them throughout the play by having common people comment on their speech, as Moth here, or elsewhere Dull, a constable.

Words also entered English from other languages, and that often happened because the Early Modern period is when England and its navy began to engage with the rest of the world. In perhaps the most notable engagement of the period, the English defeated the Spanish Armada in 1588 and, besides repelling a Spanish invasion, signaled that England would be a player on the high seas. A decade earlier Sir Francis Drake had sailed all the way around the world, an expedition that was supposed to attack Spanish possessions in the New World, and had claimed New Albion, the North American continent north of Mexico. Henry Hudson found the Hudson River in 1609. Of course Christopher Columbus had traveled to the Americas in 1492, and the Spanish had explored much of Central America and southern North America in the early sixteenth century. The English were not the first to get to North America, but they eventually established long-lasting colonies there, as we shall see in the [next chapter](#) .

Great Vowel Shift

Perhaps the greatest change in the history of English occurred in the Early Modern Period in English pronunciation, the **Great Vowel Shift** (**GVS**) (see [Figure 3.4](#)), which made the vowels of English differ from those of continental European languages. Between 1400 and 1700, the **long vowels** ([i:, e:, ɛ:, æ:, a:] in the front, and [ɔ:, o:, u:] in the back; the long [e] and long [o] are now diphthongized to [eɪ, oʊ] ; see [Appendix 1](#) for discussion of vowel symbols, diphthongs) were raised in a process of **vowel rotation** . **Raising** just means that a vowel was pronounced at a higher articulatory position than it had been before. The term “ vowel rotation ” suggests that the individual acts of raising tend to raise vowels until they get to the highest position, and then vowels fall along a more centralized track.

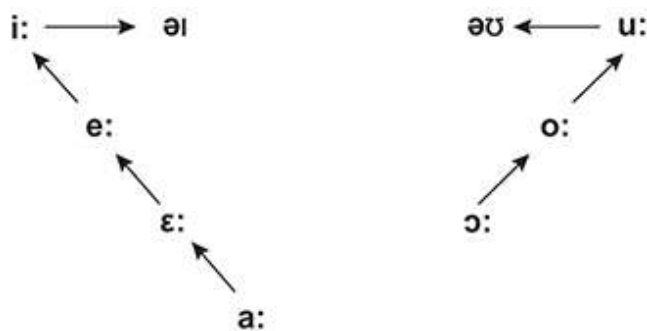


Figure 3.4 Phase 1 of the Great Vowel Shift.

The first step is that the highest long vowels, [i:] in the front and [u:] in the back, both become diphthongs [əɪ , əʊ] with the addition of the central vowel [ə]. To use words as examples, the word *bite* was pronounced [bi:t] in Middle English, but after the first step of the GVS the word was pronounced [b əɪ t]. The word *cow* in Middle English was pronounced [ku:], but after the first step of the GVS the word was pronounced [k əʊ]. Then the next highest vowels in front and back, [e:] and [o:], rise so that they are pronounced [i:] and [u:]. Again in words, in Middle English the word *see* was pronounced [se:], but after this step of the GVS it was pronounced [si:]. And Middle English *food* , pronounced [fo:d], was then pronounced [fu:d] after this step of the GVS. Then the vowels below those: in words, Middle English *meat* [m ɛ :t] became [me:t], and Middle English *boat* [b ɔ :t] became [bo:t]. Finally, Middle English *mate* [ma:t] became [mæ:t]. These changes were complete by about 1600. Next, there was a second phase of the GVS between 1600 and 1700 (see [Figure 3.5](#)).

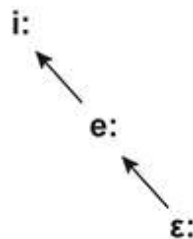


Figure 3.5 Phase 2 of the Great Vowel Shift.

Words that had previously been raised one step, like *meat* and *mate* , were raised one more step in a process called **second raising** , so that *meat* was now pronounced [mi:t], rhyming with *meet* , and *mate* was now pronounced [me:t]. A few words did not change, however: *great* , *break* , *steak* still retain their first phase pronunciations as [gre:t, bre:k, ste:k], rather than the pronunciations we might have predicted from second raising [gri:t, bri:k, sti:k]. Later, the original [i:] vowels, like *bite* that had changed to [b əɪ t], and the original [u:] vowels, like *cow* that had changed to [k əʊ], underwent a small further change to [baɪ t] and [kau] as many speakers would say them today. The remaining words with the [e:] vowel also changed slightly to be pronounced [eɪ], so *mate* [meɪ t] and *great* [greɪ t].

However, the sound change in real life was just not as neat and regular as this. The way that the complex system of speech works, with the emergence of particular habits of pronunciation or word usage in local and regional communities throughout the English-speaking

world, means that these changes occurred at different times – or sometimes not at all – among different regional groups in the British Isles. Indeed, modern dialect survey evidence shows that it is possible to find speakers somewhere in Britain whose pronunciation of particular words today still matches every stage of the GVS. There are longstanding dialect areas in Britain, from Scotland in the North to Land 's End in the Southwest. Top-level generalizations (that is, at the top level of scale in the complex system) like the GVS are still useful so long as we know that they are broad abstractions, and that we can expect linguistic life to be much messier on the ground among actual speech communities. As [Chapter 2](#) has shown us, the top-level frequency profile has other frequency profiles below it at every level of scale, so that regions or cities or even individuals will have their own frequency profiles that are unlikely to match the one at the top level.

One practical consequence of the GVS was its effect on English spelling. The fact that *meet* and *meat* now sound the same but are spelled differently was caused by the second raising step of the GVS. The same is true of *see* and *sea*. *Been* and *bean* sound the same for many speakers in Britain, but not for speakers in America. The pronunciation of English words also differs from the pronunciation of cognate words in European languages because of the GVS: an English *table* [teɪbəl] sounds different from a French *table* [tɑblə]. This is one reason for the many complaints by learners of English about spelling and pronunciation.

We cannot leave this chapter without one more look at Shakespeare (died 1616). Many modern readers have been exposed to his plays or poetry, perhaps to Sonnet 18 (you can listen to this passage online, a3.3):

Shall I compare thee to a summer
,
s day?

Thou art more lovely and more temperate:
Rough winds do shake the darling buds of May,

And summer
,
s lease hath all too short a date:

Sometime too hot the eye of heaven shines
And often is his gold complexion dimmed;
And every fair from fair sometimes declines,

By chance or nature
,
s changing course untrimmed;

But thy eternal summer shall not fade,

Nor lose possession of that fair thou ow
,
st;

Nor shall death brag thou wander
,
st in his shade,

When in eternal lines to time thou grow
,
st.

So long as men can breathe, or eyes can see,
So long lives this, and this gives life to thee.

The language is no longer difficult to understand, and perhaps the worst problem is that spelling disguises the fact that the GVS was not yet complete and Shakespeare's pronunciation is not the same as ours today. There are a few other differences, like the use of *thee/thou* (older forms of the *you* pronoun we use today), and ' *st* endings that we no longer use on verbs. These archaic forms may be familiar to some, however, from Sunday church services. The King James Bible was prepared at this time and also has these forms, and it is still in use in many churches (i.e., at a lower level of scale in the complex system than we expect in national use). More subtle differences in the meanings of words, not the same for Shakespeare as they are for us even though the words are spelled the same, may trip up the incautious reader. C. S. Lewis, in particular, has written wisely about such semantic change over time (1967).

The Old World origins of English, from 449 AD until Shakespeare, provide the source material for American English. We should not expect that one variety of English could cross the Atlantic unchanged to create American English, because there were many varieties of English in the British Isles in Shakespeare's day, as there had been at all times since Old English. This is just what the complex system of language predicts, the scaling property of varieties. So, we can expect that English speakers migrating to the New World – from Scotland or Land's End and all parts in between – will bring a broad collection of words, pronunciations, and grammatical habits with them. Out of those, the new English settlers would create American English as a consequence of their interactions with their neighbors in the new land.

Summary

The English language is part of a long process of development that began with the Indo-Europeans. It emerged from the speech of different Germanic groups who invaded Britain, and continued to emerge somewhat differently in different parts of the island. Borrowings from Latin and Norse began to occur in the Old English period. The Norman Conquest changed the circumstances for linguistic interaction, and English acquired many borrowings from French, as well as more from Latin and Norse. The Great Vowel Shift was a major change in pronunciation. All of these happenings set the stage for the emergence of American English.

Key Terms

Anglo-Saxon Chronicle

borrowing

Chaucer

Colonial Period

C. S. Lewis

Early Modern English

external history

Germanic

Gilded Age to World War II

Great Vowel Shift (GVS)

Indo-European
Information Age
internal history
linguistic continuum
loanword
long vowels
Middle English
Modern English
National Period
Old English
raising
second raising
Shakespeare
Vikings
vowel rotation

Audio Samples

Available at www.cambridge.org/williamakretzschmar.

a3.1 Anglo-Saxon Chronicle (Old English)

a3.2 Chaucer, General Prologue, Canterbury Tales (Middle English)

a3.3 Shakespeare, Sonnet 18 (Early Modern English)

Exercises

1. Listen to the audio samples of Old English (a3.1) (available at www.cambridge.org/williamakretzschmar), and while you do so, write down words that you recognize as still belonging to Modern English. You will find the task much easier if you look at the transcripts of the passages, also online.
2. In the passage from Shakespeare's *Love's Labour's Lost*, many words are glossed. Look up each of those words in the *Oxford English Dictionary* (or another dictionary that gives etymologies) and write down what language they came from. You can skip the Latin passage in the first line – that's not English and will not have any etymology.
3. In the past when you had to read Shakespeare, you may have thought of it as "old English." Now you know it is not – Early Modern English! Sometimes the differences between Shakespeare's English and Modern English sound "poetic," and sometimes that just makes Shakespeare hard to follow. When you read Sonnet 18, which usages do you think are "poetic," and which ones are just hard to follow? There is no correct answer here: do the best you can to talk about particular features of Shakespeare's language and how you interpret them (or find it hard to interpret them) today.

Computer Exercise

[Exercise App3.3 in Appendix 3](#) explores differences by age, to try to observe language change. The apparent time hypothesis from sociolinguistics (see [Chapter 10](#)) suggests that speakers from different age groups will show different stages of a linguistic change.

Further Reading

The ancient history of languages has fascinated many an imagination. See, among many other scholarly offerings, Derek Bickerton, *Language and Species* (Chicago : University of Chicago Press, 1990) ; Mark Kaiser and V. Shevoroshkin, "Nostratic," *Annual Review of Anthropology* 17 (1988), 309 – 329 ; Carl Darling Buck, *A Dictionary of Selected Synonyms in the Principal Indo-European Languages: A Contribution to the History of Ideas* (Chicago : University of Chicago Press, 1949) . Among literary treatments of the subject, notable is William Golding, *The Inheritors* (1963) .

There are numerous editions of the Anglo-Saxon Chronicle, which still exists in nine manuscripts, each one different. The translation prepared by Dorothy Whitelock (*The Anglo-Saxon Chronicle*, ed. and trans. Dorothy Whitelock, David Douglas, and Susie Tucker, New Brunswick, New Jersey : Rutgers University Press, 1961) aligns translations of several of the manuscripts. A recent translation is Michael Swanton, *The Anglo-Saxon Chronicle*, London : Routledge, 1998 .

Malcolm Parkes, *Pause and Effect: Punctuation in the West*, Berkeley : University of California Press, 1993 . This engaging book describes the history of punctuation, something we no longer notice – unless we get it wrong.

Peter Hunter Blair, *An Introduction to Anglo-Saxon England*, 3rd ed., Cambridge : Cambridge University Press, 2003 . The classic account of Anglo-Saxon culture. A compendious resource, over 600 pages and 700 articles, is the *Wiley-Blackwell Encyclopedia of Anglo-Saxon England*, 2nd ed. (Oxford : Wiley-Blackwell, 2013) , edited by Michael Lapidge, John Blair, Simon Keynes, and Donald Scragg.

Peter Baker, *Introduction to Old English*, 3rd ed., Oxford : Blackwell, 2012 ; Bruce Mitchell and Fred Robinson, *A Guide to Old English*, 8th ed., Oxford : Blackwell, 2011 ; Alastair Campbell, *Old English Grammar*, Oxford : Clarendon Press, 1959 . The first two books are popular introductions to Old English, both in advanced editions. Campbell is still the standard Old English reference grammar. A fine new Old English reader, with an introductory chapter on Old English, is Richard Marsden, *The Cambridge Old English Reader*, 2nd ed. (Cambridge : Cambridge University Press, 2015) .

The Riverside Chaucer, ed. by Larry Benson and F. N. Robinson, 3rd ed., New York : Houghton Mifflin, 1987 . A long-running popular collection of Chaucer's works. Besides *Canterbury Tales*, modern readers will still enjoy *Troilus and Criseyde*, perhaps the best love story ever written in English.

Hilary Mantel, *Wolf Hall*, London : Holt, 2009 ; *Bring Up the Bodies*, London : Holt, 2012 ; *The Mirror and the Light*. London : Holt, 2020 . Hilary Mantel's descriptions of England and court life in the sixteenth century are deservedly popular. The second book describes the relationship of Anne Boleyn and Henry VIII in great detail. The books have also been made into a BBC TV series. Can you imagine these TV programs presented with Early Modern pronunciations?

C. S. Lewis, *Studies in Words*, 2nd ed., Cambridge : Cambridge University Press, 1967 . Lewis talks about a number of keywords like *nature* and *world* as well as *free*, and along the way paints a picture of the kind of cultural humanism studied at Oxford and Cambridge in the mid-twentieth century.

For general coverage of the history of the English language, see William A. Kretzschmar Jr., 2018, *The Emergence and Development of English*, Cambridge : Cambridge University Press .

4

The Colonial Period (1600 – 1800)



In This Chapter

The beginnings of American English come from the way that Europeans settled in North America. The circumstances of early immigration were different from the circumstances of life in the Old Country, and the interactions of speakers in the new setting shaped local habits. Crèvecoeur reports a typical experience of an immigrant coming to America. Early formation of American English does follow Schneider's model for colonial Englishes, if we understand it from the point of view of complex systems.

Timeline

1607

Jamestown founded.

1619

Black slavery introduced in Virginia.

1620

Plymouth founded.

1625

Dutch establish New Amsterdam.

1636

Harvard University established.

1650

Population 51,700.

1670

Population 114,500; Charleston founded.

1682

William Penn settles Pennsylvania, Philadelphia founded

1690

Population 213,500.

1701

Detroit founded; Yale University founded.

1710

Population 375,500.

1730

Population 654,950.

1746

College of New Jersey founded, now Princeton University.

1750

Population 1,207,000.

1751

Philadelphia Academy founded, now University of Pennsylvania.

1754

French and Indian War (1754 – 1760).

1770

Population 2,205,000; Boston Massacre (riot put down by British soldiers).

1773

Boston Tea Party (protest against Tea Tax).

1775

Revolutionary War (1775 – 1783).

1776

Declaration of Independence.

1780

Population 2,781,000.

1782

Hector St. Jean de Crèvecoeur, *Letters from an American Farmer*.

1783

Noah Webster, *Grammatical Institute*, *American Spelling Book*.

1790

Population 3,929,214; Washington DC founded.

American English offers a good example of the general question of how new varieties of a language emerge, and what then happens to them over time. For America, this is the process by which particular linguistic features emerged with high frequencies in the English of

the colonies, and by which different features could become more common in different areas. American English and its varieties are the product of random interactions in a complex system, beginning in the first generation, between speakers who brought with them their use of different varieties of British English. The findings of this approach are not in conflict with Edgar Schneider's popular book about the general process of variety formation, *Postcolonial English* (2007). We can never answer the question "why" American English is as it is – there is never a good answer to the "why" question in the history of a language – but it is now possible to address more adequately the question "how" it came to be as it is.

Demographics

Let us begin with the facts of immigration and settlement. North American settlement by English speakers began in the seventeenth century, amounting at that time to about 150,000 migrants from all parts of Britain (Bailyn 1986). These English speakers and their descendants accounted for a majority of the colonial population of 275,000 people by 1700 ("new" immigrants seldom amounted to more than 10 percent of any local population at any one time). Two characteristics of European settlement – introduction of disease and violence towards the survivors – created a pattern of replacement of the native population rather than integration with it, a pattern that would continue long thereafter. Up to 90 percent of the Eastern **Native American** population was lost (see Dobyns 1983, Smith 1994), beginning with sixteenth-century Spanish explorers and the diseases they brought. The settlers themselves were not immune to disease. The earliest English settlements to survive at all after Sir Walter Raleigh's initial Roanoke colony (1585) disappeared without trace, Jamestown (1607) and Plymouth (1620), suffered mortality rates of 50 percent or more in their first years, and child mortality was up to 50 percent before the age of twenty (Bailyn 1986: 100). So, the population of English settlers, too, was subject to rapid and continuing replacement. This created mixed populations of English speakers in every settlement from different British regions.

This fact stands in contrast to more romantic views, such as historian David Fischer's book, *Albion's Seed* (1989). Fischer gives the impression that British regional culture was transplanted whole to North America, with section titles like "East Anglia to Massachusetts" and "The South of England to Virginia." He is simply wrong to write that "On Smith and Tangier islands ... immigrants from the far southwest of Britain founded a culture which still preserves the dialect of seventeenth century Cornwall and Devon" (1989: 784). Nobody today preserves in its entirety Shakespeare's English, or any other regional British variety from the seventeenth century, because no living language fails to change over time. Even settlements like Plymouth that are often supposed to be regionally homogenous were actually quite mixed, as we know from the Mayflower passenger list – half of the passengers were not Pilgrims – and from complaints by the Pilgrims about their non-Pilgrim neighbors (you can listen to Plymouth Records online, a4.1, with transcripts in a separate file). Moreover, many English settlers had already migrated to London before taking ship for America. Keene reports that "Most adult Londoners were born outside the city: in the eighteenth century the outsiders may have been as many as two-thirds of the total" (Keene 2000: 109). North American emigration accounted for as much as 70 percent of English population increase during the seventeenth century, and a majority of those people came to North America through London (Bailyn 1986: 40). So, early immigration from London did not constitute a population of "standard" speakers, but a pre-mixed blend of regional voices. The effect of early general replacement of the native population by English settlers, and of the continuous change in the immigrant population owing to mortality and new migrants, was to create a new complex system out of the interactions of the settlers.

To return to North America in the seventeenth century, complexity science tells about the process by which order, here a new American variety of English, emerged from the mixture of regional British characteristics among the settlers in every locality. We know that there were massive numbers of exchanges of linguistic features – whether words or pronunciation or grammar – deployed by human agents, the speakers thrown together in America. In the early American environment, the immigrants all contributed their own resources of speech as they tried to talk to their neighbors. Given the preponderance of early English settlement, it is no surprise that English features came to constitute the majority of the language in the new order that emerged. There were, of course, some contributions from Native American languages or other European languages in the seventeenth century; for example, New Amsterdam (later New York City) was founded by the Dutch in 1625. However, in every colony a variety of English emerged as the everyday language of the founding population of settlers (see McDavid 1958: 483, Zelinsky 1992 and Mufwene 2001a: Chapter 2 and 3, for the influence of original settlement populations, the **Doctrine of First Effective Settlement**, and the **Founder Principle** respectively). In Zelinsky's words, "the specific characteristics of the first group able to effect a viable, self-perpetuating society are of crucial significance for the later social and

cultural geography of the area, no matter how tiny the initial band of settlers may have been " ([1992](#) : 13 – 14). And after such a start, given that speech is a complex system, the variants available in the population of speakers for any and every linguistic feature began to be distributed according to the A-curve pattern simultaneously at every level of scale. Right from the beginning, somewhat different sets of variants, whether words or pronunciations or ways to put words together, would emerge as top-ranked elements in different localities. Also right from the beginning, a particular set of variants emerged as top-ranked elements at the highest level of scale, American English. The order that emerged at the national level of scale was not exactly the same as what emerged in any single locality or colony and yet, owing to the scaling property of complex systems, neither was it just an abstraction that avoided the special characteristics of any individual colony, nor was it just a kind of average of speech from lower levels of scale. The term **colonial leveling** is sometimes used to suggest that American English had avoided or leveled the differences between regional British varieties, and thereby simplified the language. The term **koinéization** is similarly sometimes used to imply that American English had created a simplified mixture of language features. Neither of these impressions is right. There was no particular avoidance of differences or simplification in the mixture of features; self-organization in the complex system of language simply allowed some features to emerge as most common, whether in American English overall or in the varieties of many different smaller populations of speakers. Massive numbers of interactions between speakers as agents in the complex system caused the emergence of noticeable differences, both between American regions and between American and British English – not simple causes like Fischer ' s idea of wholesale cultural transference.

Despite the high mortality rates, English settlers continued to flood to the colonies in the eighteenth century. And other Europeans came, too, including large numbers of Germans from the Palatinate (*Pfalz* in German, in the southwestern part of modern Germany) starting in 1709. Thousands of African people were brought involuntarily to the colonies after 1680 (the first African slaves arrived as early as 1619) to work on plantations in Southern colonies, many of them from Caribbean islands where plantation agriculture was also common. These non-English groups contributed to an even more mixed population of speakers. Thus, it is also no surprise that substantial numbers of features, whether words or pronunciation or grammatical influences, also emerged in the complex system from non-English sources (see the [next chapter](#) for contributions from various languages to American English, particularly the lexicon). By 1790, of the total colonial population of nearly 4 million, over 2.5 million came from the United Kingdom (including nearly 500,000 from Scotland and Northern Ireland), about 250,000 from Germany, and 100,000 from the Netherlands. About 750,000 African people had been imported as slaves, the largest group after settlers from the United Kingdom. Even though a new variety of English was established in the original colonies, the continuing operation of the complex system in every colony allowed new variants to be introduced, and sometimes to be preferred, owing to the continuing massive interaction of elements.

Pattern of Settlement

European village life was never recapitulated in the English-speaking New World, and so the demographics for the production of language varieties were never alike in the Old World and in the New. As Raven McDavid wrote ([1975/1980](#) : 114 – 115),

the European village has been and still is a viable organic entity ... for village life has always depended on a cooperative tradition, a tradition of a balance of shared rights and responsibilities.

McDavid ' s version of the American village that did share something of the European cooperative pattern was his picture of the Southern mill town that emerged later as a part of cotton culture, where the textile company owned the local store and by its extension of credit came to own the lives of its workers. Apparent similarities elsewhere, he said, were superficial ([1975/1980](#) : 115):

Even when a village – or “ township, ” as it is sometimes called – sought to emulate the European pattern, as in parts of New England or in some of the transplanted New England settlements in Upstate New York and [later] the Middle West, it rarely emulated the European model by being a place where people lived, who made their livelihood by cultivating the surrounding farmland. Rather, it was set up as a miniature city – with banks and shops and ambitions to become something different and bigger ...

The city, it seems, was always the American model, and according to McDavid this was one of the “ centripetal ” forces that worked “ toward a greater degree of uniformity in American speech ” ([1980](#) : 120). Charleston was founded in 1670, Philadelphia in

1682. Some cities further west were also founded early in the period, like Detroit in 1701 by the French explorer Cadillac. Again McDavid ([1975/1980](#) : 119),

Even by 1700 it was clear that the colonies had a new pattern of living. Instead of the society of villages, with urban clusterings, there was a string of cities in the wilderness, generally seaports which mediated directly between the mother country and the frontier.

The American alternative to the village was the city, a more impersonal, commercial entity and a gateway to other colonies and to the world.

McDavid ' s contrast between village and city needs a little further explanation. The historical European demographic pattern had residential villages as the norm, with a larger market town within a day ' s round-trip travel, and still larger population centers with expanded services at wider intervals (e.g., Russell [1972](#) : 29 – 37).

[Figure 4.1](#) shows that the larger “ city ” (population below 1000) of Leicester in the Middle Ages was surrounded by smaller towns, each of them surrounded by villages and hamlets. Linguistic habits emerged within the village according to the complex system of interactions of the residents, and differentiation of linguistic habits emerged between villages because people lived their lives in small, stable, intensely local groups. Village life was characterized by what Lesley and James Milroy would call **strong ties** (more about these in [Chapter 9](#) and [Chapter 10](#)), a network of close relationships between people in a community which allowed for the maintenance of linguistic norms within the group (cf. [1987](#) , [1992](#) , where the Milroys describe not villages proper, but rather their work in the separate neighborhoods of Belfast). Differences with nearby villages were small because of interaction at market towns, according to the scaling principle of the complex system of speech, and greater distances allowed for greater differences to emerge. The result was a classic linguistic continuum, as described in [Chapter 3](#) .

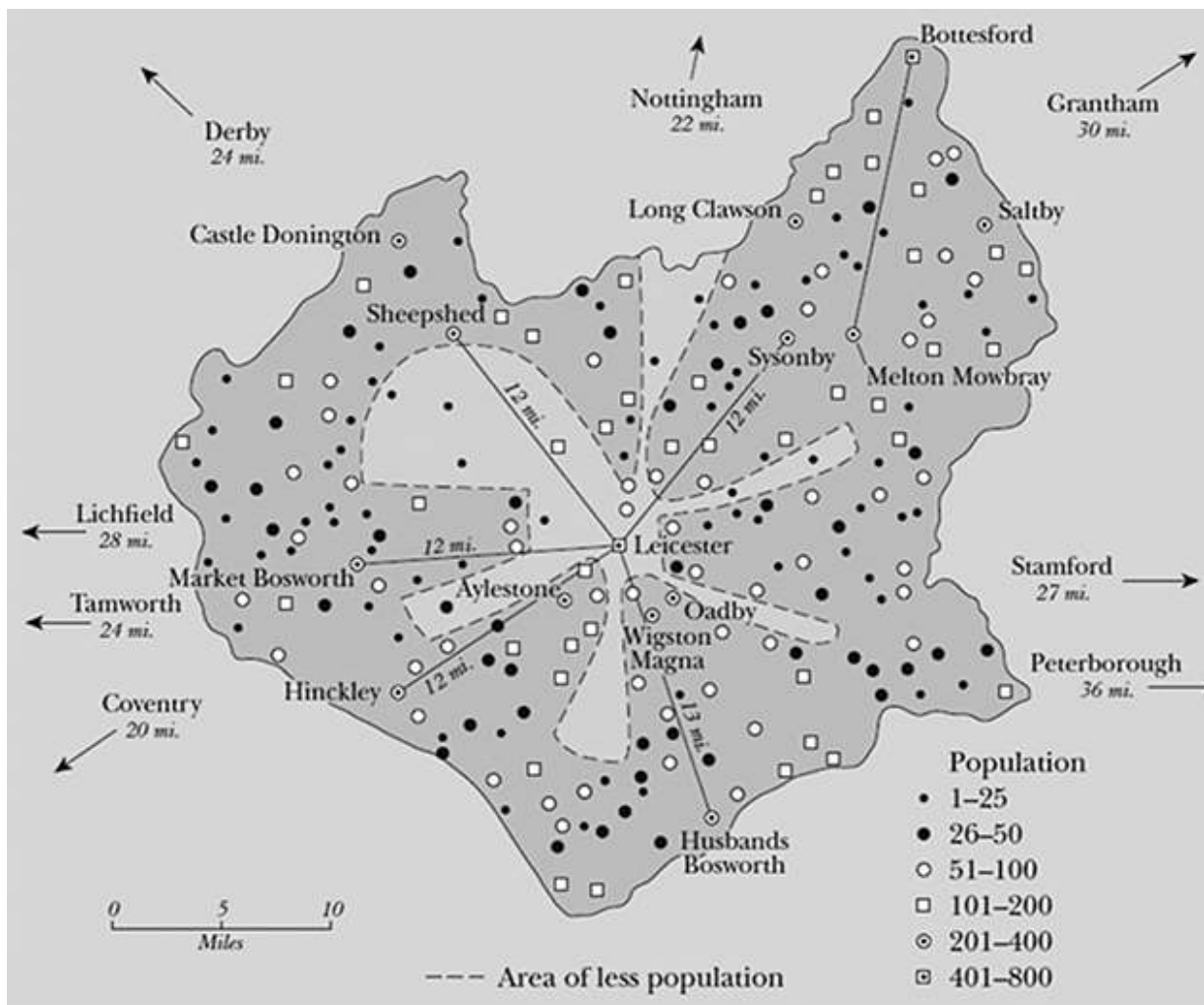


Figure 4.1 European settlement pattern near Leicester (England) in the Middle Ages.

[Figure 4.1 long description.](#)

Source: Kretzschmar, William A., Jr. 2010. Language Variation and Complex Systems. *American Speech* 85: 263 – 286.

The colonial American city, McDavida argued, did not have a supporting structure of feeder villages, but instead mediated linguistic habits for a fairly large number of people living under relatively isolated conditions on separate farms or other homesteads. Still, new American settlers did interact and cooperate with their neighbors, so local variation could emerge, and that variation could further emerge into patterns related to a city. Characteristic local variations in speech thus could and did develop in the more densely populated colonial cities, particularly among the local wealthy elite that ran commercial enterprises. Thus, American habits of settlement and communication created somewhat different possibilities for maintenance of linguistic norms than had existed in the Old World, although the same complex system of interactions worked in both places.

The main American port cities in the colonial period were Boston, New York City, Philadelphia, and Charleston. Early settlement in Virginia, beginning with Jamestown, was different in that it did not have a central port city; the port city of Norfolk only developed after 1750, and the capital Richmond was only incorporated in 1742. Each of the main port cities, and Virginia along Chesapeake Bay, developed its own culture region. Settlers who came through Boston eventually populated New England, as far north as Maine and as far west as the Berkshire Mountains, a part of the Appalachian Mountain chain that stretches from the Canadian border south to Alabama. The New York City culture region extended up the Hudson River. The Philadelphia region ran to the west of the city. Early settlement from Charleston in South Carolina occupied the lowland area north and south along the coast. The same is true of early settlement in Virginia,

which extended along the coast from the northern part of what is now North Carolina to the southern part of what is now Maryland. During the early period of settlement, the only way to get between these areas was by sea.

By 1800 ([Figure 4.2](#)), however, a road system was established near the coast, with western extensions to principal places like Pittsburgh at the headwaters of the Ohio River, founded in 1758, Charlotte in North Carolina, founded in 1768 at the intersection of two trading routes, and Augusta in Georgia, founded in 1736 at the fall line for the Savannah River (the place with a sharp drop in elevation causing waterfalls and rapids, so navigation upstream was interrupted). River travel was very important in this period with few roadways.

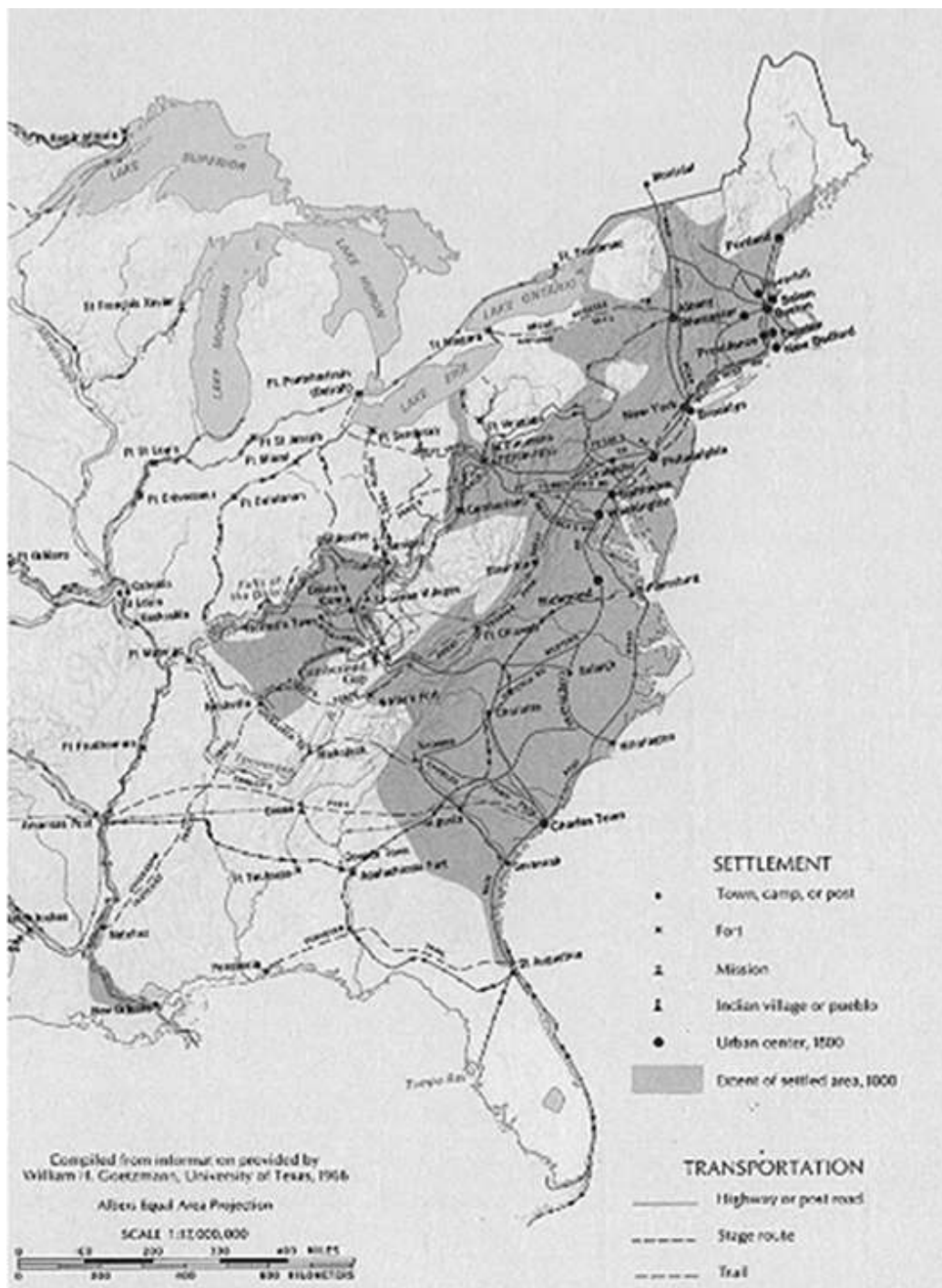


Figure 4.2 Settlement and transportation by 1800.

[Figure 4.2 long description.](#)

Source: *The National Atlas of the United States of America*. Arch C. Gerlach, editor. Washington, D.C.: U.S. Dept. of the Interior, Geological Survey, 1970, viewed at <https://legacy.lib.utexas.edu/maps/histus.html>.

Eighteenth-Century Immigration

Immigration in the eighteenth century proceeded according to a different pattern. In the seventeenth century new settlers stayed close to the coast, but in the following century what had been coastal frontier outposts developed into port cities, and new settlers, and children of colonial families whose lands could no longer support the youngest generation, passed through the coastal ports of entry and headed inland. As Bailyn has written, “ after the initial phase of settlement, the major stimuli to population recruitment and settlement were, first, the continuing need for labor, and, second, land speculation ” ([1986](#) : 60). For the labor market, in addition to single, male indentured servants, mainly from London, who had supplied the demand in the seventeenth century, about 50,000 English criminals were sent to North America (largely guilty of being poor, since dangerous criminals were typically executed at the time), large numbers of “ redemptioners ” came from Germany, and many thousands of Africans came as slaves. Because slaves took over many manual jobs from southern plantations north to Baltimore, indentured Europeans were often recruited for skilled jobs, especially in the building trades (Bailyn [1986](#) : 61 – 64). While the labor market served mainly the coastal cities and developed areas, inland settlement was often accomplished by families, whose pathways west were established by land speculators based in the port cities. Bailyn says that “ Boston was a nursery, Philadelphia a human warehouse, and New York was a staging center for the distribution of immigrants into the far northern frontier ” ([1986](#) : 53). The speculators ranged from large operators down to individual investors, like the author Crèvecoeur (see ‘ Crèvecoeur and the American Experience ’ below), who bought a small farm on the frontier as an eventual home for his daughter ([1782/1981](#) : 92); in the words of Charles Grant, “ the humblest pioneers were apparently speculating their heads off ” (cited in Bailyn, [1986](#) : 67). Boston was a nursery for inland settlement because it received little immigration, and its outlying territories were settled by its own excess population. Philadelphia and New York City, on the other hand, were major ports of entry, and new immigrants often spent considerable time there before leaving for the interior. The delay was not always good for them: unsanitary and crowded conditions led to high mortality rates. Bailyn notes that Philadelphia hosted a large number of German immigrants, while New York City hosted more Scots and Scotch-Irish, yet overall he reports that

The population that spread inland from coastal nodes to form new communities was a composite of ethnic and religious groups – Germans, French, Swiss, Scotch, Scotch-Irish, English, Caribbean islanders, Africans, Afro-Americans – carrying with them different cultural baggage And as these many groups spread through the backcountry and settled in growing inland communities and on farms and plantations scattered over millions of acres, complex regional configurations developed, which became in turn settings for later arrivals who filled in the interstices, thereby further complicating the emerging society. There was no single “ American ” pattern of family and community organization. There were many patterns, reflecting the variety of human sources from which the population had been recruited and the swiftly changing, fluid situations in which the people lived.

([1986](#) : 59 – 60)

More uniform large settlements like the Pennsylvania German (often called Pennsylvania Dutch) religious settlements were the exception that proved the rule. Most settlers found themselves in smaller groups or fending for themselves as individuals, and they had to make things up as they went along.

While large numbers of immigrants went inland, American institutions began to form in coastal cities. Higher education, for example, was supported by the foundation of numerous universities. Harvard was founded as early as 1636. Other schools followed in the eighteenth century: Yale in 1701, the College of New Jersey (later Princeton) in 1746, and the Philadelphia Academy (later the University of Pennsylvania) in 1751. The commercial and cultural opportunities of the cities supported inland migration, and also fostered political activity such as, in Boston, the Boston Massacre (1770, a confrontation between citizens and British soldiers, later publicized by revolutionary politicians) and the Boston Tea Party (1773, a protest against the Tea Tax). The Declaration of Independence and later the Constitution were discussed and approved in Independence Hall in Philadelphia. Washington DC was not founded as the capital until 1790, and the first session of Congress held there was in 1800.

Crèvecoeur and the American Experience

We can learn more about new American settlement patterns from a colonial witness, the *Letters from an American Farmer*, by Hector St. Jean de Crèvecoeur. Crèvecoeur was a Frenchman who had served in the British army in Canada, cultivated a 370-acre farm in New York State, and after the American Revolution became the French Consul in New York City. His *Letters* were published in London in 1782, with a French translation appearing in 1784. Crèvecoeur in the early letters idealized the American experience. He supplied a basic pattern for what somebody typically did to become an American:

If he is wise, he thus spends two or three years, in which time he acquires knowledge, the use of tools, the modes of working lands, felling trees, etc. [After acquiring friends, a good reputation, and a little money, he can use his acquisitions to buy land on credit.] He is now possessed of the deed, conveying to him and his posterity the fee simple and absolute property of two hundred acres of land, situated on such a river. What an epocha in this man's life! He is become a freeholder, from perhaps a German boor. He is now an American ...

([1782/1981](#) : 82 – 83)

The new immigrant began his new life in association with more established citizens, often but not exclusively with relatives or fellow countrymen, but as soon as possible abandoned their company for his own property on the frontier. Crèvecoeur's description of himself, though it leaves out his literary pretensions, probably did accord with his self-image before the Revolution:

I am but a feller of trees, a cultivator of lands, the most honourable title an American can have. I have no exploits, no discoveries, no inventions to boast of; I have cleared about 370 acres of land, some for the plough, some for the scythe, and this has occupied many years of my life.

([1782/1981](#) : 212)

Rather than live in villages, Americans lived on the land, and rather than share village rights and responsibilities, they owned their own land and made their own lives. There is an American tradition, also described by Crèvecoeur, of neighbors helping neighbors but these are people who lived at some distance down the road, not a few yards away.

A typical case of the speculative development and sale of land is described by Crèvecoeur ([1782/1981](#) : 90 – 105). He writes that “Andrew the Hebridean” – according to Bailyn, 40 percent of English settlement in the eighteenth century was Scots or Scotch-Irish ([1986](#) : 60) – arrived in Philadelphia with a group of Scots who had arranged a land deal with an agent; he himself however had no such arrangement, and Crèvecoeur picked him up on the docks and soon placed him with a local farmer and arranged a different job for his wife and teenage son. Andrew earned capital but he also learned the skills that he needed for successful homesteading, beginning with the use of the axe, which he had never had occasion to use in his treeless home country. After a couple of years, Crèvecoeur arranged for Andrew to be settled on uncleared land on the edge of the frontier, and Andrew was allowed to live there rent-free for seven years as he made progress in clearing the land. Thereafter for the rest of the thirty-year lease Andrew had to pay rent. Crèvecoeur concluded with an accounting of the money and possessions that Andrew was able to amass through his own efforts in the four years since his immigration, to a value of \$640 – when he had arrived with only about \$35 after selling all that he had acquired in a lifetime in Scotland. Crèvecoeur's account illustrates the hot labor market, the use of free labor to add value to wild land acquired for speculation, and eventual income to be derived from the property – and the same process is described in some detail by Bailyn ([1986](#) : 82). While some speculative deals did import a large number of Europeans directly for work on a particular parcel of land, the grand schemes of speculators often dissolved into mixed settlements or collapsed completely, so that individual initiative like Andrew's remained the rule. America had cities but its way of life was marked by the individuality of its new citizens on their own separate properties. It was not only the physical habits of settlement that affected the genesis of American English and its varieties, but the psychological preference for individuality that encouraged such settlement.

At the same time, Crèvecoeur insisted that the product of this individuality was a distinct American character:

Europe contains hardly any other distinctions but lords and tenants; this fair country alone is settled by freeholders, the possessors of the soil they cultivate, members of the government they obey, and the framers of their own laws, by means of their representatives.

([1782/1981](#) : 80)

This American character thus was a consequence of shared individual experience, not residence together in the same physical place. And with the exception of a few groups, like the Anabaptists who colonized land together and not singly as in the Pennsylvania German area, the American experience had the power to break down religious and national distinctions. Again Crèvecoeur:

Thus all sects are mixed, as well as all nations; thus religious indifference [i.e. lack of prejudice] is imperceptibly disseminated from one end of the continent to the other, which is at present one of the strongest characteristics of the Americans.

([1782/1981](#) : 76)

Of course this was the ideal. Crèvecoeur was scandalized by the treatment of slaves in Charleston. He was also confused during the Revolution, when his Tory sympathies made him the object of attack by his neighbors. We need not share his confusion, however, because we can see that even Crèvecoeur painted the American character in opposition to Europe: when American culture had torn down European social modes and replaced them with American ones, the American character could hardly be expected to tolerate attachments to the Old World once the Old World came to be perceived as a threat. Even as Crèvecoeur depicted it, the American character in the colonial period required political isolation. What Crèvecoeur gives us is a portrait of the new American social psychology.

To return to American English, it is clear that Americans' shared individual experiences did allow for the emergence of local variation, but not at first sharply delineated varieties in American English to parallel the historical regions in Britain. Learning to participate in the new American experience, according to Crèvecoeur, typically required some period of residence among longer-settled Americans, which would provide the opportunity for the future individualist to acquire some linguistic norms as well as capital and specialized skills for husbandry. The goal of new immigrants was to leave the place and people that they originally found and for whom they worked in order to settle on the frontier – not the wilderness, but the somewhat tamed and already marked areas made available for farming by legendary American “frontiersmen” like Daniel Boone. Thus, the new immigrants' desire to participate in the American experience included, to a greater or lesser degree, the motive and opportunity to sound like an American, but the circumstances for immigration weighed against the strong ties that would be expected in order for immigrants to maintain sharply distinctive local norms.

When, as Crèvecoeur suggested, new immigrants found employment for a time to learn American ways and to build resources before they went to homestead on the frontier, part of what they learned in the longer-settled areas was the local flavor of American speech. Some habits of speech from each port of entry would then be carried along settlement pathways throughout its focal area; the greater density of contact between speakers from the same port of entry than between those from different ports promoted the emergence of regional patterns as described in [Chapter 5](#). However, while distinctive local standards could be developed by city dwellers through their more frequent interactions, and local lexical and other linguistic norms were disseminated within typical settlement channels, still the variation stems largely from the somewhat different selection of features within the set of English features generally available in the colonies at the time. The American pattern matches the prediction of the A-curve from the complex system. Thus American social psychology and the demographics of settlement allowed simultaneously for the development of a relatively consistent American English both within and across the different regions of primary and secondary settlement, while they prevented the emergence of a marked national standard.

Schneider ' s Postcolonial English

Let us now consider how Edgar Schneider ' s [2007](#) book *Postcolonial English* discusses the emergence of new varieties of English in former colonies worldwide. His description of the histories of English in a number of places, including the United States, shows that the emergence of these postcolonial varieties does seem to follow a similar trajectory. His **Dynamic Model** suggests five phases in the evolution of such varieties: foundation of the colony, stabilization around the outside norm, nativization, formation of an internal norm, and diversification. American English began to form by self-organization out of the complex system of linguistic interactions in the new colonies. “Stabilization around the outside norm” represents the fact that, in America, English was imported as a language because of replacement of the indigenous population. “Nativization” began immediately in one sense, as settlers in every locality had to adopt words to describe local flora, fauna, and places. These were often terms taken from Native Americans, as recorded, for example, in

Thomas Harriot's *Briefe and True Report of the New Found Land of Virginia* (1588, cited in Bailey [2004](#) : 4 – 5), which was based on the failed Roanoke colony. The perception of nativization began in the eighteenth century, as British and American writers noted differences between the English of the Old and New World. John Witherspoon, for instance, commented in 1781 that (cited in Mathews [1931](#) : 16)

the vulgar in America speak much better than the vulgar in Great-Britain, for a very obvious reason, viz. that being much more unsettled, and moving frequently from place to place, they are not so liable to local peculiarities either in accent or phraseology. There is a greater difference in dialect between one county and another in Britain, than there is between one state and another in America.

Schneider cites no fewer than four other eighteenth-century writers who comment on the uniformity of American English ([2007](#) : 269 – 270). However, the period comments do more to distinguish American English from British English than they testify to any actual koinéization. The strongly marked regional dialects of Britain were certainly not maintained in America (no matter what Fischer said) owing to population mixture, noted here by Witherspoon. However, the complex system of speech did not create a uniform koiné; instead, somewhat different patterns of pronunciation, lexicon, and grammar emerged at different scales from locality to locality and from state to state, up to the national level of scale.

It was certainly possible then, as it is now, to describe the characteristics of an overall American variety, one clearly different from Britain as all the commentators tell us, even though the national description, then as now, was not an exact fit for any local variety. Schneider's " diversification " was already underway, if not yet strongly marked. Witherspoon also noted verbal differences between different regions, such as the word *chunks* for ' firewood ' in the middle colonies, and *tote* for ' carry ' in the Southern states (words still around today). Some other features that we associate still today with American regions were present then, such as r-lessness (when America was settled the change in Britain not to use the -r sound after vowels, so called **postvocalic -r** , was incomplete so some British immigrants had -r after vowels and others did not; for further discussion, see [Chapter 5](#)) and other matters of pronunciation, and grammatical choices like *hadn't ought*. This diversification of speech in the original colonies completes Schneider's picture of the initial emergence of American English, although we can say that diversification began to occur from the very beginning and just became more noticeable as the last stage. The stages of Schneider's Dynamic Model thus accord well with the process of the complex system of speech.

By the end of the eighteenth century, the eastern American seaboard had achieved a more settled status. Coastal port cities received new immigrants, who later moved inland to occupy their own land. The American population increased by a million people in the first half of the eighteenth century, and more than tripled by the end of it. Population growth in this century occurred within an existing matrix of English communities, and so English remained the dominant language of the colonies.

As for American English, at the end of the colonial period Noah Webster published his *A Grammatical Institute, of The English Language, Comprising, an Easy, Concise, and Systematic Method of Education, Designed for the Use of English Schools in America* ([1783](#)). Webster will be treated in more detail in the [next chapter](#) , but suffice it to say here that he was a promoter extraordinaire of American nationalism. While the *Grammatical Institute* as a whole may not have been universally adopted for schools in America, part of it, *The American Spelling Book* , certainly was, and it became one of the most popular textbooks of all time.

Examples of Colonial American English

Formal American discourse during the Colonial Period advances from the language of Shakespeare, and so it sounds quite modern to us today. The following passage from the " Sinners in the Hands of an Angry God " (1741) by fire-and-brimstone preacher Jonathan Edwards (1703 – 1758) can serve as an example (you can listen to the passage online, a4.2). Edwards was born in Connecticut, and was educated at Yale University. He participated in religious revivals, which serve as evidence that Americans were not uniformly pious.

The use of this awful subject may be for awakening unconverted persons in this congregation. This that you have heard is the case of every one of you that are out of Christ. – That world of misery, that lake of burning brimstone, is extended abroad under you. There is the dreadful pit of the glowing flames of the wrath of God; there is hell's wide gaping mouth open; and you have nothing to stand upon, nor any thing to take hold of; there is nothing between you and hell but the air; it is only the power and mere pleasure of God that holds you up. You probably are not sensible of this; you find you are kept out of hell, but do not see the hand of God in

it; but look at other things, as the good state of your bodily constitution, your care of your own life, and the means you use for your own preservation. But indeed these things are nothing; if God should withdraw his hand, they would avail no more to keep you from falling, than the thin air to hold up a person that is suspended in it.

Gone are the features of Shakespeare that can give pause to modern readers, like unfamiliar pronouns and verb forms. Still, the language is not quite what someone would use today, even in a sermon. “Unconverted persons” in the first line, and “this that you have heard” in the second line, are not uninterpretable by modern readers but may strike us as odd turns of phrase. The spelling of “any thing” at the end of the first paragraph as two words, not one, is not how we spell it now. Edwards wrote that “you probably are not sensible of this” in paragraph two, but today we might use the word “aware” instead of “sensible.” Finally, Edwards uses the semi-colon more than people today might use it. These are relatively subtle differences in comparison with Shakespeare a century before. It is worth noting that Edwards himself was not always as fire-and-brimstone as he appears here. He was very interested in natural history and the emerging sciences of his time, such as the work of Isaac Newton. Freedom of religion was a hallmark of the new American experience, but that did not mean that every citizen lived religious lives all the time.

We can observe a more colloquial version of the English at the end of the period in the diary of Amos Farsworth, a soldier in the Revolutionary Army (you can listen to the passage online, a4.3):

Saturday May ye 27 (1775). went on hog island And Brought of Six hoses, twentyseven hornd Cattel And fore hundred And Eleven Sheep. about the midel of the afternoon went From hog island to Noddles island and sot one Hous and Barn on fiar, kild Some hoses and Cattel Brought of two or thre Cows one horse. I with five men got of the horse And Before we got from Noddles island to hog island we was fird upon by a Privateear Schooner But we Crost the river and about fifteen of us Squated Down in a Ditch on the mash and Stood our ground. And thare Came A Company of Regulars on the marsh on the other side of the river And the Schooner: And we had A hot fiar untill the Regulars retreated. But not withstanding the Bulets flue very thitch yet thare was not A Man of us kild. Suerly God has A faver towards us: And He can Save in one Place as well as Another. we left the island about Sun-Set and Came to Chelsea: And on Saturday about ten At night Marchd to Winnisimit ferry where thare was a Schooner and Sloop Afiring with grate fury on us thare. But thanks be unto god that gave vs the Victry at this time for throu his Providence the Schooner that Plad upon us the day before ran Aground and we Sot fiar to hur And Consumed hur thare And the Ssloop received much damage. in this ingagement we had not A man kild: but fore wounded but we hope all will Recover. one of the fore was A tounsing man belonging to our Company the bullet went throu his mouth from one Cheek to the other. thanks be unto God that so little hurt was Done us when the Bauls Sung like Bees Round our heds.

Here we see many differences in capitalization and spelling from usage today. The use of “ye” in the date just means ‘the,’ since the *y* in “ye” is a replacement for the *þ* letter, pronounced as a *th* sound, that we saw in the [last chapter](#) in use in Old English. Some of these differences tell us about Farsworth’s pronunciation: when he wrote “Six hoses” in the first line, surely he was talking about horses, a sign that he did not pronounce *-r* after vowels as many people in Boston still do not today. In other places he wrote “horse,” not “hose,” so he knew that the word could be spelled with an *r* in it, he just did not do so consistently. The same thing happened for the word “marsh,” sometimes spelled with a *r* and sometimes without. In the third line he wrote “sot” as the past tense of *set*, a nonstandard verb form still heard today. Another nonstandard usage occurs in “we was fird upon,” which used the singular “was” where we might expect the plural “were.” There is an example of what is known as a *prefixing* near the end of the passage, “Afiring,” today a form still in vernacular use. A difference in usage occurs in the phrase “we had A hot fiar,” meaning ‘we had a hot battle.’ Still, we have less trouble with Farsworth’s language than with Shakespeare’s, so long as we allow for informal spelling and usage. Farsworth shows us about common speech in the period, whereas Jonathan Edwards showed us high style.

By the end of the Colonial Period, America consisted of the thirteen states that were party to the original Articles of Confederation, plus three others who joined the Union in the 1790s following ratification of the Constitution (Vermont, Kentucky, Tennessee). The population had reached 5 million people. Important port cities like Philadelphia (the largest), Boston, New York City, and Charleston served as focal areas for interior settlement. Plantation Virginia, too, though without a major city (Richmond was its most urban center), was an original colonial focal area from which settlers headed west. The east coast had its own culture, a little different in each region, that included higher education institutions and cultivated citizens as well as yeoman farmers in the interior. And in each region American English was firmly established, a little bit different in each region as the complex system of language would have us expect.

Summary

Colonial settlement of the American east coast came predominantly from Britain, which established the cultural matrix into which settlers from other places fit themselves. America did not have the European village plan, but instead coastal cities with people ranging into the frontier. Crèvecoeur described the American colonial experience, which possessed both formal (Edwards) and less formal (Farsworth) ways of speaking.

Key Terms

colonial leveling

Crèvecoeur

Doctrine of First Effective Settlement

Dynamic Model

Founder Principle

koinéization

Native Americans

postvocalic -r

strong ties

Audio Samples

Available at www.cambridge.org/williamakretzschmar .

a4.1 Plymouth Records (seventeenth to eighteenth century)

a4.2 Jonathan Edwards (late eighteenth century)

a4.3 Amos Farsworth (late eighteenth century)

Exercises

1. Go online (Wikipedia is fine) to look up the history of a state on the American east coast, any of them from Georgia north to Maine. Who were the first settlers? Did they stay and remain active? Was there a mixture of settlers from different countries?
2. Crèvecoeur wrote that “ Europe contains hardly any other distinctions but lords and tenants; this fair country alone is settled by freeholders, the possessors of the soil they cultivate, members of the government they obey, and the framers of their own laws, by means of their representatives. ” Is this a fair contrast for him to make? Is it all about the aristocracy who owned the land and tenants who worked it in seventeenth- and eighteenth-century Europe?
3. Look up the process of change for the English pronouns *thee/thou* and *you* . How did *thee/thou* disappear (and did it go out of use for everybody at once)? The pronoun *you* is supposed to be both singular and plural: has it always been that way? Are there any other forms of the *you* plural in use today?

Computer Exercise

[Exercise App3.4 in Appendix 3](#) explores how communities can have multiple terms for the same thing at different frequencies, following the idea of mixed speech communities discussed in this chapter.

Further Reading

Bernard Bailyn , *The Peopling of British North America* , New York : Vintage , 1986 . Bailyn ' s account of the early colonization of North America replaces earlier, more romantic views with a more modern history.

Richard Bailey , *Speaking American: A History of English in the United States* , New York : Oxford University Press , 2012 . Bailey ' s entertaining book selects a different place for every fifty-year period in American history for its chapters, from Chesapeake Bay before 1650 up to Los Angeles for 1950 – 2000, and provides a wealth of detail about the language in its place and time. The earlier chapters – Chesapeake Bay, Boston, Charleston, Philadelphia, New Orleans, and New York – touch on American places that had their own cultural regions during the settlement period, as mentioned earlier in this chapter.

Edgar Schneider , *Postcolonial English* , Cambridge : Cambridge University Press , 2007 . Schneider ' s Dynamic Model is the best current description of the common points of development for colonial varieties. He has also published a short textbook on the subject, *English Around the World* (Cambridge : Cambridge University Press , 2011) .

5

The National Period (up to the Civil War, 1800 - 1865)



In This Chapter

“ Go west young man, go west and grow up with the country ” (a famous quotation attributed to Horace Greely) tells the story of this chapter. Americans left the east coast to populate the territory as far as the Mississippi River and some parts beyond it. As immigration grew so did the effects it had on American English, though not always as scholars have thought about it. This chapter also describes the beginnings of Standard American English through the influence of Noah Webster.

Timeline

1800

Population 5,308,438

1803

Louisiana Purchase (828,000 square miles)

1804

Lewis and Clark Expedition (1804 - 1806)

1808

Importation of slaves prohibited

1810

Population 7,239,881

1812

War of 1812 (1812 - 1815)

1819

Florida Purchase

1820

Population 9,638,543

1821

Santa Fe Trail (Missouri to New Mexico)

1823

Monroe Doctrine (no new European colonies in the Americas)

1828

Webster, *American Dictionary*

1830

Population 12,866,020

1836

Lone Star Republic (1836 – 1845); Oregon Trail (Missouri to Oregon)

1838

Underground Railroad established (escape routes for African Americans)

1840

Population 17,069,453

1845

Texas annexed

1846

Mexican War (1846 – 1848)

1847

Mormons in Utah

1849

California Gold Rush

1850

Population 23,191,876

1852

Harriet Beecher Stowe, *Uncle Tom 's Cabin*

1860

Population 31,443,321

1860

The Civil War (1860 – 1865)

1863

Battle of Gettysburg; Emancipation Proclamation

1865

Lee 's surrender at Appomattox; Lincoln assassinated; 13th Amendment outlaws slavery

The situation for American English after its initial emergence as settlement proceeded inland in the nineteenth century is somewhat different from the Colonial Period. The complex systems of speech in inland American localities were established, again, by mixed populations of speakers, including some people who had been resident in the original colonies, some speakers who had arrived at ports of entry and stayed some time there (a frequent occurrence), and some speakers who proceeded more directly to the frontier. Some Native Americans were present in the northern parts of the American East. There were still not many nearer the coast because of the spread of epidemics originated by Spanish explorers, but settlers met more Native Americans as they went west to areas not struck by disease. In the Southeast the Native American population had had a longer time to rebound after the epidemics had run their course but the survivors were displaced. In the state of Georgia in the nineteenth century the state militia forced Native Americans out, and new settlers participated in land lotteries to acquire 200-acre sections for homesteading. Under these conditions of the time, the largest proportion of the speakers who settled in any one locality was certainly formed by those who had lived further to the east along the settlement route that allowed new settlers to get to the frontier. The remaining Native Americans and people who came more immediately to available homesteading areas contributed linguistic variants which could become common in a locality, but which had to compete with variants that were already in frequent use in established complex systems of speech further east.

Settlement Patterns

There was some contact between regions in the colonial period because coastal cities were transportation centers, but the difficulty of such long-distance transportation tended to create focal areas that extended out from the cities. In the nineteenth century, settlers streamed inland from the coastal cities as the terrain allowed them to. As settlement proceeded inland from the coastal outposts, the speech habits of the coastal communities were carried to the interior by residents of the established colonies who wanted new opportunities, and by new immigrants who landed at the coast and acquired speech habits as they made their way to the frontier (which for some immigrants took years).

Settlement proceeded generally westward in three large geographical bands as far as the Mississippi River, corresponding to what is now the **Northern** tier of states, a **Midland** region, and the **Southern** region (see the arrows in [Figure 5.1](#)). In the North the stream of settlement in Upstate New York had to go around the southeast part of the state inland from New York City (originally Dutch in settlement), and followed the Hudson River (also river systems through Connecticut) far enough north to reach unsettled territory. In the early nineteenth century the Erie Canal, completed in 1825, was built to connect the Hudson River at Albany with Lake Erie at Buffalo. The waterway promoted westward settlement along the Great Lakes as far as Northern Illinois, Wisconsin, and Minnesota, a region we can call the **Inland North** . This region was separated from **New England** by the Appalachian mountains, and so settlers coming to New England through the port of Boston occupied New Hampshire, Vermont, and Maine to the east of the mountains. Thus the Northern region had two separate settlement areas, New England and the Inland North.

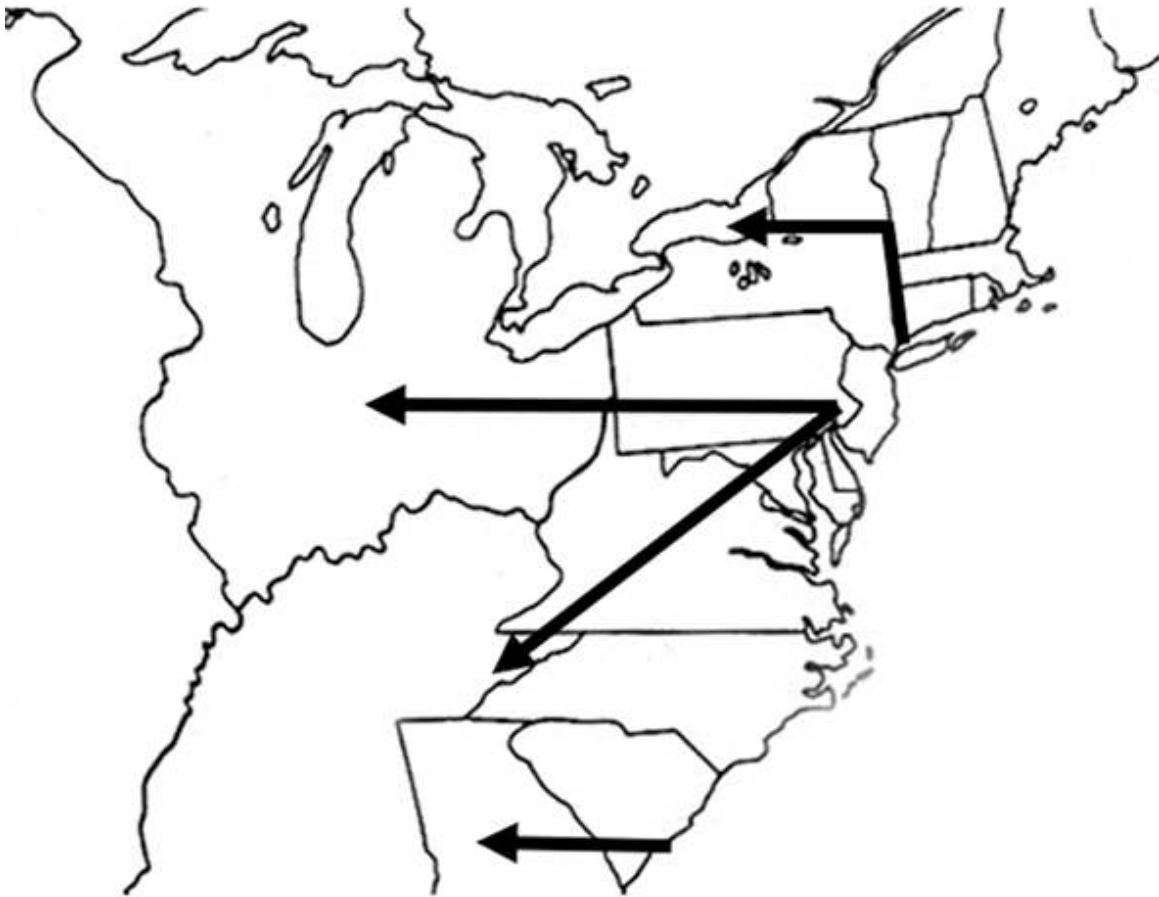


Figure 5.1 Settlement pathways from the American East Coast.

The South had no convenient waterway to facilitate travel to the interior, and the varied topography of the land – mountains, the piney woods, wiregrass – was not all well suited to the pattern of plantation agriculture that dominated the colonial economies of Virginia and the Carolinas. Southern settlement thus proceeded more slowly, in a patchwork of communities across Georgia and Alabama until settlers reached plantation lands in the plains and Mississippi Basin areas of Tennessee, Mississippi, Louisiana, and East Texas. The Florida Purchase of 1819 established American control from its former Spanish owners, but Florida only became a state in 1845. Development of plantations there was hampered by battles with the Seminole tribe of Native Americans, which ended only in 1858.

Philadelphia was the cultural center for the stream of settlement in the Midland region, which proceeded west in two different directions. The National Road was built to run due west from Philadelphia through Pennsylvania, eventually as far as central Illinois, close to the present-day route of Interstate 80 in southern Pennsylvania. Settlement took place along the road, and settlers could also reach the Ohio River valley at Pittsburgh and then use the waterway to settle farther inland. Because river travel was much easier than road travel, this meant that settlement often occurred sooner along the Ohio River than it did on land further from the river. This **North Midland** settlement pathway is often merged with the Northern region by those who would create just two American regions, North and South. The more southerly stream of Midland settlement, sometimes merged with the South by those who want just two regions, followed the course of the Shenandoah River southwest through Virginia towards the Cumberland Gap in Tennessee. Most of the **South Midland** settlers were subsistence farmers, and they occupied whatever land could support them throughout the Appalachian Mountain region and, eventually, the uplands as far west as Arkansas, and also in the lowlands of the Southern states where the land was not suitable for plantations. These historical patterns of settlement – North, Midland, and South – created the basic framework of regional American speech that we can still hear today (see [Chapter 8](#) for discussion of regional dialects).

Beyond the Mississippi, the Louisiana Purchase in 1803 greatly expanded territory nominally under American control (most of it was occupied by Native Americans) by over 2 million square kilometers. Thomas Jefferson commissioned the Lewis and Clark Expedition to explore the new territory, and the explorers reached the Pacific Ocean at the Columbia River (the present-day border between Oregon

and Washington) in late 1805. Beginning in 1823, the Monroe Doctrine recognized existing European colonies but declared that no further colonies could be created or states be controlled by Europeans. South of the Louisiana Purchase, settlers began to follow the Santa Fe Trail in 1821. The Lone Star Republic declared independence from Mexico in 1836, and Texas became a state in 1845 (its annexation was confirmed by the Mexican War from 1846 to 1848). Also in 1845 settlers began to take wagon trains across the Oregon Trail. Mormons settled in Utah beginning in 1847. The California Gold Rush began in 1849, and California became a state in 1850. Oregon became a state in 1859. [Figure 5.2](#) indicates the extent of American settlement and the trails west as they were in 1850.

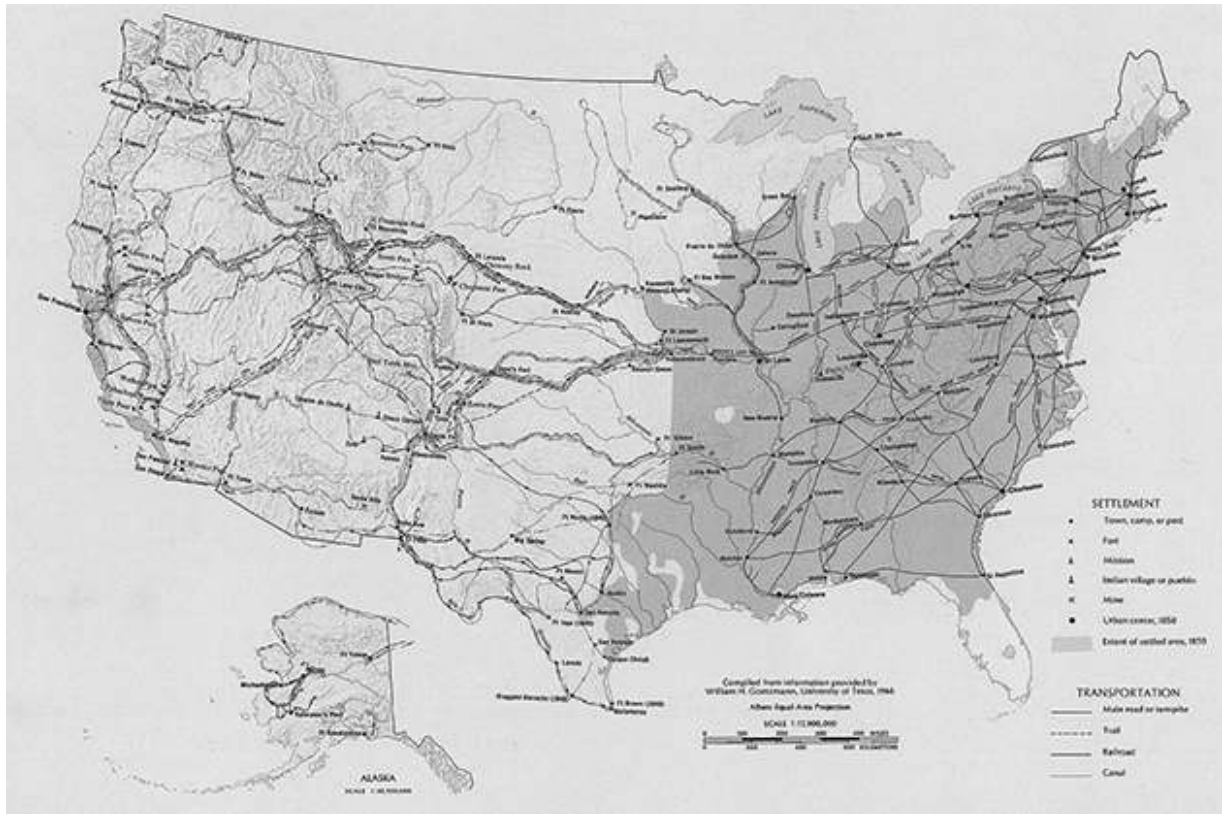


Figure 5.2 American Settlement by 1850.

[Figure 5.2 long description.](#)

Source: *The National Atlas of the United States of America*. Arch C. Gerlach, editor. Washington, D.C.: U.S. Dept. of the Interior, Geological Survey, 1970, viewed at <https://legacy.lib.utexas.edu/maps/histus.html>.

Differences in language between these regions were already in evidence by the early nineteenth century. For example, emergent regionalisms appear in the writing of Anne Royall, a travel and society writer. She wrote in 1831 (cited in Mathews [1931](#): 95):

I saw a piece in the papers not long since, which went to satirize the Tennessee dialect. I would advise such people to look at home. Those who live in glass houses, ought not to throw stones. Let us compare this with the dialect of Virginia ... ' you know da is heap of baw [bear] on da Kenhawa; so [we] are all goin to Kenhawa to hunt baw - Kenhawa mighty far - so we walk - we walk - last we come to da Kenhawa - Kenhawa b-i-g river, for true - Tell you what, it skears me - well, I goes out into de woods - I hear noise - I look up tree, and see a baw! ... ' Now for the Pennsylvania dialect: ' Jim, where are you and Sam; why but ye ' s pit [put] you cow in the pester [pasture]; ' am sure a towled ye ' s the mornin. - Ye ' s cruel bad children - and there a fine job ye ' s done to leave you gears out by. ' The Yankee: ' Flora you want [ought] to wash them clothes right away. You hadn ' t ought to left ' em so. ' ' What say? '

We see in this report that by the early nineteenth century there was common knowledge of dialect variation between the states. Further, we see that some features that we associate with those regions still today were present then, such as loss of postvocalic -r and other matters of pronunciation (represented with nonstandard spellings), lexical choices still at issue like *hadn 't ought* or the second-person pronoun *ye*, and also grammatical choices like “ what say, ” “ for true, ” or “ am sure a towled ye ' s the mornin. ”

An Experiment in the Spread of Dialect Words

In order to measure the spread of dialect words, we first need to know how words are typically distributed across the land. [Figure 5.3](#) shows a map based on the distribution of the word *cloudburst* in the Linguistic Atlas of the Middle and South Atlantic States (LAMSAS) survey (page 6, line 1 of the questionnaire).

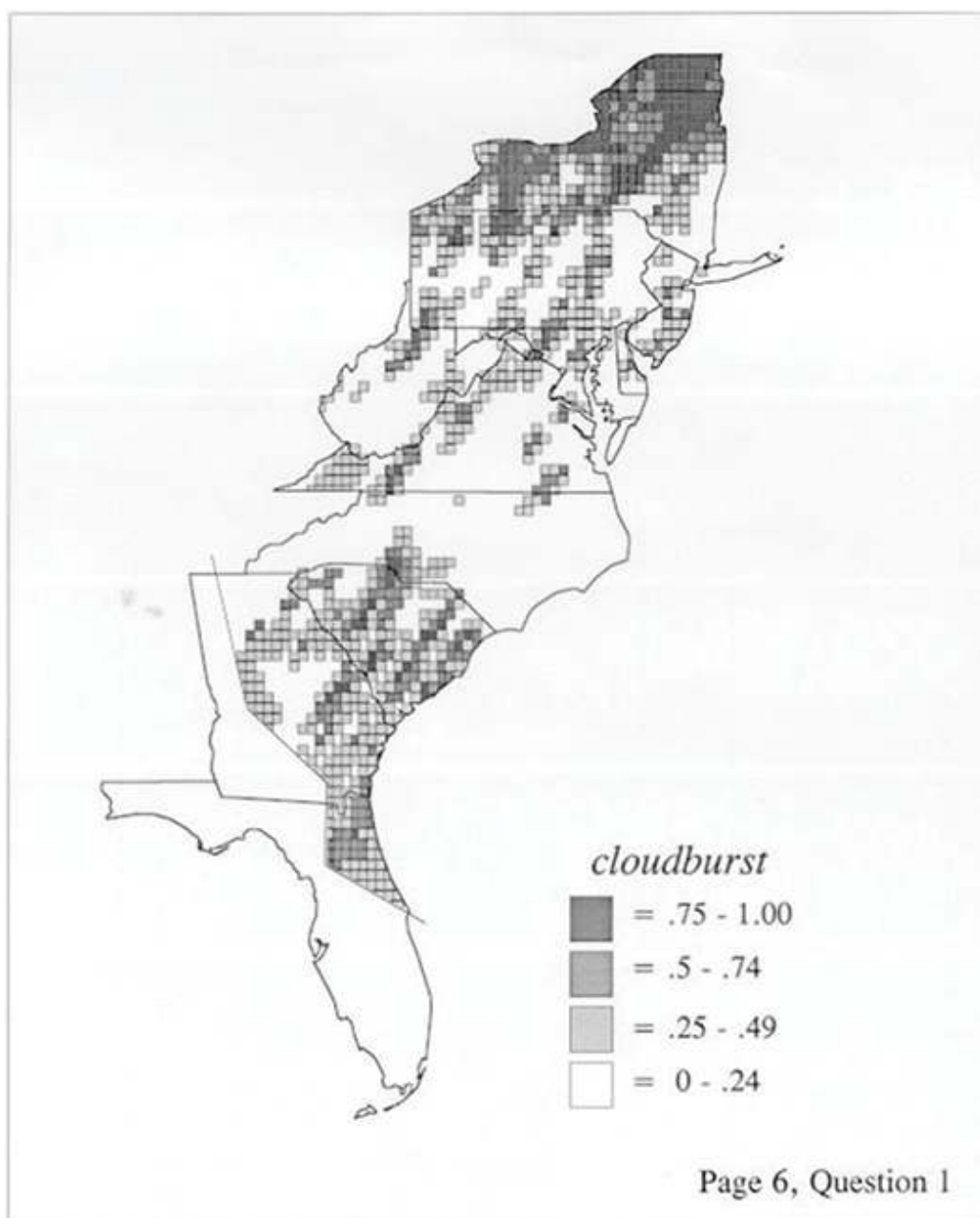


Figure 5.3 *cloudburst* in LAMSAS (density estimation).

The map shows a small square, in four degrees of shading from dark to light, for each 0.2 degree of longitude and latitude throughout the LAMSAS survey region (about 3,000 squares); the angular cutoff in Georgia and Florida separates the western and southern parts of those states that were not part of the survey area. Using a **density estimation** statistic to estimate the status of all the squares from the available data points (by looking at the nearest neighbors that do have data for the squares that do not contain an informant), the darkest squares show the highest probability of finding *cloudburst* (75 percent to 100 percent), with two lighter shadings to indicate lower probabilities; parts of the survey area without shading have a 0 percent to 25 percent probability of finding *cloudburst*. The main benefit of these probability maps is that each map gives a comprehensive analysis of the word whose distribution it illustrates. The set of maps (available online at emergence.libs.uga.edu) provides comprehensive coverage of 115 words processed in this way, each one a word that occurred at least fifty times in the LAMSAS survey. The general impression one gets from the whole set of maps is that words do not just exist in neat regions. The pattern for *cloudburst* is the most common, patchy distributions across the map. Some words have

dense, dark coverage throughout almost the entire survey area, such as *dry spell* or *wardrobe* ; others are widely scattered like *drought* ' dry spell, ' or strongly localized like *chifforobe* ' wardrobe. ' The overall statistical finding from this data is that all of the items show clustering (as opposed to data at random locations or evenly separated locations; see Kretzschmar 1996a).

In order to find out about the influence of settlement, we can check the probability of occurrence of each of the 115 words in each of twenty cities (as first reported in Kretzschmar 1996b): New York City and Rochester (NY); Philadelphia, Harrisburg, and Pittsburgh (PA); Baltimore (MD); Washington (DC); Charleston (WV); Richmond, Norfolk, and Roanoke (VA); Wilmington, Raleigh, and Charlotte (NC); Charleston, Columbia, and Greenville (SC); and Savannah, Augusta, and Atlanta (GA). In accordance with the shading on the maps, for each variant we can assign a value of 0 (no shading), 1 (light shading), 2 (moderate shading), or 3 (dark shading) to each city for each word.

Table 5.1 shows the number of words from the list that were strongly associated with each of the cities (i.e., when a word had the highest probability, 3, of being found there). There are not very many words that are never strongly associated with a city (7/115; *going down* , *thundersquall* , *back stick* , *chifforobe* , *week from Sunday* , *rich pine* , and *white frost*), and there are also not that many that are strongly associated with all the cities (14/115; *night* , *bureau* , *drizzle* , *sofa* , *closet* , *feet* , *frost* , *clear* , *half past* , *wardrobe* , *attic* , *thunderstorm* , *blew* , *three years old*). There are only six words strongly associated with a single city, so that it is not the case that we see what some people might have expected, that each city would have its own set of words not shared with other cities. On average, any given word was likely to be found in nine or ten cities. Again, on average, the typical probability of occurrence for a word in a city was level 2 (50 percent to 75 percent). Instead of each city having its own words, the distribution of words belongs to the realm of probability as we expect in the complex system of speech, a distribution of more and less rather than all or none. In these probabilistic terms, we can say that most variants tended to be widely distributed across American cities, especially if we consider that words often have a weaker association with a place than what Table 5.1 tabulated.

Table 5.1 Distribution of words by number of cities

Number of cities	Number of words
0	7
1	6
2	6
3	6
4	13
5	7
6	6
7	4
8	5
9	3
10	2
11	5
12	3
13	3
14	5

Number of cities	Number of words
15	3
16	6
17	2
18	4
19	5
20	14

[Table 5.2](#) shows a breakdown by city of the number of words with some probability of occurrence (those in levels 1, 2, or 3).

Table 5.2 Distribution of variants by city

City	Number of words
Greenville (SC)	74
Charleston (SC)	69
Roanoke (VA)	66
Augusta (GA)	63
Charlotte (NC)	62
Columbia (SC)	59
Richmond (VA)	56
Raleigh (NC)	56
Wilmington (NC)	54
Atlanta (GA)	54
Savannah (GA)	52
Baltimore (MD)	51
Norfolk (VA)	51
New York City	50
Charleston (WV)	48
Philadelphia (PA)	48
Washington (DC)	47
Pittsburgh (PA)	47
Rochester (NY)	47

City	Number of words
Harrisburg (PA)	42

The order of the cities suggests that the American South has a broader vocabulary than the North (as Metcalf [1997](#) first reported). The first eleven cities in the list are Southern, the first thirteen if we consider Baltimore, where slaves were common, to be Southern. The number of variants from each city ranges from 74/115 (64 percent) to 42/115 (37 percent), with an average of 55 (48 percent). Still, rather than having an exclusive set of words, each city participates in the pool of available words. While variation is not evenly distributed in American English, it is widespread and normal. One reason that Southern cities have more variants is a technical aspect of the LAMSAS survey: Raven McDavid, the main fieldworker in the South, collected more variants than other fieldworkers did. On the other hand, it is also possible that the complex social structure of the South, with plantations and slavery and yeoman farmers all playing a role, tended to preserve more variants than the relatively simpler farming culture of the North.

As for evidence from the settlement patterns of the National Period, we can look at four pairs of cities, each pair consisting of one of the coastal focal cities from the Colonial Period and a city further inland: New York City and Rochester (NY), Philadelphia and Pittsburgh (PA), Richmond and Roanoke (VA), and Charleston and Greenville (SC). When we look at the words with the highest probabilities (level 3) that are most closely associated with the cities, in every case the inland city shares more of these words with the coastal focal city than with other cities. In one case, Rochester, the inland city shares the same number of words with Philadelphia and Pittsburgh (from the neighboring pair just to the south) as it does with New York City. Rochester is not “inland” of New York City in quite the same way as for the other pairs, but even so New York City is one of its closest relatives. Amidst all the variability in vocabulary between all of the cities, these pairs still regularly show the effect of the settlement pathways: language followed the people moving west.

Immigration and Language

The American population increased rapidly during the National Period. From about 5 million people in 1800, the overall population grew to more than 30 million by 1860. In the first few decades of the nineteenth century foreign immigration was relatively limited, in part from the disturbance of the War of 1812 (1812 – 1815), so population growth came mainly from the established citizens, but settlement by foreign immigrants accelerated, starting in the 1830s. The largest sources of immigrants were Ireland and Germany, followed by England and France. At the end of the period, a great number of Spanish speakers, former Mexicans and others in Texas, the Southwest, and California, became Americans. Besides these large groups, settlers arrived from all across Europe, indeed the world. The California Gold Rush attracted about 100,000 people, not only Americans from the eastern states but also foreign immigrants from Europe, Australia, and China. The importation of slaves from Africa was officially halted in 1808 but the population of African Americans continued to grow, to reach about 4 million slaves by the time of the Civil War, plus another half million “free” African Americans. While slaves were concentrated in the Southern states, all of the different contributing groups of the population were heavily mixed. Large groups like the Irish and Germans did establish significant ethnic clusters in cities, like the Irish in New York and Germans in many new Midwestern cities. Owing to the time when large numbers of Scots and Scots-Irish got to America, they formed a large part of the population in the Appalachian Mountain region. Over time, other ethnic groups formed clusters in other areas that were open to settlement at the time when a large number of them immigrated (see [Chapter 6](#)). These clusters, however, existed within a heavily mixed population overall and were still governed by the Principle of First Effective Settlement (see [Chapter 4](#)).

The process of complex systems offers an answer to the problem of scattered evidence for ethnic influences on American English. Michael Montgomery, a meticulous scholar, worked hard to connect Scots-Irish immigration with dialect features in Appalachia ([1989](#), [1991](#), [1997](#)), but he was only able to find small traces of Scots-Irish English in the Southern mountains. We know that large numbers of Scots and Scots-Irish came to the Appalachian region in the eighteenth century and thereafter, and we can certainly find cultural connections with the Scots and Scots-Irish in Appalachia, from housing and farming patterns to ballads and songs. Montgomery found that **plural verbal -s** (like *they works*) had been retained in Appalachian English as a low frequency feature, and so had the use of **multiple modal auxiliary verbs** (like *might could* and *may can*), but a great many other possibilities that Montgomery checked could not be connected in this way. The operation of the complex system tells us how such grammatical variants could be retained at low frequencies on the A-curve, in competition with top-ranked usages of verbal -s and auxiliaries. The complex system also explains why the *needs*

washed construction (as opposed to the more common *needs to be washed*), another variant with a Scots and Scots-Irish history, is *not* found in Appalachia but *is* found in western Pennsylvania. Owing to the random interactions of the system, some variants will become common in some places and not others. The presence of speakers from some pre-existing cultural group creates the opportunity for variants to be introduced to the system, but does not require that any particular variant will become common in the regional complex system. Indeed, given the extension of eastern complex systems to the west, we might expect, on the odds, to find just what we see: the retention at low levels of variants from significant cultural groups in the population, within an overall pattern dominated by variants carried west from the coastal areas.

We can see a parallel problem with the distribution of lack of postvocalic -r (whether the -r is pronounced in words like *car*, *barn*) in primary American settlement areas. One theory to account for the fact that postvocalic -r was historically often lost in New England, New York City, and the Coastal South, proposed by George Krapp (1925), is that such r-lessness in both Britain and America “ was a natural and early change in language which took place in popular speech unaffected by learned or standard influences ” (cited in Stephenson 1968: 64).

The most common causal explanation, as in Kurath (see Figure 5.4) and McDavid 1961, is that the areas that lost postvocalic -r stayed in closer contact with England than the places that did not lose postvocalic -r, notably Philadelphia, and thus lost their -r as the change expanded in England. This theory has its attractions: we know that the social elite of coastal cities did send some of their children to be educated in Britain, and that they looked back to Britain, specifically London society, as an important source of style and custom. We also know that the Quakers of Pennsylvania had the reputation of rejecting social flummery, as in their maintenance of *thee/thou* in rejection of the honorific use of *you* as a singular second-person pronoun. And, as Raven McDavid argued, the demographics of the Plantation South, in which a very small white elite managed an overwhelming African-American majority of slaves and fostered the spread of r-lessness in plantation areas, fit the notion of strong influence by a social elite (1948).

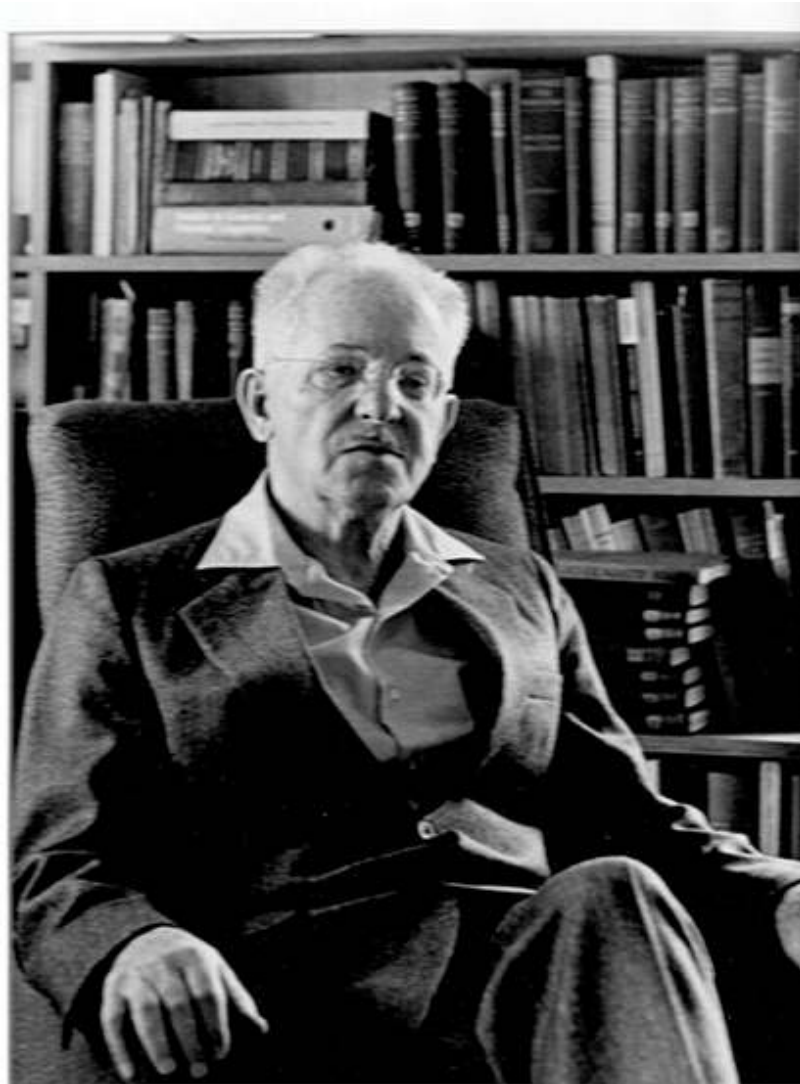


Figure 5.4 Hans Kurath.

As before, however, the facts of the case do not correspond to expectations, as demonstrated in a classic detailed study of North Carolina by Edward Stephenson (1968). An earlier article by Archibald Hill had shown that loss of postvocalic -r often occurred in Middle English in three environments: in unstressed syllables (like the final syllable in *father* , *brother*), through dissimilation in words with a second syllable with r (like *murder*), and in consonant clusters before non-labial, non-velar consonants like /s, t/ (like *first* , *burst*). Stephenson says that all areas of colonial America could thus be expected to have some kinds of r-lessness, and he finds examples in North Carolina. Still, Stephenson points out that more general r-lessness remains to be explained for the colonies. His careful study of variant spellings in eighteenth-century North Carolina documents indicates that, while Hill ' s r-lessness was present near the beginnings of settlement in North Carolina, the more general kind of r-lessness began to appear there only later in the eighteenth century. Further, the areas of general r-lessness in central North Carolina probably arose through settlement from Virginia, and general r-lessness is not present in areas of Eastern North Carolina that should have had it if either the theory of elite contact with Britain were true (as through the port of Wilmington) or if McDavid ' s theory of diffusion from South Carolina planters were valid (as in eastern North Carolina where settlements have come from South Carolina). Stephenson also points out that, even if general r-lessness entered Virginia from the social elite in Richmond, it was immediately a property observed in all social groups in North Carolina – which must cast doubt on the likelihood of any gradual melting of the feature through the population. We can share Stephenson ' s conclusion that “ the causes of the loss of postvocalic /r/ in North Carolina are complex, and no simple version of either the Krapp theory or the Kurath-McDavid theory will suffice to account

for the development ” (1968: 70). As in the case of Scots-Irish influence in Appalachia, a better answer comes from the complex system of speech. Speakers could, but did not have to, drop their postvocalic -r, and as a result of feedback from interactions between speakers, the probability that they would do so emerged at different levels in different places. The loss of postvocalic -r does not require a particular cause, just the operation of the complex system with differing results in different places as we might expect.

Albert Marckwardt has provided us with lists of words that English-speaking Americans borrowed from groups speaking other languages (1958). Of course, borrowing here is not something that will be given back, just the term that linguists use for acquiring a word from a different language. From the opposite point of view, linguists also talk about loanwords, but of course these loans are not paid back any more than the borrowings are. Marckwardt ’ s point of reference was that these words existed in “ present-day American English ” (for him the 1950s), so he did not offer specific dates for the borrowings. Many of these could be looked up in the *Oxford English Dictionary* (online) or the *Dictionary of American English* (1936 – 1944). In this chapter, words from different groups are presented, but not all of the words were necessarily borrowed (or loaned) during the National Period.

Borrowings from Native Americans began as soon as Europeans arrived in North America, as mentioned in the [previous chapter](#) . Of course Native Americans did not all speak the same language; in fact, they spoke hundreds of different languages, such as those in the Algonquian and the Iroquoian (including Cherokee) language families in the North and Central regions, and the Muskoghean family in the South. Other Native American language families in the West become relevant later in the National Period (like the Siouan family) and thereafter. A great many place names came from Native Americans. Some Native American borrowings were their names for native trees or plants, like *hickory* , *pecan* , and *squash* . Others animals: *chipmunk* , *moose* , *possum* , *raccoon* , and *skunk* . Some came from items of food or culture: *hominy* , *succotash* ; *powwow* , *squaw* , *moccasin* , *tomahawk* . Many more words from Native American languages were borrowed into American English but would be less familiar to most English speakers (like *scuppernong* , a native grape). Many Native American words were used in a local area and never made it into general use in American English, and other words may have been in wider use at one time but now no longer. In the complex system of speech it is easy for individual speakers to use a word they may have heard, and perhaps their neighbors may begin to use it, too. The word may catch on in wider and wider populations. But it may not. A novel word may never get established even at the neighborhood or local level, much less nationally. And a word that has become common in a population may, without any particular reason, become uncommon again.

One aspect of Native American speech that became popularized in Hollywood films and television shows is Indian grammar. “ How, ” a chief might say when he meets a cowboy. A fluent English speaker might rather have said “ How are you? ” Tonto, the Indian friend of the Lone Ranger on radio and television in the 1950s (but not Tonto as played by Johnny Depp in the 2013 movie; you can see the original version on YouTube), used to say “ Me understand, kemosabe. ” While there is dispute about what *kemosabe* could mean (‘ trusty scout, ’ ‘ idiot, ’ ‘ white man ’), Tonto ’ s grammar was always a little different, such as his use of *me* instead of *I* as the subject of a sentence. When speakers of two different languages have to communicate with each other, say for trade purposes, it has often happened around the world that the speakers in a less-powerful position begin to use a limited form of the language from the more powerful group, a **pidgin** language. A pidgin is a language with simplified grammar, and with a limited vocabulary mainly drawn from the words of the more powerful group. The “ How ” is an example of a simplified greeting. Native American pidgin language has been discussed by scholars mainly with respect to speakers in the Pacific Northwest (a relatively late development), so Hollywood may have overgeneralized the contact situation between Native Americans and European Americans (see Meek 2006 for more about representations of Native American English). It is highly likely, however, that contact between English speakers and Native Americans did involve limited interactions when someone fluent in both languages was not available to translate. [Chapter 11](#) offers information about the current status of Native American languages and the “ Reservation Accent. ”

The German immigrant group came to America in several waves. The wave in the Colonial Period is responsible for the group usually called the Pennsylvania Dutch, with Anabaptist religious convictions. This inward-oriented group has to this day maintained German as the matrix language of their communities, though with many loans from English; members of these communities are bilingual in German and English, especially in localities where German is now only used in church. Subsequent waves of German immigrants starting in the 1830s did not have religion to hold their communities together, but they often did establish German-language church services and newspapers in urban areas, and the German language continued in family or local use for some time. In the author ’ s own family, the first German immigrants settled in Illinois in the mid-nineteenth century, and some of their children moved northeast to Michigan in search of cheaper land. The author ’ s grandfather, born near 1900 and living his life entirely in central Michigan, retained only a few words of German and trotted them out to annoy his grandchildren. Community use of German outside conservative religious

communities has survived the longest in Wisconsin and Texas, but even in these places it declined in the twentieth century in parallel with negative perceptions of German created by World War I and World War II.

Marckwardt reports a long list of food words coming to English from German, including *delicatessen*, *hamburger*, *lager beer*, *pretzel*, *pumpnickel*, and *sauerkraut*. Words in the field of education, a German strongpoint in the nineteenth century, include *festschrift*, *semester*, and *seminar*. *Christmas tree* is a German loan. A number of little colloquial words came from German: *bum*, *hex*, *loafer*, *nix*, *ouch*, and *phooey*. In areas with German populations one can hear borrowed grammatical constructions like “make the light out,” or “come by” to visit someone, or words perhaps less common in English like *liverwurst* or *schnitzel*. Some loanwords come from a related language, Yiddish, spoken by Jewish settlers. Yiddish as a language began in the Middle Ages, consisting of a German core with additions from Hebrew and Aramaic; it later spread to Eastern Europe, with further influences from Slavic languages there. In America, *kosher* and *kibitz* are the most familiar words, but in Jewish groups a great many more Yiddish words are common. In the mid-twentieth century many more such words were widely known, following the success of Jewish American comedians in the media.

Dutch settlement was first concentrated in downstate New York and northern New Jersey, inland from originally Dutch New York City. Later the Dutch settled in western Michigan, for example in the town of Holland, near Grand Rapids. Even though the numbers of settlers were smaller than the number from Germany, Dutch gave American English very common food terms like *cole slaw*, *cookie*, and *waffle*. Dutch *Santa Claus* is much more common than the German *Kris Kringle*. Other common words include *caboose*, *scow*, *sleigh*; *boss*, *Yankee*; *dope*, *dumb* (meaning ‘stupid’), *snoop*, and *spook*.

French loans into American English are complicated by the long history of the relationship between French and English owing to the Norman Conquest and its aftermath. The aristocracy in England was French-speaking for hundreds of years after the conquest, and even after that the kings of England laid claim to much of southern France for centuries further. England retained control of the mainland port of Calais until 1558. In North America the French were early settlers of Canada, and explorers in the Great Lakes region and the Mississippi River. American cities *Detroit*, *St. Louis*, and *New Orleans* were founded by the French. In the National Period, the French sold the United States their inland territories, largely unoccupied by Europeans, as the Louisiana Purchase. Some French loanwords to American English came from the North: *caribou*, *crappie* (a fish), *gopher*, *pumpkin*, *portage*, *prairie*, *toboggan*. Many more came from the Louisiana Delta and New Orleans: *bayou*, *jambalaya*, *levee*, *praline*. Words like *bureau*, *cent*, *depot*, *dime*, and *rotisserie* are not associated with a specific region.

Spanish borrowings in America are mostly associated with Texas and the West, although Spanish explorers first came to North America in Florida and explored through the (future) Southern states in the sixteenth century. They were responsible, by accident, for the introduction of smallpox and other European diseases with horrible effects upon the Native American population, resulting in the depopulation of large areas east of the Mississippi River (before the arrival of other Europeans). St. Augustine, Florida, is the longest continuously occupied European settlement in mainland North America, founded by the Spanish in 1565 (San Juan, Puerto Rico, was founded in 1521). The Spanish were also involved in New Orleans. Marckwardt lists no fewer than eighty-eight different Spanish loanwords in American English. Among plants and animals: *alfalfa*, *marijuana*, *bronco*, *cockroach*, *coyote*, and *mustang*. Spanish loans for food and drink make up staple fast foods in America today, like *chili*, *enchilada*, *taco*, *tortilla*. Western ranches provided many words: *corral*, *lariat*, *lasso*, *poncho*, *ranch*, *rodeo*, *sombrero*, and *stampede*. The words *canyon*, *fiesta*, *pronto*, and *tornado* are also very common.

African Americans did not come to the country as immigrants but instead were brought as slaves. Some came direct from Africa, others by way of the Caribbean islands such as Barbados (claimed by the English in 1625 and a center of the slave trade). Words such as *gumbo* and *voodoo* are said to be borrowed from African languages and many more words may have come from that source, but a relative lack of knowledge of African languages by European and American scholars has complicated the explanation of these word origins (but see Lorenzo Turner’s [1949](#) *Africanisms in the Gullah Dialect*). In later years a great deal of language associated with the African American community has become mainstream, such as the words *jazz*, *juke box*, and *hip hop* (see [Chapter 9](#) for more information).

Again, as mentioned above in connection with Scots-Irish borrowings, the presence of speakers from some pre-existing cultural group creates the opportunity for words and other linguistic features to be introduced to the complex system of speech in America, but that does not mean that any particular word or feature will become common. What we see, overall, is the retention of some words and features from significant cultural groups in the population, within an overall pattern dominated by English.

Webster and Standard American English

Standard American English is not a product of the same process that creates and continues to change American English. Regional and social varieties and the American variety as a whole emerge from all the linguistic interactions between members of regional and social groups, and, at the top level of scale, by all participants in American culture. Standard American English, on the other hand, is an institutional construct. It has no native speakers. It is, however, a fact of life for American speakers in formal settings, especially in the educational system (see [Chapter 12](#)).

The main push behind the idea of a standard variety of a language (like **Standard English**) occurred in the nineteenth century, not only in England but elsewhere in northern Europe (see Milroy [2000](#)). The development of notions of purism and a focus on educated speech in the nineteenth century led to the expectation that the standard language would be uniform in structure, and mainly treated the written language instead of the more highly variable use of language in speech. Standard languages, therefore, can be associated with the language of capital cities, not because the speech of the capital city provides a natural model for a national language, but because the political and social importance of the capital gives national status among the *literati* to written language originating in the capital. Standard English is not to be taken for granted as some sort of default form of the language, and neither should it be brushed aside as unreal. Standard English arises from particular historical circumstances and processes of thought, and it is now completely ingrained in the American educational system (and that of other countries as well).

Standard American English began with **Noah Webster** (see [Figure 5.5](#)). Webster had published his own *Grammatical Institute* ([1783](#)) soon after other grammars (e.g., by Robert Lowth in 1762) that launched the Standard English movement. He was interested in the creation of a specifically American variety of English, a national language for a new country:

The author wishes to promote the honor and prosperity of the confederated republics of America This country must in some future time be distinguished by the superiority of her literary improvements, as she is already by the liberality of her civil and ecclesiastical constitutions. Europe is grown old in folly, corruption and tyranny. For America in her infancy to adopt the maxims of the Old World would be to stamp the wrinkles of decrepit old age upon the bloom of youth, and to plant the seeds of decay in a vigorous constitution.

(written in 1783, cited in Commager [1958/1962](#) : 1)

As clearly expressed in this passage, and neatly characterized by Commager, “ The driving force in Webster, the compulsion that explains all particular expressions of his ambitions and his energies, was nationalism ” (Commager [1958/1962](#) : 5).



Figure 5.5 Noah Webster (1758 – 1843), American lexicographer.

Source: Bettmann/Getty Images.

Commager explains ([1958/1962](#) : 7):

But if nationalism was to work in the United States – and in 1800 that was still very much an open question – it would have to get along without the Monarchy, the Church, the Military, and the many other institutions that provided common denominators abroad, and work with more democratic ingredients and build on popular support. It would have to frustrate those class and religious and racial divisions which were potentially so dangerous; it would have to overcome differences not merely of accent but of language itself. The United States, dedicated to the unprecedented experiment of republicanism in a vast territory, a heterogeneous population, and a classless society, could not afford differences of accent or of language.

As we have seen in previous chapters, variation in language naturally self-organizes out of a radically mixed population in a complex system. Thus, regional and social varieties of English were inevitable developments in the United States. A uniform standard, however, was then and still remains a politically attractive idea. That there were fewer differences between the speech of American states than there were differences between British regions might well have been taken as evidence at the time that a standard language was actually developing in the speech of America. Such a notion is as much an example of wishful thinking now as it was then.

The development of Standard American English nonetheless took place, if not naturally in the complex system from which American regional varieties emerged, then by Webster ' s salesmanship. John Adams did lead an unsuccessful attempt to create an American Academy on the model of the Académie Française (see Mathews [1931](#) : 39 – 43), and Webster himself helped to create a

Philological Society, but Commager again states the crucial fact: " The Academy was never born; the Society withered and died; but they were not necessary. Webster ' s books did their work " ([1958/1962](#) : 8). Webster ' s *American Spelling Book* (see [Figure 5.6](#)) began its career as a part of his *Grammatical Institute* but was later published widely as a separate volume. A footnote (dated March 1818) in the preface of the 1831 edition of *The American Spelling Book* claimed that sales to that point " amount to more than FIVE MILLIONS of copies, and they are annually increasing " ([1831/1962](#) : 15). Webster wrote that his book had become " the principal elementary book in the United States. In a great part of the northern States, it is the only book of the kind used; it is much used in the middle and southern States; and its annual sales indicate a large and increasing demand " ([1831/1962](#) : 15). The justice of his claim is shown by Mathews ' estimate that *The American Spelling Book* had sold 50 million copies by 1865 ([1931](#) : 45), and by Pyles ' estimate that over 100 million copies were sold before it was replaced by other books ([1952](#) : 98).

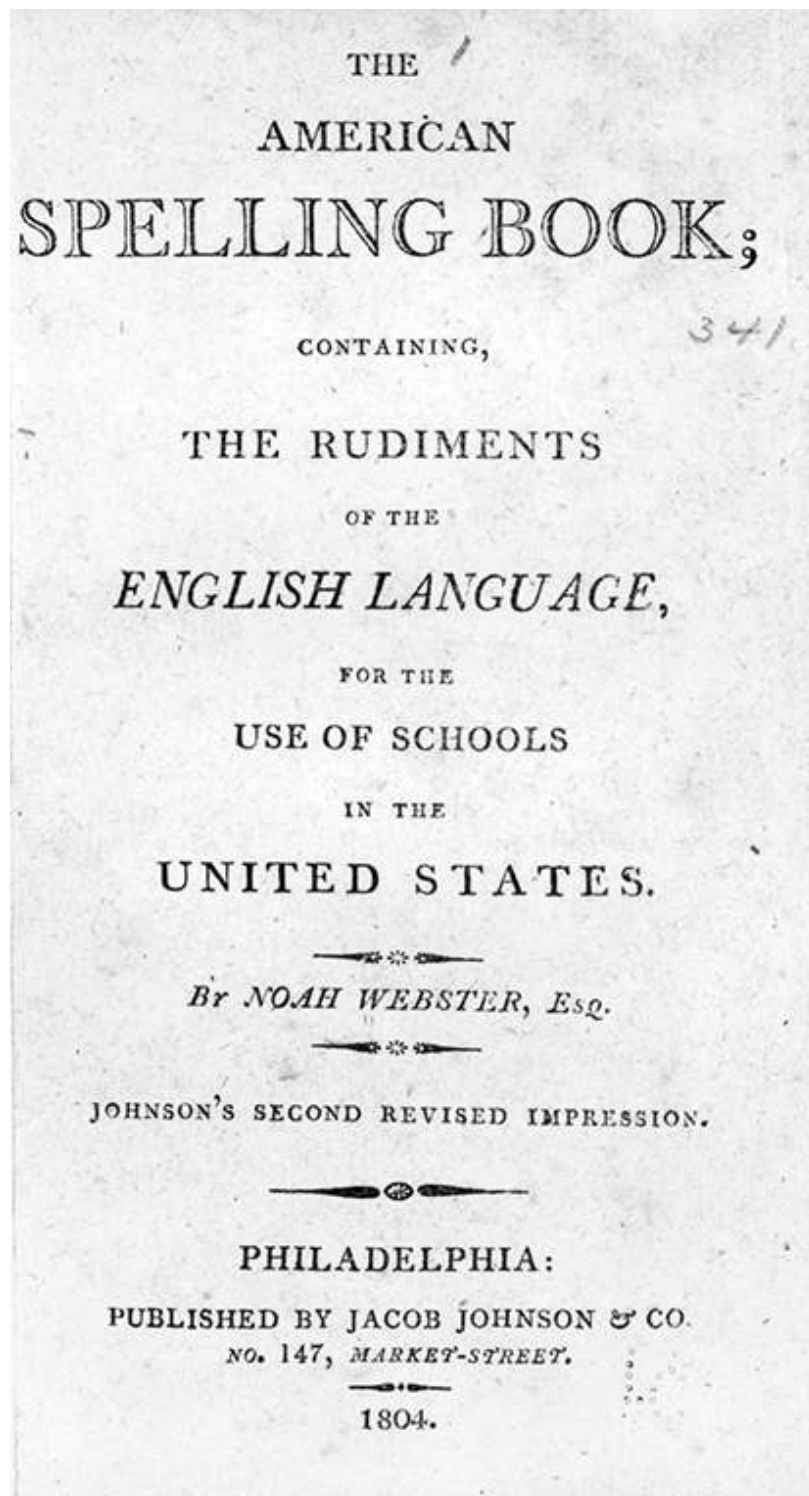


Figure 5.6 *The American Spelling Book* .

[Figure 5.6 long description.](#)

Source: MPI/Stringer/Getty Images.

More famous than *The American Spelling Book* but less successful in sales was Webster ' s *American Dictionary of the English Language* (1828). Pyles reports that " Unfortunately Webster, who was extremely good at the promotion of his books ... was not a very good man of business " (1952 : 98). Webster had sold the rights to *The American Spelling Book* and thus did not accrue royalties on most of the millions sold, and he had to borrow money to finance both the first and second editions of the *American Dictionary* so that they, in Pyles ' words, " did not pile up much of a profit " (1952 : 120). Still, the success of Webster ' s promotional efforts created one of the most successful textbooks of all time and made his name, in America at least, synonymous with the dictionary. Pyles offered the following summary assessment (1952 : 123):

It has been remarked that Webster may have taught us how to spell but taught us nothing else. With this it is difficult to agree. Webster was certainly one of the most influential commentators upon language who ever lived. More than any other single person, he shaped the course of American English, for he supplied us with the schoolmaster ' s authority which we needed for linguistic self-confidence. He was largely responsible for the dissemination in this country of an attitude toward language that prevails to this day, even among the rank and file of our people – an attitude which, while it is by no means exclusively American, is yet notably so.

Standard American English is Webster ' s legacy, but not primarily for the particular features of American spelling he advocated, but rather for the association of language with nationalism, uniformity, moral virtues, and authority, especially within the school setting.

The 1831 edition of *The American Spelling Book* had simply referred to " the most accurate rules of pronunciation, and the most general usage of speaking " (1831/1962 : 16). At the same time that this edition headed all of its pages with " An Easy Standard of Pronunciation, " its preface further asserted that, " A perfect standard of pronunciation, in a living language, is not to be expected; and when the best English dictionaries differ from each other ... where are we to seek for undisputed rules? And how can we arrive at perfect uniformity? " Webster and his revisers through numerous editions were interested in uniformity, authority, and the rules of English, even though they recognized variation in actual practice. It is interesting to note that grammar was not a large part of the system. The 1831 edition tells us that the abridged grammar originally included in the book had been omitted, along with the geographical tables, because " Geography and Grammar are sciences that require distinct treatises " and " It is believed to be more useful to confine this work to its proper objects, the teaching of the first elements of language, spelling and reading. " Authoritative treatment of grammar was not yet part of the American paradigm for elementary language teaching in these books.

The main content of the book is presented in numerous tables. Many of these consist of words deemed to belong to a " class " (e.g., one syllable, two syllables accented on the first, three syllables accented on the second, etc.), in which the spelling and syllabification of the words is accompanied by diacritical marks to indicate pronunciation. The earliest tables consist of single syllables, some of which are words in their own spelling (*h ē* , *sh ē*). Others are only syllables (*h ī* , *p ī*), considered valuable for later word formation. Many tables also contain example sentences, including very short ones in the early tables and more complex ones later. As the sentences get longer they begin to have useful content, such as " The world turns round in a day " or " The best paper is made of linen rags. " Moral lessons were also popular, such as " A rude girl will romp in the street " and " Bad boys love to rob the nests of birds, " or " I love the young lady that shows me how to read " and " The Holy Bible is the book of God. " Each sentence for a table tells its own story:

Strong drink will debase a man.
Hard shells incase clams and oysters.
Men inflate balloons with gas, which is lighter than common air.
Teachers like to see their pupils polite to each other.
Idle men often delay till to-morrow things that should be done to-day.
Good men obey the laws of God.

When sentences were introduced, they were explicitly religious and moral:

Lesson I
No man may put off the law of God:
My joy is in his law all day.
O may I not go in the way of sin!
Let me not go in the way of ill men.

Lesson II

A bad man is a foe to the law:
It is his joy to do ill.
All men go out of the way.
Who can say he has no sin?

Thus Webster and his revisers created Standard American English out of nationalism, and linked it explicitly with moral and religious teachings presented as reading instruction. The legacy in America of *The American Spelling Book* is an ideology of standard spelling and pronunciation, if not complete uniformity in either, as an expression of morality and patriotism.

It is now clear why an institutional language construct like Standard American English is not the same sort of thing as a natural language variety. The claim that there is a “ standard ” in the sense of a “ default ” variant for any linguistic feature is not compatible with the complex system of language in use. The only problem with the incorporation of Standard American English in the American educational system, beginning with Webster and continuing through the present day, is the unexamined assumption that Standard American English has an empirical basis in language in use. It does not. Standard American English is actually just another manifestation of a particular culture, amongst the many regional and social cultures in pluralistic American society (see [Chapter 12](#) for more information).

At the end of the National Period came the greatest disturbance ever for the American social experiment, the Civil War. The northern Union states opposed the practice of slavery, and eleven southern Confederate states (with two other states represented in the Confederate Congress) insisted on states ’ rights, really the continuance of slavery. The Confederate states had economic interests in plantations and cotton production that dominated their politics, although large numbers of their residents were small farmers in areas not well suited to plantation agriculture. Plantations were where large numbers of slaves were needed; small farmers often had no slaves. Opposition to slavery in the north had a long history beginning in the eighteenth century. The Underground Railroad (a means of escape from the South for African Americans) was founded in 1838, and Harriet Beecher Stowe ’ s anti-slavery novel *Uncle Tom ’ s Cabin* was published in 1852. During the four years of the war (1860 – 1865) as many as 750,000 soldiers died, about 50,000 alone at the Battle of Gettysburg (1863), and an uncounted number of civilians. The war ended in 1865 with General Robert E. Lee ’ s surrender, Lincoln ’ s assassination, and the passage of the Thirteenth Amendment to the Constitution which outlawed slavery. The confederate states were readmitted to the union between 1866 and 1870. Much of the fighting had occurred in the southern states so that the infrastructure of the South was destroyed and its way of life changed forever. Changed but not forgotten. To this day many Southerners look back to the genteel society of the mid-nineteenth-century South, and prefer to remember that gentility instead of the treatment at the time of African Americans. The South has remained a socially stigmatized region ever afterwards.

Summary

During the National Period America grew from coastal colonies into a large nation, and its population ended the period six times larger than when it began. Settlement patterns formed out of westward immigration from coastal port cities, and language features followed the people west. American English borrowed words from Native Americans and many European languages. Influences from other languages, however, were always subject to the operation of the complex system of speech. Noah Webster began the institutionalization of Standard American English that still obtains today.

Key Terms

American Spelling Book

density estimation

Inland North

Midland

multiple modal auxiliary verbs

Noah Webster

New England

North Midland

Northern

pidgin

plural verbal -s

South Midland

Southern

Standard English

Audio Samples

The following samples of the primary American regions were recorded in 1928 (available at www.cambridge.org/williamakretzschmar). Each is a recording of the Grip the Rat passage. Can you hear any differences?

a5.1 Inland Northern – 1928

a5.2 Midland – 1928

a5.3 Southern – 1928

Exercises

1. Try to rewrite the chapter ' s Anne Royal passage in modern colloquial English.
2. Look up the Mexican War (also called the Mexican-American War). How did it affect the territory of the United States? What do you think its consequences were for American English?
3. What do you think of *The American Spelling Book* as the most popular textbook of all time, given the passages mentioned in the chapter? Would it be permitted in schools today? Do you think it goes along with the American experience as a social experiment?

Computer Exercise

[Exercise App3.5 in Appendix 3](#) explores variation in individual communities, as discussed in the experiment about dialect words in this chapter.

Further Reading

Albert Marckwardt , *American English* (New York : Oxford University Press , 1958) ; Thomas Pyles , *Words and Ways of American English* (New York : Random House , 1952) . These are two earlier textbooks of American English, each notable in their own ways. Marckwardt ' s book was later revised and republished by Joey Dillard, which only diminished the value of the book. A more recent book by Walt Wolfram and Natalie Schilling , *American English: Dialects and Variation* , 3rd ed. (Oxford : Wiley-Blackwell , 2015) focuses on sociolinguistic aspects of American English.

James Milroy, " The Ideology of the Standard Language, " in Laura Wright , ed. *The Development of Standard English 1300-1800* (Cambridge : Cambridge University Press , 2000), 11 – 28 . Milroy ' s essay clearly describes how the idea of a standard arose and become entrenched in schools. His earlier book with Lesley Milroy , *Authority in Language: Investigating Standard English* , 3rd ed. (London : Routledge , 1998) , provides a longer account, especially including the " complaint tradition " in England.

6

Gilded Age to World War II (1866 - 1945)



In This Chapter

The industrialization of America created a Gilded Age of wealth and excess, at the same time as the Great Plains and West were settled and the population grew at a tremendous rate. Industrialization enlarged cities, which created new urban neighborhoods for new immigrants. The Great Depression caused a pause in this rapid growth, which again accelerated for World War II.

Timeline

1867

Purchase of Alaska

1870

Population 38,818,449; Standard Oil Company founded

1873

Twain and Warner, *The Gilded Age*

1876

Bell telephone, barbed wire invented

1880

Population 50,155,783

1885

Stanford University founded

1886

Statue of Liberty dedicated; Coca-Cola merchandised

1890

Population 62,947,714

1892

University of Chicago founded

1896

Edison introduces motion pictures in the United States

1899

Carnegie Steel Company organized

1900

Population 75,994,575

1903

Wright Brothers fly

1909

first mass produced Model T Ford

1910

Population 91,972,266; NAACP founded (African American organization)

1917

The United States enters World War I; emergence of Hollywood

1919

H. L. Mencken, *The American Language*

1920

Population 105,710,620; first commercial radio broadcast

1927

The Jazz Singer, "talking pictures"; Lindbergh flies New York to Paris

1929

Stock market crash: Great Depression

1930

Population 122,775,046; first supermarket

1939

Regular trans-Atlantic air service

1940

Population 131,669,275

1941

World War II (1941 – 1945)

After the terrible divisions of the Civil War, America was symbolically joined in 1869 by the driving of the Golden Spike at Promontory Summit, Utah, which connected the railway systems of the eastern and western states. Leland Stanford, who later founded

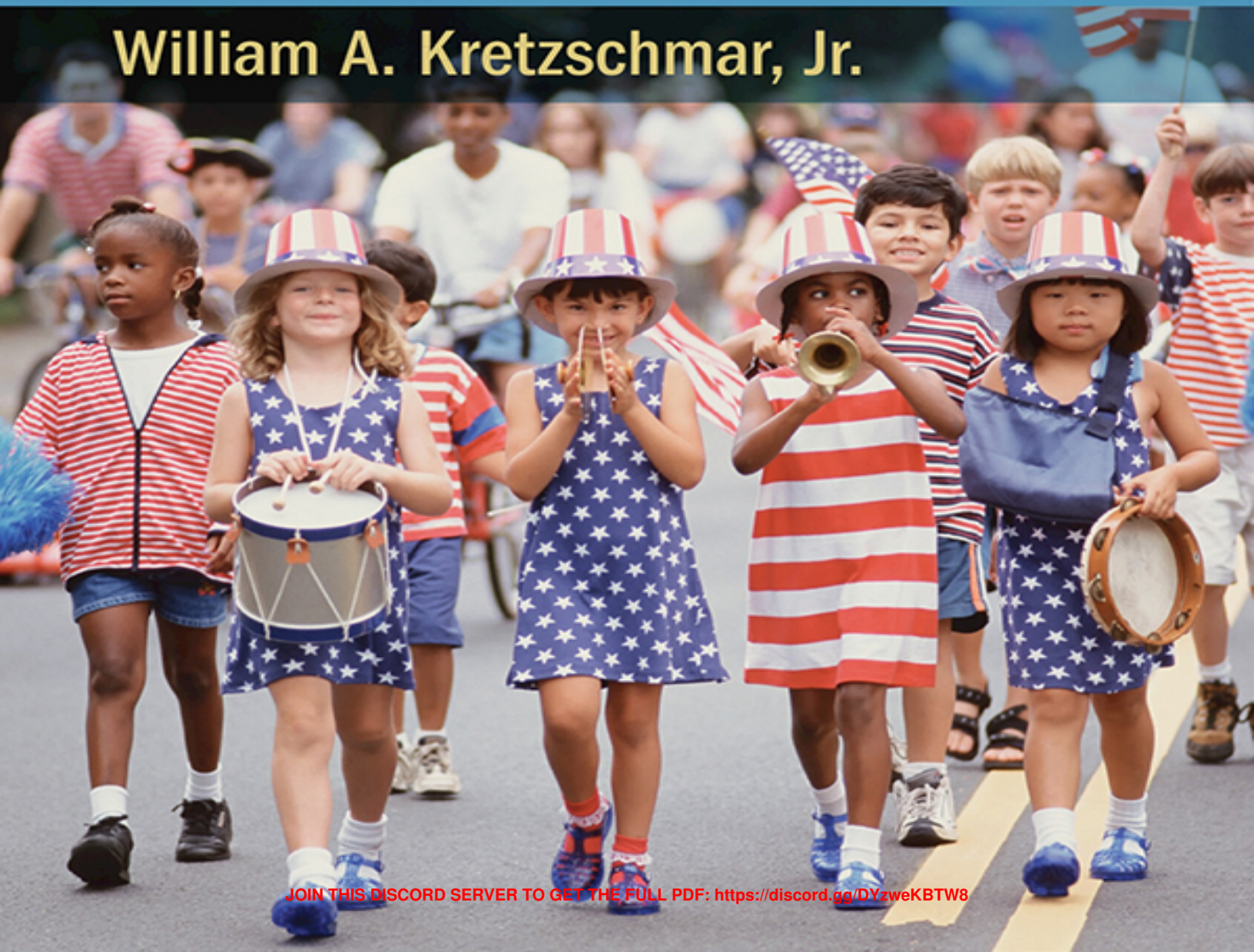
Stanford University (1885), drove the ceremonial spike. The whole event stands as an emblem of schizophrenic times in America: occupation of the full area of the original forty-eight states and acquisition of territories (Alaska, Hawaii) that would become the last two states, the advance of industry and technology, and parallel advance of higher education and culture, as against the importance of “gilded” ceremony, and the ruthlessness of robber barons out to acquire wealth and power. Near the beginning of this period, **Mark Twain** and co-author Charles Warner wrote the novel *The Gilded Age* ([1873](#)) to satirize the extremes of greed and corruption of the time, both in politics and industry. As they say, “if the shoe fits wear it,” and so Twain and Warner’s title has become the first part of the title of this chapter. If we take the **Great Depression** beginning in 1929 as the end of the Gilded Age, we can also see emerging what has been called “the American Century” of new involvement in world affairs, confirmed by America’s role in the second part of the title, World War II.

Robber Barons

Perhaps the first of the robber barons was Cornelius Vanderbilt (1794 – 1877) (see [Figure 6.1](#)). He made his fortune as a shipping magnate. He began his career as a ferry operator between Staten Island and Manhattan, and over the years came to dominate the new steamboat business around New York City owing to a combination of business ability, fiercely competitive prices, and accepting payments not to compete with rivals. He expanded to ocean-going steamships, and again in cutthroat fashion won a monopoly on the California steamship trade. He was later instrumental in the construction of railroads, eventually buying the New York Central Railroad (1867), which became one of the largest in America.

The Emergence and Development of American English

William A. Kretzschmar, Jr.



THE EMERGENCE AND DEVELOPMENT OF AMERICAN ENGLISH

William A. Kretzschmar, Jr.
University of Georgia



CAMBRIDGE
UNIVERSITY PRESS



Shaftesbury Road, Cambridge CB2 8EA, United Kingdom

One Liberty Plaza, 20th Floor, New York, NY 10006, USA

477 Williamstown Road, Port Melbourne, VIC 3207, Australia

314 – 321, 3rd Floor, Plot 3, Splendor Forum, Jasola District Centre, New Delhi – 110025, India

Cambridge University Press is part of Cambridge University Press & Assessment, a department of the University of Cambridge.

We share the University's mission to contribute to society through the pursuit of education, learning and research at the highest international levels of excellence.

www.cambridge.org

Information on this title: www.cambridge.org/9781009161213

DOI: [10.1017/9781009161220](https://doi.org/10.1017/9781009161220)

© William A. Kretzschmar, Jr. 2026

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 & Assessment.

When citing this work, please include a reference to the DOI [10.1017/9781009161220](https://doi.org/10.1017/9781009161220)

First published 2026

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

Library of Congress Cataloging-in-Publication Data

Names: Kretzschmar, William A., Jr., author.

Title: The emergence and development of American English / William A. Kretzschmar, Jr., University of Georgia.

Description: Cambridge ; New York, NY : Cambridge University Press, 2025. | Includes bibliographical references and index.

Identifiers: LCCN 2024057522 | ISBN 9781009161213 (hardback) | ISBN 9781009161237 (paperback) | ISBN 9781009161220 (ebook)

Subjects: LCSH: English language – United States – History.

Classification: LCC PE2809 .K74 2025 | DDC 427/.973 – dc23/eng/20241231

LC record available at <https://lcn.loc.gov/2024057522>

ISBN 978-1-009-16121-3 Hardback

ISBN 978-1-009-16123-7 Paperback

Additional resources for this publication at www.cambridge.org/williamakretzschmar

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

For EU product safety concerns, contact us at Calle de José Abascal, 56, 1º, 28003 Madrid, Spain, or email eugpsr@cambridge.org

Contents

[List of Figures](#)

[List of Tables](#)

[Acknowledgments](#)

[Introduction](#)

[1 The Idea of American English](#)

[American English as Language](#)

[American English as Culture](#)

[American English in Politics](#)

[" Spoken in the United States "](#)

[2 Emergence](#)

[Complex Systems](#)

[Evidence of Emergence](#)

[Consequences of Emergence](#)

[3 Old World Origins for American English](#)

[Ancient History](#)

[Origins of English](#)

[Great Vowel Shift](#)

[4 The Colonial Period \(1600 – 1800\)](#)

[Demographics](#)

[Pattern of Settlement](#)

[Eighteenth-Century Immigration](#)

[Crèvecoeur and the American Experience](#)

[Schneider ' s Postcolonial English](#)

[Examples of Colonial American English](#)

[5 The National Period \(up to the Civil War, 1800 – 1865\)](#)

[Settlement Patterns](#)

[An Experiment in the Spread of Dialect Words](#)

[Immigration and Language](#)

[Webster and Standard American English](#)

[6 Gilded Age to World War II \(1866 – 1945\)](#)

[Robber Barons](#)

[Demographics](#)

[The Great Depression](#)

[Common Language](#)

[Mencken and The American Language](#)

[Grip the Rat](#)

7 [The Information Age \(1945 – Present\)](#)

[America as a World Power](#)

[Information and Technology](#)

[Demographic Patterns](#)

[Language in Use](#)

8 [Regions and Localities](#)

[Traditional Dialect Patterns](#)

[More Recent Dialect Maps](#)

[Perceptions of Regional Dialects](#)

[The American South](#)

[Regional Differences in Frequency Profiles](#)

[Listening to Regional Voices](#)

9 [African American English](#)

[Race and Slavery](#)

[Demographics and Migration](#)

[Features of African American English](#)

[Academic Ideas about African American English](#)

[Language in Use](#)

10 [Social Differences in American English](#)

[Social Class](#)

[North American Sociolinguistics](#)

[Multidimensional Social Behavior](#)

[Roswell](#)

[Social Differences in the Complex System of Speech](#)

11 [Heritage Languages and American English](#)

[Ideas about Language Contact](#)

[Language Use across Generations](#)

[Language Learning](#)

[Heritage Languages in Communities](#)

12 [Standard American English](#)

[Mavens](#)

[Pronunciation](#)

[World English versus American English](#)

[Standards and Urbanization](#)

Appendix 1 [Terms and Concepts for Studying the English Language: Expression of Words with Sounds](#)

[Words](#)

[Speech Sounds](#)

Appendix 2 [Terms and Concepts for Studying the English Language: Beyond Expression to Content](#)

[Words in Patterns](#)

[Patterns beyond Sentences](#)

Appendix 3 [The Linguistic Atlas Project and Excel: Working with Survey Data](#)

[*Linguistic Atlas Project \(LAP\)*](#)

[*LAMSAS*](#)

[*LAGS*](#)

[*Other Atlas Projects*](#)

[*Getting Started Online*](#)

[*Data Download Center*](#)

[*LICHEN*](#)

[*Tallies*](#)

[*Working with Spreadsheets*](#)

[*COUNTIF*](#)

[*VLOOKUP*](#)

[*Computer Exercises*](#)

[*Glossary*](#)

[*References*](#)

[*Index*](#)

Additional resources for this publication available at www.cambridge.org/williamakretzschmar

Figures

- [1.1 The American states.](#)
- [1.2 American regions.](#)
- [1.3 Dennis Preston.](#)
- [1.4 North America.](#)
- [1.5 A schematic, three-dimensional representation to visualize Zelinsky ' s cultural systems.](#)
- [1.6 Cutting potatoes.](#)
- [2.1 The break in pool.](#)
- [2.2 A dragonfly.](#)
- [2.3 A-curve for *dragonfly* variants.](#)
- [2.4 A-curve for *dragonfly* variants, after removing plurals and inappropriate responses.](#)
- [2.5 *dragonfly* variants just for men, and just for women.](#)
- [2.6 *dragonfly* variants for regional groups of speakers.](#)
- [2.7 *dragonfly* variants for groups of speakers by age.](#)
- [2.8 Flexible and understandable.](#)
- [3.1 Indo-European tree of languages.](#)
- [3.2 Alsace and Germany.](#)
- [3.3 Early regions in Britain \(showing the modern borders for Scotland and Wales\).](#)
- [3.4 Phase 1 of the Great Vowel Shift.](#)
- [3.5 Phase 2 of the Great Vowel Shift.](#)
- [4.1 European settlement pattern near Leicester \(England\) in the Middle Ages.](#)
- [4.2 Settlement and transportation by 1800.](#)
- [5.1 Settlement pathways from the American East Coast.](#)
- [5.2 American Settlement by 1850.](#)
- [5.3 *cloudburst* in LAMSAS \(density estimation\).](#)
- [5.4 Hans Kurath.](#)
- [5.5 Noah Webster.](#)
- [5.6 *The American Spelling Book.*](#)
- [6.1 Cornelius Vanderbilt.](#)
- [6.2a Andrew Carnegie.](#)

- [6.2b Andrew Mellon.](#)
- [6.3a Leland Stanford.](#)
- [6.3b John D. Rockefeller.](#)
- [6.4 Russell Patterson \(1893 – 1977\), “Where There ’s Smoke There ’s Fire,” ca. 1920s.](#)
- [6.5 Settlement by 1890.](#)
- [7.1 United States population density \(2000\).](#)
- [7.2 Red and blue states as of 2020.](#)
- [7.3 Vaux survey, map for “sandwich” responses \(#64\).](#)
- [8.1 Kurath ’s dialect map.](#)
- [8.2 Variants of *dragonfly*.](#)
- [8.3 Isoglosses.](#)
- [8.4 Hempl ’s dialect map.](#)
- [8.5 Labov ’s dialect map.](#)
- [8.6 The Northern Cities shift.](#)
- [8.7 The Southern shift.](#)
- [8.8 Raw Value Map for /ay/ before voiced consonants \(e.g. *bide* \) on Formant 2.](#)
- [8.9 Local Autocorrelation Map for /ay/ before voiced consonants on Formant 2.](#)
- [8.10 HCA Dendrogram based on Factors 1, 2, 3, and 4.](#)
- [8.11 Two perceptual maps.](#)
- [8.12 Percentage estimates of the South.](#)
- [8.13 Vowel system of a sample of Southern non-African-American men.](#)
- [8.14 A-curve of 6,214 examples of \[u\] from twenty-three Southern non-African-American men.](#)
- [8.15 A-curve for LAMSAS variants for *curdled milk* .](#)
- [8.16 A-curve for New York City names for *curdled milk* .](#)
- [8.17 A-curve for Philadelphia names for *curdled milk* .](#)
- [9.1 W. E. B. Du Bois.](#)
- [9.2 Race?](#)
- [9.3 Martin Luther King, Jr. at the Lincoln Memorial.](#)
- [9.4 Percentage of African Americans vs. all Americans by income class. Household distribution by income.](#)
- [9.5 Raven and Virginia McDavid.](#)
- [9.6 Lorenzo Dow Turner.](#)
- [9.7 John Baugh.](#)
- [9.8 John Rickford.](#)

- [9.9 The Southern shift.](#)
- [9.10 Atlanta African American Male vowel means vs. Kent and Read national means \(from the Atlanta Survey\).](#)
- [9.11 Atlanta African American Female vowel means vs. Kent and Read national means \(from the Atlanta Survey\).](#)
- [9.12 Roswell African American male front vowel means vs. Atlanta means.](#)
- [9.13 Roswell African American female front vowel means vs. Atlanta means.](#)
- [10.1 William Labov.](#)
- [10.2 Sali Tagliamonte.](#)
- [10.3 Class/Style model for -r in New York City \(redrawn from Labov 1972b\).](#)
- [10.4 *fog* overall in LAMSAS.](#)
- [10.5 *fog* for men \(765\) and women \(346\).](#)
- [10.6 *fog* for farmers \(545\), housekeepers \(265\), managers \(94\), and professionals \(52\).](#)
- [11.1 Native American Languages spoken in the United States.](#)
- [11.2 Joe Salmons.](#)
- [11.3 Carmen Fought.](#)
- [11.4 Separate balls, separate languages.](#)
- [11.5 Cake.](#)
- [11.6 Batter.](#)
- [11.7 Locative constructions among interviewers and learners.](#)
- [11.8 Levels of scale, domains of use.](#)
- [11.9 Levels of scale, domains of use, reorganized.](#)
- [11.10 Learning by self-organization.](#)
- [11.11 Type frequency, early vocabulary.](#)
- [12.1 William Safire.](#)
- [12.2 Bryan Garner.](#)
- [12.3 Antonin Scalia.](#)
- [App1.1 Places of articulation.](#)
- [App1.2 American English vowel system in F1/F2 space \(following Kent and Read 2002\).](#)
- [App1.3 \[i\] pronunciations in F1/F2 space, sixty-four DASS speakers.](#)
- [App1.4 Frequency profile of pronunciations of the \[i\] vowel, sixty-four DASS speakers.](#)
- [App1.5 Shaded cells for where sixty-four DASS speakers said the \[i\] vowel.](#)
- [App1.6 Vowel space for sixty-four DASS speakers, shown with ellipses.](#)
- [App3.1 Opening page of the LAP website.](#)
- [App3.2 LAP projects.](#)

- [App3.3](#) [Data Download Center: LAMSAS link.](#)
- [App3.4](#) [Spreadsheet of LAMSAS speakers \(first twenty rows\).](#)
- [App3.5](#) [LAMSAS field book page.](#)
- [App3.6](#) [Portion of spreadsheet from LAMSAS page 4.](#)
- [App3.7](#) [Portion of audio spreadsheet for LAGS020.](#)
- [App3.8](#) [LICHEN opening screen.](#)
- [App3.9](#) [LICHEN map of LAP speakers.](#)
- [App3.10](#) [LICHEN search tab.](#)
- [App3.11](#) [LICHEN search for LAGS middle-aged, highly educated, upper class women.](#)
- [App3.12](#) [LICHEN display for LAGS 024.](#)
- [App3.13](#) [Map of LAGS middle-aged, highly educated, upper class women.](#)
- [App3.14](#) [LICHEN items tab.](#)
- [App3.15](#) [Dragon fly chart \(partial\).](#)
- [App3.16](#) [Map for *skeeter hawk* .](#)
- [App3.17](#) [Excel file for *dragon fly* tally, after CSV download \(partial\).](#)
- [App3.18](#) [Adjusted Excel tally with chart inserted \(partial\).](#)
- [App3.19](#) [Excel with LAMSAS page 60 A file open \(partial\).](#)
- [App3.20](#) [Sorted LAMSAS page 60 A file \(partial\).](#)
- [App3.21](#) [New sheet for responses to line 4 of page 60 A file \(partial\).](#)
- [App3.22](#) [Results of deleting duplicates in Column L \(partial\).](#)
- [App3.23](#) [Tally for dragon fly item \(partial\).](#)
- [App3.24](#) [Dragon fly tally with chart inserted.](#)
- [App3.25](#) [VLOOKUP results for Sex added to the data file for dragon fly \(partial\).](#)
- [App3.26](#) [VLOOKUP results for Sex and Age added to the data file for dragon fly \(partial\).](#)

Tables

[2.1 Top ten names for *dragonfly*](#)

[2.2 All the names for *dragonfly*](#)

[5.1 Distribution of words by number of cities](#)

[5.2 Distribution of variants by city](#)

[6.1 Differences between American and British English](#)

[7.1 Twelve "Southern" features for Roswell residents](#)

[8.1 Variants for "extra bed on the floor"](#)

[8.2 Variants for "cornbread"](#)

[8.3 Top LAMSAS variants for *curdled milk*](#)

[8.4 New York City names for *curdled milk*](#)

[8.5 Philadelphia names for *curdled milk*](#)

[9.1 When the plantation accent developed \(following Bailey 1997\)](#)

[10.1 Variants for *fog* overall in LAMSAS](#)

[10.2a *fog* for men \(765\)](#)

[10.2b *fog* for women \(346\)](#)

[10.3a *fog* for farmers](#)

[10.3b *fog* for housekeepers](#)

[10.3c *fog* for managers](#)

[10.3d *fog* for professionals](#)

[11.1 L-vocalization in the Australasian region \(adapted from Table 2, Horvath and Horvath 2003: 147\)](#)

[11.2 No nouns \(one child at age two, twenty-five most frequent words\) \(adapted from Tomasello 2003: 82\)](#)

[12.1 Standard American English Vowels \(adapted from Kurath and McDavid 1961: 6 with IPA symbols used in Upton and Kretzschmar 2017\)](#)

[App1.1 IPA symbols for English sounds](#)

[App2.1 Sentence patterns](#)

[App3.1 Community/Age Word Table](#)

[App3.2 Community Word Table](#)

[App3.3 Community/Job Word Table](#)

[App3.4 Community/Type Word Table](#)

[App3.5 Community/Race Word Table](#)

App3.6 [Community/Sex Word Table](#)

App3.7 [Community/Education Word Table](#)

Acknowledgments

My first acknowledgment is to my students, who have put up with my efforts to teach them in a different way and who have made many suggestions for how to do it better since my work on complex systems has begun to appear. But those were students in my History of the English Language classes: I have been unable to teach American English for nearly a decade because of my need to cover other courses at my university. Then, in Autumn 2019 I had the opportunity to teach American English again as Fulbright Distinguished Chair at Adam Mickiewicz University in Poznań, Poland. In Autumn 2020 I did teach American English again at my own university, though remotely during the pandemic so students had much to cope with.

My greatest debt is to my teachers and friends, particularly those who have participated with me in the American Dialect Society. Raven and Virginia McDavid gave me my first opportunity to study American English, and what a chance that was! Lee Pederson, another of Raven's students with whom I met regularly for lunch over two decades, greatly influenced my thought about American English – and provided the timelines in [Chapters 3](#) through [7](#). I have had fewer chances to connect with another of Raven's students, Roger Shuy, but I value greatly the chances I have had to talk with and learn from him. Finally, Richard Bailey was a teacher I could have had but never did when I was an undergraduate at Michigan, and who became a good friend only later in life. He encouraged me by exclaiming to others that my current research was “exactly what we needed,” and his own writing in a series of books provided an example for detailed, urbane, and witty research. I have been fortunate to live my academic life with such people, and I am – as complexity science would say – a product of our interactions.

I am very grateful for numerous good suggestions from anonymous readers of the manuscript for Cambridge University Press. Any remaining errors are of course my own.

Introduction



This book is about American English, a textbook meant to be a relatively brief, highly teachable volume designed for undergraduate courses in the area. *The Emergence and Development of American English* (*EDAE*) is meant to be an all-in-one volume, and so it includes introductory treatment of basic terms and concepts for language study in the first two Appendices. *EDAE* takes a historical perspective in that it offers a set of chapters that bring readers from the origins of English up to the present day in America. It also has chapters that flesh out the modern situation for American English: regions, social groups including a separate chapter on African American English, heritage languages, and Standard American English. The book is meant for undergraduates who lack training in English language studies or training in linguistics but of course can also be used by people who have more training. *EDAE* is designed for global readers, with an awareness throughout of the global reach of American English. There is a strong demand for new approaches suitable for a wide range of faculty with some training in language studies who want more comprehensive modern coverage. These teachers will benefit from the structure of chapters, modeled after the structure in the Cambridge Introductions to the English Language series (CIEL). This book is a companion for *The Emergence and Development of English* in CIEL, a brief but general coverage of history of the English language, and *EDAE* provides more audio and computer opportunities for teachers and students.

The key challenge for students and instructors in *EDAE* will be the incorporation of the science of complex systems into the mainstream coverage of American English. The book pursues a narrative thread throughout the chapters on “ emergence.” Emergence is the key term from the study of complex systems, a new (literally only a few decades old) science currently useful in physics, genetics, evolutionary biology, and economics, but also a perfect fit for the humanities. The science of complexity describes how massive numbers of random interactions can give rise to order, self-organization of regularities that “ emerge ” from the interactions without specific causes. The drive of twentieth-century linguistics to make the study of language more scientific by means of grammatical and exceptionless “ rules ” has never been as successful as linguists might have hoped. The reason is that speech, language in use, is a complex system, as demonstrated from first principles and copious evidence in the author ’ s *The Linguistics of Speech* (2009) and *Language and Complex Systems* (2015), foundational books in the field. *Exploring Linguistic Science* (Burkette and Kretzschmar 2018) is a complete textbook meant to offer an easy introduction to complexity science and linguistics. Emergence in American English is not once-and-done; it continues in every place where Americans talk or write, in every locality and in every kind of conversation or text. Thus, in this book, while the text will apply the common terms and concepts of contemporary language study and linguistics, the story of the language will be about continual emergence and re-emergence of lexical, phonological, grammatical, and discourse forms of English out of the interaction of its speakers and the contingencies of their history. Complex systems are adaptable and so this method predicts linguistic change. The central aim of *EDAE* is to produce a compelling account of American English that does not leave out the people in favor of paradigms and rules, and that casts the important facts of the language as regularities that exist within a matrix of variation, subject to continual change. Of course, this book may be taught without engaging with complex systems if an instructor wishes to do so.

The subject of complex systems is explained briefly and non-technically in [Chapter 2](#) ; additional aspects of complex systems will be introduced in later chapters, but nowhere are students and their instructors subjected to heavily mathematical or otherwise technical discussion. Complex systems can describe the process by which we perceive our language behavior to be associated with our communities and practices; thus, the study of speech as a complex system addresses language as an aspect of culture that emerges from human interaction. The key point about the nonlinear A-curve and the property of scaling (see [Chapter 2](#)), signs that a complex system has operated in a speech community, is that these are understandable on a conceptual basis. Moreover, the book cannot replace normal linguistic terminology because the complex systems approach leads to discussion of emergence, and exactly what has emerged in the

language must be described in linguistic terms, introduced in basic terms and concepts in [Appendix 1](#) and [Appendix 2](#) for those who have not encountered them. These discussions are quite compressed, and so they provide a framework for teachers to explain using their own backgrounds, not a comprehensive resource about linguistics. A more thorough and detailed approach to complex systems in relation to linguistic terms and concepts can be found in *Exploring Linguistic Science* (Burkette and Kretzschmar 2018).

The point to emphasize about *EDAE* is that the theme of emergence will not throw the baby out with the bath water. This book is unique in its historical approach, and covers the same linguistic ground as other American English textbooks, but through emergence it does a much better job than other texts of talking about natural and inevitable change in the language, and about the fact that English is different in different places and social situations even while we can still talk about it as one language. Emergence provides an improved quantitative model for sociolinguistic analysis of language in communities (see [Chapter 10](#)), so that sociolinguists might reconsider some findings in a new light. Emergence also offers historical linguists an improved way to think about evident variation in the historical record. Complex systems does not replace sociolinguistics and historical linguistics, but instead stands beside them with the chance of improving our understanding of social and historical change. Complexity science tells us what *change* really means in quantitative terms, rather than the qualitative view of structural change often applied in linguistics. While some students (and teachers) may think originally that *EDAE* as a title refers to the progressive march of English towards its contemporary institutional standard, they will learn that the complex system of speech offers instead a richer description of our language in which the institutional standard is only a part.

[Appendix 3](#) is different in that it explains how to use data from the Linguistic Atlas Project (LAP). LAP is the oldest and largest survey research project on American English. It has collected information about Americans' everyday words, pronunciations, and grammatical choices in thousands of interviews across the country. Most of these interviews are concentrated east of the Mississippi River, in America's area of highest population density. The LAP website provides a great deal of this data, in text, audio, and images. The website has different parts, a Data Download Center and the LICHEN user interface, to provide the data to users. [Appendix 3](#) describes access to these sections. It also provides detailed instructions about using Excel (or similar programs) to access all the data provided in spreadsheet form. These instructions will also enable readers to create their own spreadsheets and analyze them, based on their experience with LAP data. Students can test their skills on a series of exercises, enough that instructors can assign one exercise per chapter as students progress through the full text. The Computer Exercises in [Appendix 3](#) take students from introductory exploration of the LAP website in the earlier exercises, to the opportunity to do their own research on data from the site. While each individual student's findings may be unpredictable, use of the structured exercises by the author in classes over many years has shown that, in a class of students, their overall findings always go along with the teaching in the text. [Appendix 3](#) thus does for linguistic analysis what is meant by the old saying, "if you give someone a fish you feed them today, but if you teach someone to fish you feed them for a lifetime." [Appendix 3](#) looks forward to students and teachers doing their own research through instruction about spreadsheets based on LAP. My own experience teaching American English with LAP data is that students really enjoy the chance to look at primary data, and to make their own maps and tables.

Each chapter in *EDAE* is provided with Exercises (according to the CIEL pattern). The volume is also provided with online audio supplements (available at www.cambridge.org/williamakretzschmar) in addition to its instruction in the use of the online LAP resource. A special section at the end of every chapter offers students a chance to listen to relevant short audio passages. As referenced in the text of the volume, readers and teachers can access many audio samples from Jess Bessinger and Diane Bornstein, *A History of the English Language* (1973), from Cabell Greet's 1928 recordings, from a 1967 NCTE album that illustrates American speech, and from various LAP projects, in the Cambridge University Press online companion to this volume.

1

The Idea of American English



In This Chapter

American English is not a simple thing to define. The United States is a big place, with many different regions. American English is certainly different from British English, and yet it is hard to set boundaries on the differences. American culture also plays a role in American English, and some say that politics does as well. In the end, the multitude of voices of Americans of whatever belief and whatever region come together to emerge as what people around the world recognize as American English.

Mitford M. Mathews started his book called *The Beginnings of American English* with the following statement ([1931](#) : vii):

The expression ‘ American English ’ is used in this work in its generally accepted sense of ‘ that variety of English which is spoken in the United States of America. ’

This definition can also serve to launch the present book. Mathews ’ definition contains two key components:

- the idea that American English is a “ variety of English ”
- the idea that American English is “ spoken in the United States ”

Pretty obvious, you might think, perhaps not worth saying at all – until you start to think more closely about these ideas. Just what should we think of “ a variety ” when it has to do with a language, especially the American variety of English? What makes how some English speakers talk “ American ” (as something recognizably different from other speakers of English around the world)? How did it happen that a language like English came to have different varieties, especially the American variety? And what should we think about the relationship between the speech of a place and the place itself? Do English-speaking people from elsewhere around the world automatically begin to speak American English as soon as they arrive within the physical borders of the United States, or is there more to it than that? Unraveling these questions constitutes the purpose of this book.

The United States of America is a very large place. A convenient way to talk about America is to refer to the individual states, as on the following map ([Figure 1.1](#)).

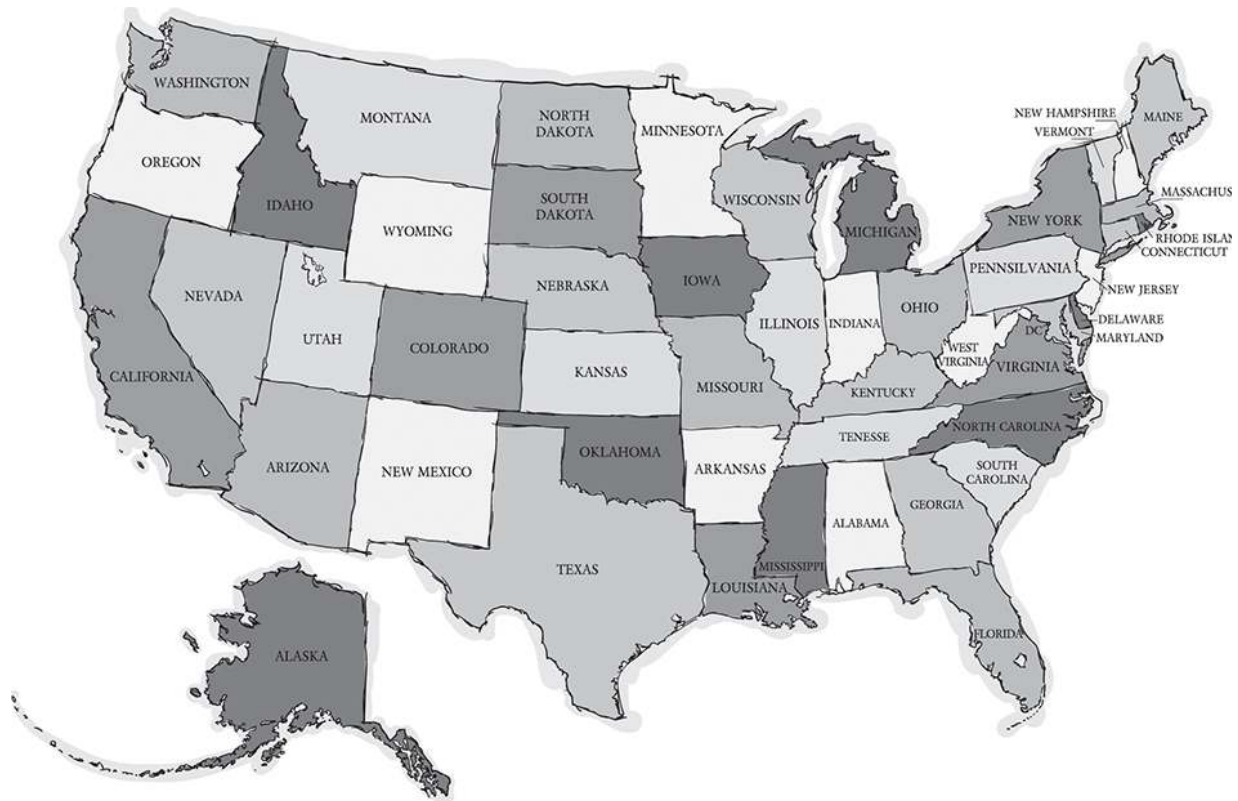


Figure 1.1 The American states.

Source: Jobalou/Getty Images.

There are also names for **regions**, collections of states. New England is the group of states east and north of the state of New York. Everybody talks about the “ South, ” but there is no general agreement about which states belong to it. One definition is east of the Mississippi River (the very large river that runs from north to south, along the western borders of Illinois, Kentucky, Tennessee and Mississippi), and from Tennessee and North Carolina South to the Gulf of Mexico, as in [Figure 1.2](#) . Others would include the old Confederate states (from Civil War days in the 1860s) of Virginia, Kentucky, Arkansas, Louisiana, and Texas. Still others might include Oklahoma. The “ Midwest ” is the same: some people would say it includes Ohio, Indiana, Illinois, Michigan, and Wisconsin, while others would also include Minnesota, Iowa, and Missouri across the Mississippi, and still others might include the Dakotas, Nebraska, and Kansas, as in [Figure 1.2](#) .

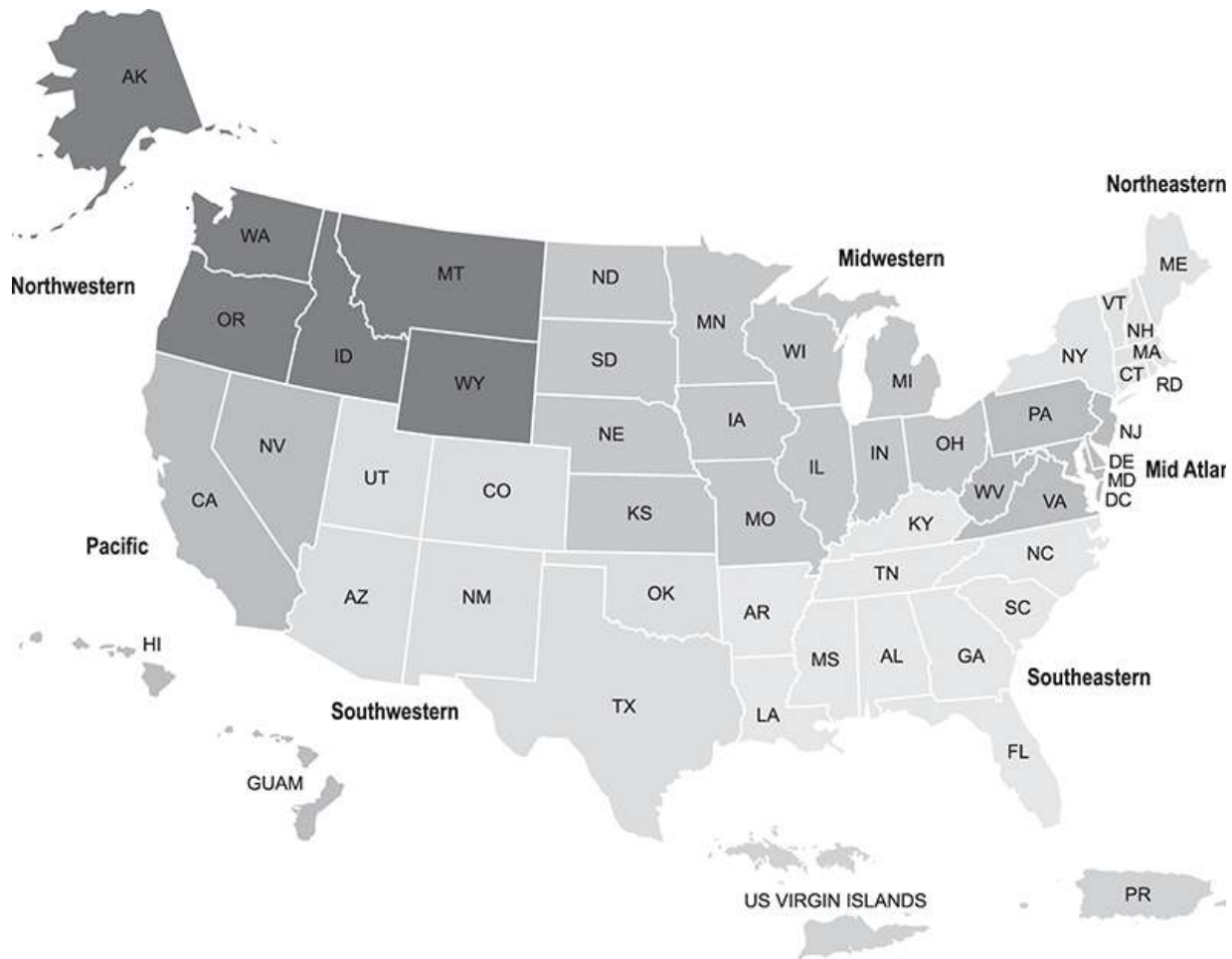


Figure 1.2 American regions.

Source: Getty Images.

The “ West ” might be all the states west of the Mississippi, but other people might start it with Montana, Wyoming, and Colorado, where the Rocky Mountains divide the continent. [Figure 1.2](#) puts California and Nevada in a Pacific region. Texas is often considered to be in a category by itself, as is the state of California. Other regional names, like “ Southwest, ” and “ Northwest ” (as in [Figure 1.2](#)) and “ Great Plains ” (as separate from the “ Midwest ”) are in common use, but again without precise definitions of what states belong to them. American geography across the states played an important role in settlement patterns, where rivers were conduits for travel and mountains blocked the way. In the rest of this book the names of states and prominent land features will be named – if you are not familiar with the places and features, they are easy to look up online.

American English as Language

The reason that a great many people are satisfied with their own impressions of American English, instead of wanting to make a study of it, is that their impressions are so clear. American English has a certain concrete reality for them, based on their experience with Americans speaking English in comparison with non-Americans speaking English. Citizens of the United States know that their own talk is not the same as the English used by somebody from another English-speaking country, say English in Britain – even if they have never traveled far from home. Since we hear people ’ s pronunciation all the while that they are talking, it is only natural that this characteristic of speech, often called **accent** , becomes identified with the behavior of the people doing the talking.

The term **Americanism** was coined in 1781 by John Witherspoon to describe “ use of phrases or terms, or a construction of sentences, even among persons of rank and education, different from the use of the same terms or phrases, or the construction of similar sentences, in Great Britain ” (Mathews [1931](#) : 17). This term seems perfectly appropriate to most people as the designation for words and phrases of American origin, but since the English language first appeared in Britain it may seem strange to some people to consider a word or phrase to be a **Briticism** . John Algeo, the foremost student of Briticisms, defines them as expressions with a form or use that originated in Britain after 1776 or one that is more characteristic of British than of American English ([2006](#)). Algeo distinguishes a more common kind of Briticisms, those that appear in American sources but in material by or about the British, from a more subtle variety, those that appear in American sources in native contexts. Among the latter, Algeo ([2006](#)) lists

<i>gaol</i> (Am <i>jail</i>)	<i>skinhead</i>
<i>now do you?</i> (a “ tag question ”)	<i>loo</i> (Am <i>toilet</i>)
<i>the occasional</i> (Am <i>an occasional</i>)	<i>on average</i> (Am <i>on the average</i>)
<i>Filofax</i> (Am <i>portfolio</i>)	<i>flat</i> (Am <i>apartment</i>)
<i>infra dig</i> (Am <i>undignified</i>)	<i>roundabout</i> (Am <i>traffic circle</i>)
<i>value for money</i> (Am <i>good deal</i>)	<i>flog</i> (Am <i>try to sell</i>)

While the terms “ Americanism ” and “ Briticism ” commonly refer to the origins of words, Americanisms and Briticisms are used in both countries, just at different rates. The words *flat* and *apartment* , for instance, are both used in both Britain and America, but *flat* is the more common word in Britain while in America people more commonly say *apartment* . As we shall see in later chapters, frequency differences like this (as opposed to all or nothing usage) are characteristic of how groups of people use language.

While many English speakers would find it difficult to cite particular differences in usage between, say, British and American English, most of them could also offer an imitation – more or less effective – of the speech of a British or American English speaker. Imitation here is not flattery but a declaration of differences: even people who give very bad imitations believe that there is a difference and try to enact it.

Dennis Preston ([Figure 1.3](#)) has studied what he has called **folk linguistics** or **perceptual dialectology** ([1989](#) , [1993](#) ; Preston and Niedzielski [2000](#)). He has found that people are not slow to form perceptions of how other people speak, and that the perceptions are bound up with how these folk (by which Preston means nothing bad, just that his subjects are not trained to analyze speech) see themselves as English speakers. We can accept individual people for themselves without abandoning our stereotypes. And we can maintain the stereotypes even if we cannot readily make a list of actual differences between them, whether in pronunciation or lexicon or syntax. This, then, is what most people mean by “ a variety of English. ” For most people a **variety of a language** is constituted by the perception of a difference.

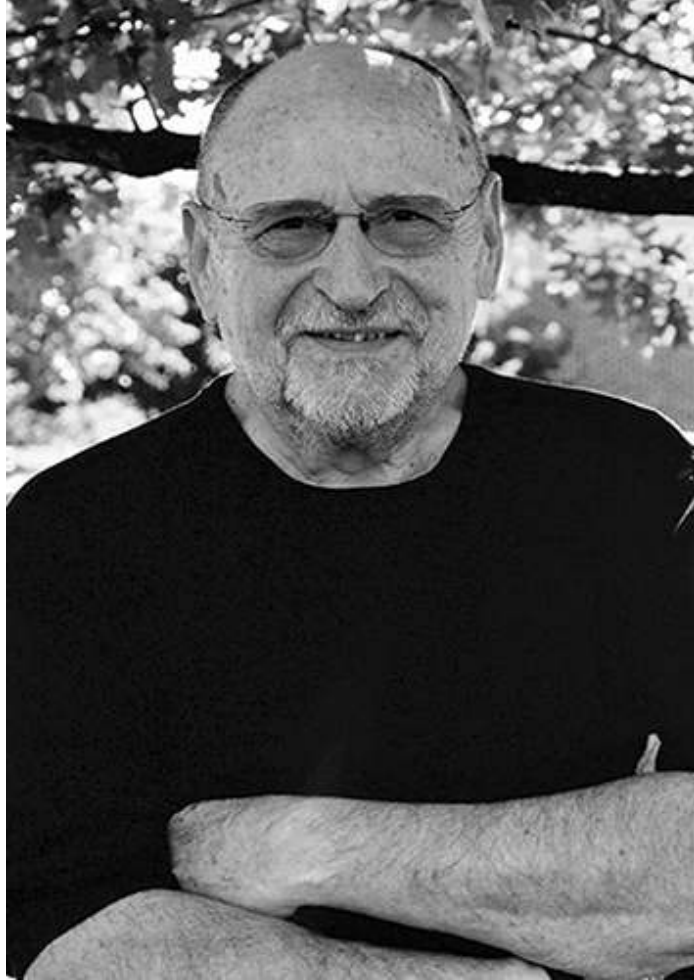


Figure 1.3 Dennis Preston.

Source: <https://linguistics.as.uky.edu/users/dpr235> . Courtesy of Dennis R. Preston.

The boundaries of such a variety are usually convenient designations of linguistic borders, rather than accurate assessments of linguistic evidence. It is very convenient, for instance, to use national boundaries as definitions for varieties of languages, like British English and American English. The problem remains even at the national level, as we can see from Canadian English. For British English speakers, Canadian English often gets lumped together with American English – rightly so, because Canada is also part of North America (see [Figure 1.4](#)), and the United States need not, though in practice it usually does, grab the label “ American ” all for itself.



Figure 1.4 North America.

Source: bergserg/Getty Images.

Besides the facts of geography, however, non-North-Americans perceive the pronunciation of Canadians to be essentially similar to that of US speakers. One prominent difference between American and Canadian English is the vowel sound in words like *out* and *knife*, so-called **Canadian raising**. The vowel sound in such words begins with the vowel found in *hot* for Americans, but Canadians begin it with a vowel more like that in *love*; the vowel for both Americans and Canadians ends with an *oo* or an *ee* sound, respectively (see [Appendix 1](#) for more accurate phonetic descriptions). Americans typically hear Canadian *out* as *oot*, but do not seem to notice as much that words like *knife* are pronounced differently by Canadians. The Canadian pronunciation may now be spreading in the Northern United States. This and many other differences are discussed in Charles Boberg's *The English Language in Canada* (2010).

We now can see that the idea that American English is "spoken in the United States" is problematic because what is "American" is defined less by the national border than it is by people's perception and point of view. The idea of a variety of a language is hopelessly entangled in perceptions, unless and until we can conduct a rigorous study of the parts of a language variety, of the features that speakers of the variety commonly use. Features of pronunciation, lexicon, syntax, and discourse (for more information on these, see [Appendix 1](#) and [Appendix 2](#)) all come together to form the whole of a language or a variety. Since we cannot take into consideration all of the actual conversations that people have, instead we have to concentrate on the features of language that are constantly repeated to form those conversations, as we derive them from examples of speech. The modern study of linguistics accepts four different ways for studying such features of a language, the names of which have already been introduced: **pronunciation**, **lexicon**, **syntax**, and **discourse**. As for pronunciation, each language and variety has a range of sounds that are commonly used in the expression of its words. There is also an inventory of words, a lexicon, that belongs to every language and variety. Each language and variety has characteristic patterns, syntax, with which its words can be arranged in sentences. Finally, each language and variety has characteristic habits of arrangement of words and sentences to form meaningful discourse. Pronunciation, lexicon, syntax, and discourse, then, tell us where to look for particular features that may be produced differently in different varieties. As we will see in [Chapter 2](#), the features of pronunciation, lexicon, syntax, and discourse in different varieties are matters of "more and less," not "on and off," so we will always be looking for tendencies, not sure indicators of a difference.

That said, given an assertion of the existence of a language variety on perceptual grounds, we should examine evidence from the speech of people who are said to speak it so that we can discover what we can about their pronunciation, lexical, syntactic, and discourse features. We will not be interested solely in features that we may find strange, different from what we consider to be normal in our own language variety, but instead we will want to build our knowledge of features in order to know more about the range of sounds, the lexicon, and the characteristic patterns of the language variety under study. Linguists have developed an array of technical terms and concepts for the study of linguistic features, as well as methods for collection and analysis of linguistic evidence (as in [Appendix 1](#) and [Appendix 2](#)).

American English as Culture

Even when we know a good deal about the linguistic features of a variety, we still must account for how people come to have their perceptions of the variety. Our perceptions of speech are often bound up with our perceptions of behavior, and this clue can lead us to consider how our speech is bound up with the whole range of social behavior, often known as **culture**. The cultural geographer Wilbur Zelinsky proposed a three-dimensional plan that could be used as a template for the analysis of cultural systems (1992: 72; [Figure 1.5](#) is a schematic cube for illustration). In his graphic representation of the plan it takes a moment to locate "Language": it is one of the **mentifacts** down near a bottom corner, just one slice of a much bigger cultural matrix, grouped together with religion, magic, the arts, and folklore. Mentifacts, which Zelinsky describes as "cerebral, psychological, or attitudinal in character" are just one of the "intrinsic components" that compose one dimension of his plan, say the righthand side of the cube in [Figure 1.5](#). **Artifacts** have to do with people's livelihood within their culture, from material things like tools or food, to means of production like farming or industrial activity, to more abstract concerns like technology or transportation systems. **Sociofacts** are elements of interpersonal relations, like kinship or politics. These three aspects of culture, taken together, constitute one way of describing the entire range of human behavior in a culture, an entire side of the cube. Besides these intrinsic components, Zelinsky also proposes dimensions for location, the "spatial dimension" (say, the

left-hand side of the cube), and for “ subcultural components ” (say, the top side of the cube), which correspond to different occupations or ideologies such as (again in Zelinsky ’ s words, [1992](#) : 72) “ males and females, farmers, ditchdiggers, Presbyterians, mountain climbers, convicts, Freemasons, bowlers, and drug addicts. ” There is, then, according to Zelinsky, practically an unlimited number of ways to divide and to describe cultural activity. The important point about this set of cultural divisions is that it is comprehensive – any aspect of culture can be described as either an artifact, a sociofact, or a mentifact, whether in some particular location or over the entire geographic extent of a culture, and whether limited to a subculture or widely diffused throughout a culture. The role of language within such a comprehensive model is as just one slice of the whole, and this tells us that language is necessarily bound up with other mentifacts like religion, the arts, and folklore, as well as with kinship and politics (sociofacts), and with people ’ s livelihood, what they eat and make and create (artifacts). Moreover, language is also bound to vary according to subculture (occupations, religions, sexual orientation, and many others) and according to the different locations or regions in which the intrinsic components and subcultural components are happening. From a model like this one, we can understand that we are all bound to perceive a language variety as the particular and recognizable form of speech that is associated with speakers who have particular cultural characteristics, whether in mentifacts, sociofacts, and artifacts, or in their subculture, or in their spatial situation – or in all of these at once!

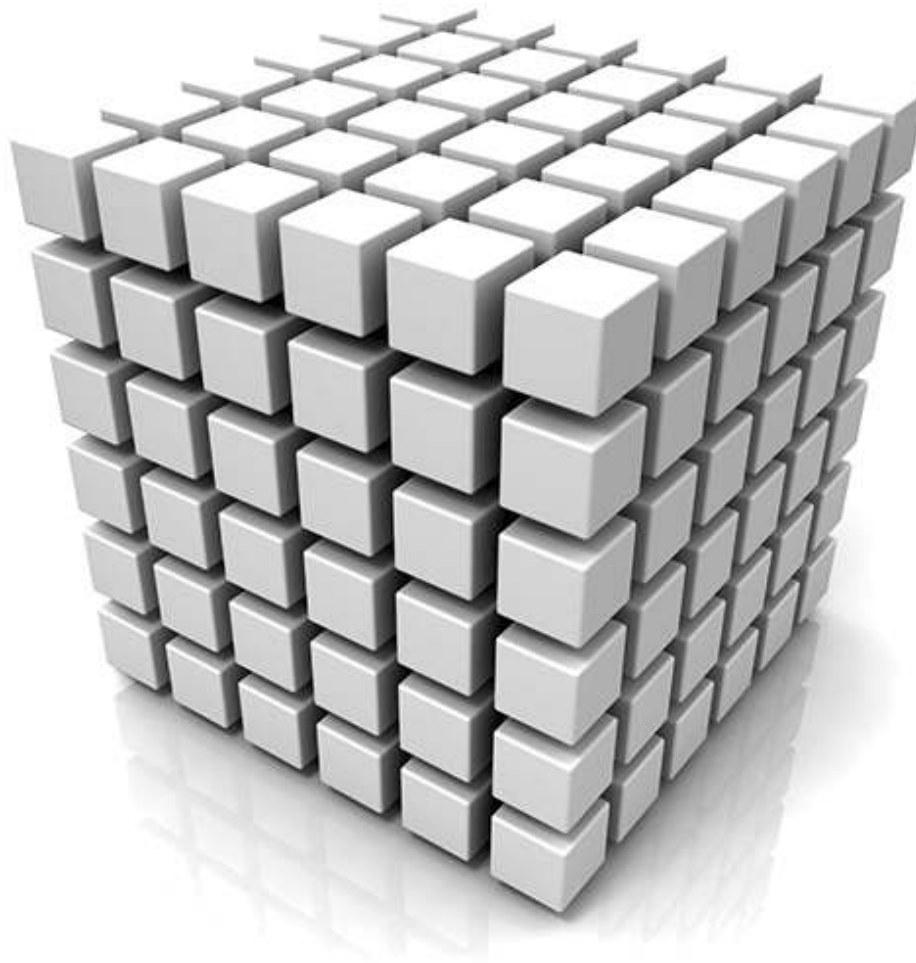


Figure 1.5 A schematic, three-dimensional representation to visualize Zelinsky ’ s cultural systems (Zelinsky [1992](#) : 73).

[Figure 1.5 long description.](#)

Source: Kuklev/Getty Images.

Zelinsky ’ s cube represents one entire culture, but the culture is not represented by the surface of the cube: Zelinsky proposes that we slice it in three different ways, by intrinsic components, by geographical groupings of people, and by social groupings of people. That

is to say, for any given culture region in the spatial dimension, it is possible to consider the whole range of artifacts, sociofacts, and mentifacts. So, too, for any given culture region and particular set of artifacts, sociofacts, and mentifacts, it is possible to observe variation in the dimension reserved for subcultural groups. On the cube in [Figure 1.5](#), you could choose to work on a whole side, or one layer of a side, or even on a single one of the smaller cubes that together make up the whole. Before this all begins to seem too complicated, it may be worthwhile to think of Zelinsky's model in terms of something very common and mundane: how you might want to cut up a potato in the kitchen. You can make slices in one direction, thin ones for potato chips (*crisps* in Britain) or thicker ones for cottage fries and potato casseroles. Alternatively, you can make slices in two directions and end up with pieces that are longer than they are wide, french fries, skinny like McDonalds or fat like the ones in a steakhouse. You can also cut the potato in three different directions and end up with diced pieces, big ones for stew or smaller ones for soup. The more times you cut, the more sides of each piece of potato you expose, and this creates different possibilities for the cook (see [Figure 1.6](#)).



Figure 1.6 Cutting potatoes.

Source: MarkAndrewPhotography/Getty Images.

To return to Zelinsky's cultural model, the more slices of culture you examine, the more sides of cultural activity you can reveal. More is not necessarily better – the slicing needs to match the intended result, whether for potatoes or culture. Potatoes cut up for stew will not make good potato chips! Besides the number of sides, you also have to think about how thick to make the slices. You can cut thicker or thinner, whether to make stew or soup with the potato, or to strive for more or less precision for cultural analysis. With either potatoes or culture, the more slices you want, the more work you have to do and, just as for the number of directions to cut, slicing thick or thin may be good for different purposes. Finally, it must be said that you can boil a potato whole, or mash together a whole collection of potatoes. So, too, it is possible to make gross generalizations about a culture or even a group of cultures when the occasion calls for it. Zelinsky's multidimensional model allows us to see that there is more than one way to examine culture, and that all of those different dimensions are still there waiting for us even if we choose not to cut in all the directions right away.

From Zelinsky's perspective, the cultural geography of the United States, language is a relatively small component of the whole; for the purposes of this book language takes center stage – but not the whole stage. When we choose language as our slice of American culture to examine, we cannot forget that American English is an integral component of American culture; the language of its speakers both helps to form the culture and is also formed by it. Cultural geographers, Zelinsky says, find it “more efficient and profitable ... to extract major subsystems from the total culture, then treat them independently of other aspects of the larger system, holding other things constant” ([1992](#) : 74). For our purposes here, when we focus on language we are not obligated also to treat religion and folklore in depth, or to treat every culture region or subcultural component in detail, but neither should we forget that they are relevant. Indeed, because language is just one slice of the culture at large, we cannot expect to describe American English adequately without some discussion of different aspects of American culture. American English is not just “spoken in the United States,” but rather is spoken by people who are involved with American culture. When we focus on American English, we are not obligated to treat the English of other places (i.e., of other culture regions like Britain or Canada) in any depth, although they remain relevant, and we should be aware of the possibilities within American English for subsidiary cultural divisions and subcultural influences, like geographical regions, or occupational or ideological differences. As soon as we grant that language and culture are inextricably bound together, we have an answer for how to approach people's perceptions, and we can no longer be satisfied just with features of pronunciation, lexicon, syntax, and discourse as the sole target for our study. Zelinsky concludes that ([1992](#) : 74)

It is only by taking into account the relevant multiplicity of components and dimensions at the particular scale chosen for observation, and also the fact that they are changing through time, that a realistic understanding of a given culture may be reached.

We can agree with him, and say that a realistic understanding of American English can only be achieved by locating its linguistic features in the context of the other dimensions of American culture.

American English in Politics

As we shall see in chapters to come, the United States began as a political (some might also say, religious) experiment. In the decades and centuries that followed, waves of immigrants brought into the new American ideal as it was enacted for them in North America by people who already lived in the country. Even today, many Americans subscribe to an American political ideal – about half the country to one version of it (the one currently expressed by Republicans) and the other half of the country to another, quite different version of it (currently expressed by Democrats). A surprisingly small number of Americans find themselves to be independent of these two points of view, free thinkers who might vote either way in an election, and this segment of the population often decides the direction of the government in Washington DC. This kind of split in American politics has always been present, whether between Royalists and Revolutionaries at the end of the eighteenth century, or between upholders of States Rights (in the South) and Abolitionists (in the North) in the nineteenth century. America has never spoken with a single voice. And that is an American hallmark: freedom of opinion, freedom of choice, whether as regards religion or for any of many other social options. At the same time, Americans have generally thought of themselves as different from the common ideas of the Old Country (whichever Old Country that was). Property rights have been a prime issue, since in America one can own one's own land while in the Old Country a few people might own the land while others worked it, or in other places nobody owned the land and strongmen struggled for control of it. The American Constitution and Bill of Rights began to codify this American difference into rules of law, and later Amendments to the Constitution and other laws have explored finer points. Neither the Republicans nor the Democrats today maintain the true and original ideal – no matter what they say! – since the American ideal has had to change over the centuries to fit emerging conditions in North America and the world at large.

Politics per se has little to do with the American variety of English except for the fact that different political groups have their own characteristics in speech, as in the terms for their preferred political issues. While some politicians may claim that American English is what holds American society together, actually the opposite is true. Yes, American English belongs to Americans, but it is the conversations and writings of Americans that create that relationship. There is no magical effect of an American standard language that makes Americans (as we shall see in chapters to come), but instead a bottom-up, grassroots process in which the interactions of people engaged in all of the different aspects of their daily lives (think Zelinsky's cube) produce what we can recognize as the American variety of English. Just as American politicians require the votes of their constituents to take office, American English requires the communication of people in America to be recognizable for itself among world varieties of English.

“ Spoken in the United States ”

To go back now to the second part of Mitford Mathews' definition, American English is a variety of English that is “ spoken in the United States. ” By this he meant much more than a mere coincidence of speech and geographical borders. Mathews' special topic was the developmental view of American English ([1931](#) : vii):

This form of English had its beginnings when the colonists and settlers began to adopt new terms and develop new senses of words, and, still later, it became more definite when the vernaculars of the various groups began to coalesce into one recognized form of language somewhat distinct from the English of the mother country.

We can observe in this statement different components in the separation of American English from British English. Mathews notes that features of the lexicon (and we may extend what he says to pronunciation, syntax, and discourse as well) are subject to a historical process. There were various groups that initiated new uses of words, and in time these originally separate groups came to “ coalesce ” to form a new, larger cultural entity – American culture. Following Zelinsky, we can understand Mathews' various groups of people originally to constitute different cultural (i.e., geographical) or subcultural (i.e., social) groups within English culture. In time, these originally separate groups came to share enough characteristics, whether in use of words or in the breakdown of previous geographical or

social barriers, so that they might be considered to form a new collective American cultural group that could be considered on its own terms as separate from the original English culture. Mathews does not mean by this that the identity of the original groups was necessarily lost, only that the groups came to participate in the identity of a larger American culture. Thus it makes sense to consider the “ beginnings ” of American English, and to consider that the characteristics of American English will necessarily be different at different moments in time, as American culture emerges, both develops and changes, over time.

In some ways the term “ American English ” is like mashed potatoes in our earlier metaphor: it groups together a large number of things to make a gross generalization. It is a valid generalization, certainly a useful one in discussions of World English, but mashing is not the only way to cook potatoes. This book is called *The Emergence and Development of American English* in order to emphasize that American English is not “ once and done, ” but that it continues to emerge and develop over time and across the culture. American speakers do not all speak alike. Americans come from different places across the wide expanse of the continent, they belong to subcultural groups too numerous to count, and they are free to hold many different beliefs and to lead their lives as they think best. Such pluralism and such freedom are undoubtedly the hallmark of American culture and the American experience, so it just seems wrong to name a book so that readers might get the idea that American English is something homogenous and exclusive, that there is some single way of speaking that all Americans must have, or else somehow be less than American. *The Emergence and Development of American English* instead emphasizes the inclusive quality of American English, that the multitude of voices of Americans of whatever belief and whatever region come together to emerge as what people around the world recognize as American English. This is the idea of American English to be explored in the chapters to come.

Summary

American English comes from a place, the United States, but that does not mean that all Americans talk the same way. Americans have somewhat different accents, lexicon, syntax, and discourse from place to place and from group to group. Still, American English can be recognized as its own variety of the language in comparison to other varieties of English around the world.

Key Terms

accent

Americanism

artifacts

Briticism

Canadian raising

culture

discourse

folk linguistics

lexicon

mentifacts

perceptual dialectology

pronunciation

regions

sociofacts

syntax

variety of a language

Audio Samples

In the online companion to this book (available at www.cambridge.org/williamakretzschmar), you can listen to audio samples that illustrate the state of the language. For this chapter you can hear three speakers from Roswell, Georgia. You will be able to hear that they talk differently, even though they all come from the same town just north of Atlanta (a big city known as an air travel hub and as the central place of the New South).

a1.1 Uptown-downtown in Roswell

a1.2 Civil War Story

a1.3 Baseball

Exercises

1. What regions can you name in the United States? Do your ideas go along with [Figure 1.2](#) , or would you put different states in the named regions? Or would you make other regions entirely, say one for New York City?
2. If our sense of a variety comes from our perception of a difference in how people use language, can you think of other ways in which our perception of differences gives us ideas? What about regions? What about kinds of foods? Styles of dress? Architectural designs?
3. Zelinsky ' s model of culture looks like a cube, in three dimensions. Can you think of anything he left out of the subdivisions of his cube (spatial, subcultural, intrinsic components)? Do you think that his multidimensional model, that allows you to slice and dice culture as you like, is a good representation of culture, or do you think it ' s harder than he says to take aspects of culture apart?

Computer Exercises

Computer exercises in [Appendix 3](#) are progressive, in that each exercise is intended to address a new skill or topic. They are not necessarily linked to the content of each chapter, although many of the exercises do parallel the content of the chapter. [Appendix 3](#) is the place that explains how to access data from the Linguistic Atlas Project website, in order to search, sort, and map it. In a classroom setting each individual user may get somewhat different results from examining the online data, so that it will be useful to discuss together what all the users found in order to understand the bigger picture. This, of course, is how science works, by adding together many observations to make a general point.

For [Chapter 1](#) it would be appropriate for the reader to do Exercise App3.1, which asks users to make maps online for features with different frequencies. The task is a good way to start using the website.

Further Reading

Preston , Dennis . 1989 . *Perceptual Dialectology: Nonlinguists ' Views of Areal Linguistics* . Dordrecht : Foris . " Folk Dialectology , " in *American Dialect Research* , edited by Dennis Preston . Amsterdam/Philadelphia : John Benjamins , 1993 . (with Nancy Niedzielski) *Folk Linguistics* . Berlin : de Gruyter , 2000 .

Preston has reinvigorated the idea that we should pay attention to what people *think* about language, not just how they say things differently. In particular, he has asked people where “ correct ” English is most likely to be found in America, and where the English in America is most “ pleasant. ” The answers are quite different! And Preston has found that people have very different ideas about where regional dialects can be found, even if many people do name the same general areas (like the “ South ”).

Zelinsky , Wilbur . 1992 . *The Cultural Geography of the United States: A Revised Edition* . Englewood Cliffs, New Jersey : Prentice Hall .

First published in 1973, Zelinsky ’ s classic brief textbook of cultural geography both outlines the field and comments on American culture. Part Three contains Zelinsky ’ s rethinking after twenty years of many of his original ideas, with some generally pessimistic comments on developments in American culture. Readers may or may not agree with the later comments, but will find no clearer presentation of the structures and patterns of American culture.

Videos: A number of video productions attempt to explore American English, among them *Do You Speak American?* (narrated by Robert MacNeil. New York: WNET, 2005) and *American Tongues* (Center for New American Media, 1988). YouTube also offers numerous short videos about American English. As a journalist, MacNeil sometimes prefers good TV to accurate reporting, as in the segment in which he looks for – and finds! – Shakespeare ’ s English in America.

2

Emergence



In This Chapter

The new science of complex systems explains why Zelinsky ' s cube is a good model of culture. It works well with economic markets – and also language in use. We can see the evidence that a complex system has operated in American English by looking at evidence from the Linguistic Atlas Project. Linguistic variants all show the same patterns of distribution, both overall in a population and in subset populations. These frequency profiles provide a challenge to traditional ways of thinking about language with grammars and dictionaries.

When we begin to make slices of Zelinsky ' s cube in order to investigate American English in all of its different spatial (geographical) and subcultural (social) aspects over time, we need to have a scientific model that supports such work. The best available model is called **complexity science** , or **complex systems** . The word “ complexity ” does not just mean ‘ complicated ’ but instead refers to the emergence of stable patterns out of the interactions of a great many different participants. Complexity science is still “ science, ” on a par with what most of us think of as science, but it works in a different domain from what many physical and natural scientists study. Aristotle gave us the basic idea of what science should be, when he advocated regular, systematic observation of the world around us. The most familiar domain of science today is **Newtonian Mechanics** . In this mode of analysis, the scientist looks for cause and effect relationships as individual elements interact with each other. You can think of planets at the large scale, and billiard balls at a smaller scale. The trick when you play pool is to strike the cue ball in such a way that it hits another ball and makes it move how you want it to, say into the corner pocket. In the modern physical and biological sciences, this emphasis on cause and effect has been carried further to what is known as **reductionism** . That is, scientists in the reductionist domain look for smaller and smaller constituents, under the idea that if you understand things at the lowest level of scale, you will better understand all the levels of scale. Complexity science, on the other hand, does not try just to reduce anything to basic principles but instead asks the scientist to observe every part of the whole for its own characteristics. Complex systems analysis can reach every slice of Zelinsky ' s cube, whether the cube as a whole or any small cultural segment. The status of different scales is not necessarily produced by one root cause. From the point of view of complexity science, we need to observe slices and scales individually instead of assuming that they all share essentially the same characteristics.

Complex Systems

Complexity science is a different domain for systematic observation and analysis. When we consider many interacting elements, not just one thing acting upon another thing, you might think that it would be possible to predict the behavior of the system by measuring what each of the individual parts does. The classic formulation of this problem is measuring the position, mass, and velocity of objects, in order to predict what they will do in relation to each other. Unfortunately, this analysis will not work. Henri Poincaré proved in the late nineteenth century that there is an infinite number of solutions even for the **three-body problem** , just three interacting objects. This means that we cannot use cause and effect to predict the behavior of a collection of many interacting parts – we know that individual interactions have causes and effects but we just cannot use that knowledge to predict what the system as a whole will do or even what any

individual element will do. This also means that we cannot use reductionism, because our measurement of the position, mass, and velocity of a single element cannot tell us what the whole set of elements will do. We cannot look for the smallest parts of a system and use them to understand the whole.

You might think again of a pool table for an example. The first shot of a game of pool is the “break,” that is, directing the cue ball against a triangular configuration of the other balls (see [Figure 2.1](#)). Most of us will strike the cue ball hard against the first ball in the triangle, and we cannot predict where all the balls will go – we hope one goes in a pocket so that we can keep our turn, and one often does, but we just do not know if that will happen.

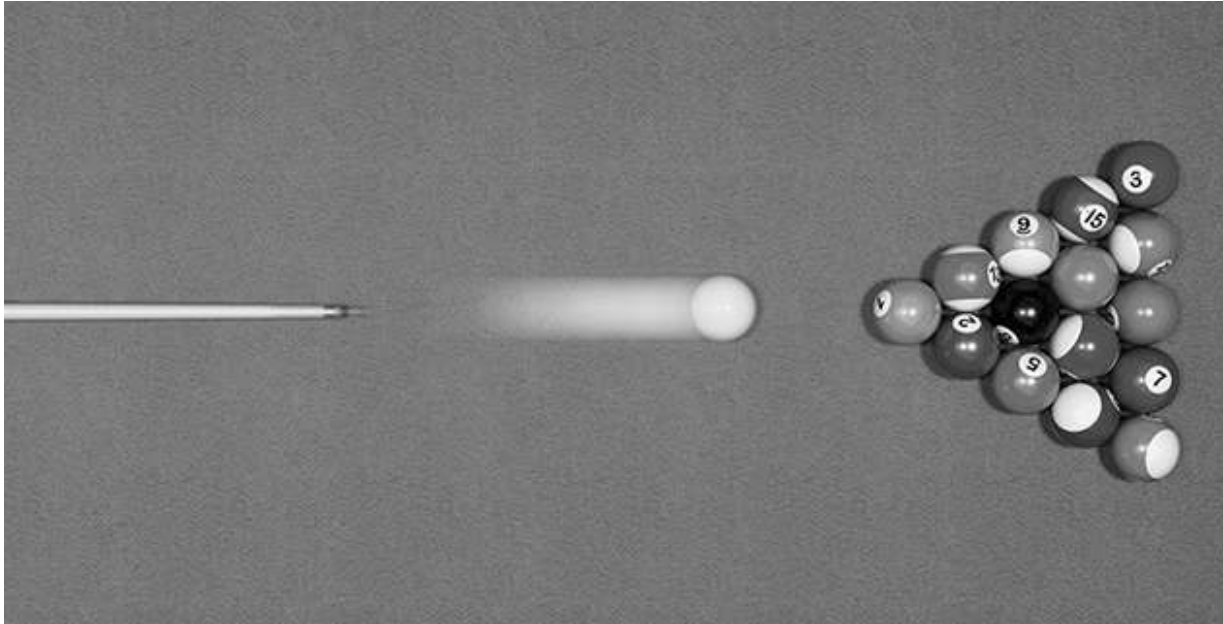


Figure 2.1 The break in pool.

Source: mevans/Getty Images.

Professional pool players have strategies for the break, say, trying for the smallest possible dispersion of the balls so that their opponent will have a more difficult shot. They do this by putting as little energy into the break as possible, but even then, the professionals cannot calculate where all the balls will actually end up. The break, therefore, is a good example of a complex physical system, one in which the behavior of each of many interacting elements is just not predictable. In biological and human systems, all of the balls, all of the elements in the complex system, are in constant motion affecting each other. We are all cue balls, making our own breaks.

The beginning of thinking about complex systems can be traced to Glasgow and to Adam Smith, who wrote about the famous **invisible hand**. In 1776 he wrote that a man of business

intends only his own gain, and he is in this, as in many other cases, led by an invisible hand to promote an end which was no part of his intention. Nor is it always the worse for the society that it was not part of it. By pursuing his own interest he frequently promotes that of the society more effectually than when he really intends to promote it.

Adam Smith was talking about the emergence of economic markets that satisfy the needs of society, not by the design (intelligent or otherwise) of some creator, but through the invisible hand of **self-organization** of activities that were motivated by self-interest, not society's interest. The fact that Smith spoke of some sort of “hand” showed that he believed the world to be a causal place, where an effect, like a market, must have a cause. Today, however, we should focus not on the hand but on his word “invisible,” because self-organization requires no causal hand. Complex systems have no simple causes for the effects that emerge from them. Rather, a complex system works through a process of interaction among a large number of components, as the process must cope with the contingencies of the environment in which the individual components are interacting. Cause and effect as in Newtonian Mechanics is a good explanation

for many aspects of the world around us, just not for everything. For circumstances that have many interacting components, like buyers and sellers or billiard balls in a game of pool, we need to let go of our assumptions about cause and effect and replace them with the idea of self-organization that leads to the emergence of patterns. Language is one of those circumstances.

First let us consider what happens in a complex system for it to produce self-organized results like an economic market. For any complex system to operate, we must have the random interaction of a large number of **components**. This interaction constitutes **activity**, which is essential to the operation of the system, for a complex system dies if the activity stops. So, for example, there is no longer any American market for domestic chestnuts because all of the trees died out and nobody can buy and sell the nuts. As the interactions continue the components affect each other in what might be called an **exchange** of information, which leads to **reinforcement** of behaviors among the components, and thus to the **emergence** of stable patterns in the complex system, all without any central control. That is, as people buy and sell products, the prices they pay are affected by their knowledge of what other people are paying, and over time a stable market price emerges where not everybody is paying the same price but prices in general are predictable. All of these things happen in relation to **contingency**, to local circumstances, so that complex systems are able to react to circumstances, to change over time as they need to. In Adam Smith's economic market the components are the things being bought and sold: bread, beer, pins, cloth, and everything else we use and trade. People are **agents**, in that they facilitate the process of the complex system, in economic markets by doing the buying and selling.

Let us think about a particular example of a complex system in action, say the market in apples, where the components are apples in all their different varieties. The activity is all the sales of quantities of apples, and for each sale there is information, such as the source and the size and the variety of the apples and the price they sold for. As the agents exchange this information, they reinforce their buying and selling behavior by setting prices. Some apples are plentiful in the market (like Delicious apples in America, or Cox apples in Britain) and the price may emerge at a low level; some apples may be the current favorite variety (like Honeycrisp apples in the United States, a relatively new variety) and a higher price may emerge for them. Over time, the prices will be relatively stable but will change according to contingency: if there was late freezing weather in Michigan, where many Honeycrisp apples are grown, the price will emerge at a higher level because the supply is lower. Indeed, the price of Honeycrisp apples will go up as soon as the agents hear about the freezing weather because they expect the supply will be lower at harvest: information is more than just the facts available at the moment.

This was a feature of a famous Wall Street movie starring Eddie Murphy and Dan Aykroyd called *Trading Places* (1983), where Murphy and Aykroyd manipulated the market for orange juice by getting advance information about a crop forecast. Thus we can have futures markets and all sorts of other specialty markets in which human agents buy and sell, and in so doing create a market for different commodities or services.

Let us think now about language as a complex system. This is not how we have all been taught to think about language. All through primary and secondary school, our teachers always told us about the grammar of our language, rules that we should follow and violate only at our peril. Sometimes our teachers told us about dictionaries, and many of us supplemented that teaching by playing the game *Scrabble*, where we used letter tiles to make words and where the dictionary was the authority that told us the legal words in the language. Grammatical rules and lists of words in the dictionary provided structure for our language. And that is how all of us think of it, language as a structured entity, where we can decide what is grammatical or not according to the **syntagmatic structure** of the language, and where we know where to find the list of legal words, the **paradigmatic structure** of the language (you can see more about these structures in [Appendix 2](#)).

These structures are not the place to start when we think about language as a complex system. Instead, let us consider that people just use whatever experience they have in order to talk with each other. People are talkers. A person is not the same thing as a language: some people can use their experience to talk in two or more languages. Indeed, all of us do that even if we do not realize it: we all use somewhat different language in all of the different language interactions that we have, spoken or written. Our conversations with family members have different words and different grammar than the conversations we have at work. Conversations we have with children have different words and grammar than conversations we have with doctors, lawyers, and other professionals, and we all know what to do to talk with children, if not always with professionals. The words and grammar are not entirely different in these various conversations and situations for writing; it is just more or less likely that the talker or writer would use particular features in a particular situation. We probably would not talk about "syntagmatic structure" and "paradigmatic structure" in a family setting, but they occur in the previous paragraph for the very good reason that readers of this book can be expected to be comfortable with those words – if only after a look at [Appendix 2](#)! Each of us speaks a somewhat different language in all of the settings for speech and writing that we encounter, based on our

experiences with such settings. We may not name these differences in our language by the same names we use for national differences, like American English or British English (or English as opposed to Spanish or Chinese), but nonetheless we can recognize the differences.

All of that happens because of the complex system of language. We speakers and writers are agents, not the same as any language but users of language, in the same way that buyers and sellers are agents, not money themselves but users of money. The components in the complex system are all of the possible variant realizations of linguistic features, different word and grammar choices we use for children and professionals, for engineers and linguists. The activity in the system consists of all of our conversations, and as a more limited case, all of our writing. The exchange of information is not the same as sharing the meaningful content of what we say and write (which is information in a different sense), but instead the implicit comparison of the use of different linguistic variants, different ways of articulating the same meaning, by different agents in different situations. We listen to *how* people say things, and see *how* they write things, not just understand what they mean. **Feedback** from exchange of information leads to reinforcement, so speakers and writers are more likely to use particular variants in future occurrences of particular circumstances for speech. Human agents can think about and choose what linguistic variants to use, but that does not change the fact that we make choices in relation to the system, usually without thinking too much about them. Emergence, the order that emerges in speech, consists of the configuration of components, whether words, pronunciations, or grammatical constructions, that come to occur in any of the circumstances in which we actually communicate. As for other complex systems, all of these are conditioned by contingency and so emergent patterns can change over time. The process operating in complex systems just explains better what we already knew: we tend to talk like the people nearby, either spatially or socially near, and we tend to use the same linguistic tools that others do when we are writing or saying the same kind of thing.

How we use the information from our emergent patterns to manage our talk is not precise and rule-based, or based on categories. Our brains are composed of neurons, and all they can do is fire or not fire. We do not have linguistic categories in our minds, as early notions of cognitive linguistics had it. Instead, we just have firing patterns of all the interconnected neurons that come to correspond to our experience, this because the neurons can become habituated to repeated situations (see [Chapter 11](#)). John Miller illustrates the inexactness of the process in the paragraph below (Miller [2015](#) : 23), after he has told us that letters on a page “emerge” in our perception from numerous small printed dots:

the letters, when placed near one another, take on new properties and meaning, and ultimately result in the emergence of words.

Such emergence is so strong that it persists even if we scramble the letter between each word's start and end, that is, such emergence is so strong that it persists even if we scramble the letters between each word's start and end.

We do not see the dots, we see letters. We still see words even if they are not spelled exactly right – and when you think about it, how else could we proofread anything. Our minds are not like computers that rely on exact matches of text strings in searching and sorting data. We know, and computers do not know except for the limited case of spell checkers, what word was meant when it appears with an odd spelling – and we all get frustrated with some of the spelling changes our cell phones make when we are writing texts! We have some latitude in how we put stimuli together to make language, whether when we see letter shapes and word spellings, or when we hear pronunciations and understand words from those. As users of language, we are always reaching for the best fit of what we hear or see. Sometimes we do fail to put things together in the same way that our conversational partner has meant them, and these situations are often memorable for us, often quite funny because of the unanticipated broken expectations.

Evidence of Emergence

Let us look at an example of how complex systems affect what words we say. Here is a list of the top ten different names that people used, in a mid-twentieth-century survey of 1,162 people from the American Eastern States, for the insect with two sets of wings that flies in damp areas and eats mosquitos ([Figure 2.2](#)) – what many people today might call a *dragonfly* (see [Table 2.1](#)). All of this data, and much more like it, is freely available at www.lap.uga.edu ([Appendix 3](#) explains how to use it).



Figure 2.2 A dragonfly.

Source: Ernst Himmelsbach/500px/Getty Images.

Table 2.1 Top ten names for *dragonfly*

Name	Number of uses
snake doctor	536
snake feeder	413
mosquito hawk	360
darning needle	294
dragonfly	196
skeeter hawk	175
devil ' s darning needle	158
spindle	23
snake waiter	19
devil ' s horse	13

The people in the survey used lots of different words, and they did not use one word most of the time with some rare creative names. It may be surprising that the word many people think of first, *dragonfly* , was only in fifth place in the list of ten words, when we arrange the list by how often the 1162 people said it. *Snake doctor* was first for this survey, followed by *snake feeder*, *mosquito hawk*, and *darning needle*. The survey shows the same results for all questionnaire items: there is always more variation in words than anybody might expect. Here below is the whole list of names for a dragonfly (see [Table 2.2](#) . Content warning: the table contains a taboo racial slur.

It will be distressing enough to readers that I have chosen not to spell it in full.). Some of the entries are simple plurals of other entries (like *snake doctors* as well as *snake doctor*). A few of the names might actually be for other kinds of insects, but we can trust the field workers for the survey to do a good job of putting the right name down in the right place. Still, we can see that there are far more than just ten names for a dragonfly.

Table 2.2 All the names for *dragonfly*

a

Name	Number of uses	Name	Number of uses
snake doctor	536	donnel feathers	2
snake feeder	413	dragon fly	2
mosquito hawk	360	drum hawk	2
darning needle	294	galley nipper	2
dragonfly	196	galli nippers	2
skeeter hawk	175	gally nippers	2
devil's darning needle	158	gnat bug	2
mosquito hawks	89	gnat catchers	2
snake doctors	77	jar fly	2
dragonflies	42	johnny crowhorse	2
snake feeders	35	knit needle	2
darning needles	28	needles	2
spindle	23	partridge	2
snake waiter	19	praying mantis	2
skeeter hawks	17	saltpeter fly	2
devil's darning needles	14	snake bugs	2
devil's horse	13	snake charmer	2
mosquito	12	snake cure	2
devil's riding horse	8	snake doctor fly	2
mosquitoes	8	snake eaters	2
devil horse	6	snake feed	2
devil's needle	6	snake fly	2
snake servant	6	snake leaders	2
skeeters	5	snake peters	2
gnat hawk	4	snake skeeter	2
gnats	4	snake weeder	2
June bug	4	snake worm	2
mosquitos	4	stinging bee	2
needle	4	bedbug	1
snake flies	4	big mosquito	1
snake guarder	4	big mosquitoes	1
snake master	4	bull bats	1
snake spindle	4	bull haver	1
galli nipper	3	chulabama	1
girl nipper	3	covered up her ears	1
skeeter	3	dobson fly	1
bottlefly	2	dragon flies	1
busy bug	2	flea	1
darning bug	2	flies	1
darning fly	2	gadfly	1
devil riding horse	2	gally nipper	1
devil's bug	2	girlie nipper	1
devils' horse	2	girlie nippers	1
devil's horses	2	granddaddies	1
devil's knitting needle	2	guinea fowl	1
devil's needles	2	harmony birds	1
humming bird	1	schlange heeder	1

[Table 2.2 long description.](#)

b

Name	Number of uses	Name	Number of uses
humming birds	1	sew up your ears	1
July flies	1	sew up your eyes	1
July fly	1	shite poke	1
June bugs	1	sing-gaily	1
Katydid	1	snake tender	1
locust	1	snake tenders	1
mosquito hood	1	snake waiters	1
n*****s	1	spider	1
n*****s call them	1	spidle	1
quail	1	spinners	1
sand flies	1	they catch skeeter	1
sand fly gnat	1	yard flies	1
schlange geeder	1		

[Table 2.2b long description.](#)

Besides the common terms at the top of the list, we see that there are lots of names that only occur once (forty-five of them) or twice (thirty-eight of them). There are, in fact, 119 different entries in the list! If we take out the thirty plural forms, we still have seventy-nine different names. If we take out some entries that we think might be names of other insects or otherwise inappropriate answers, call it fifteen more entries, we still have sixty-four different names. This number is wildly higher than anybody might have thought from their own personal experience.

If we chart all the different names, sorted by frequency, the survey always shows us the same picture (see [Figure 2.3](#)).

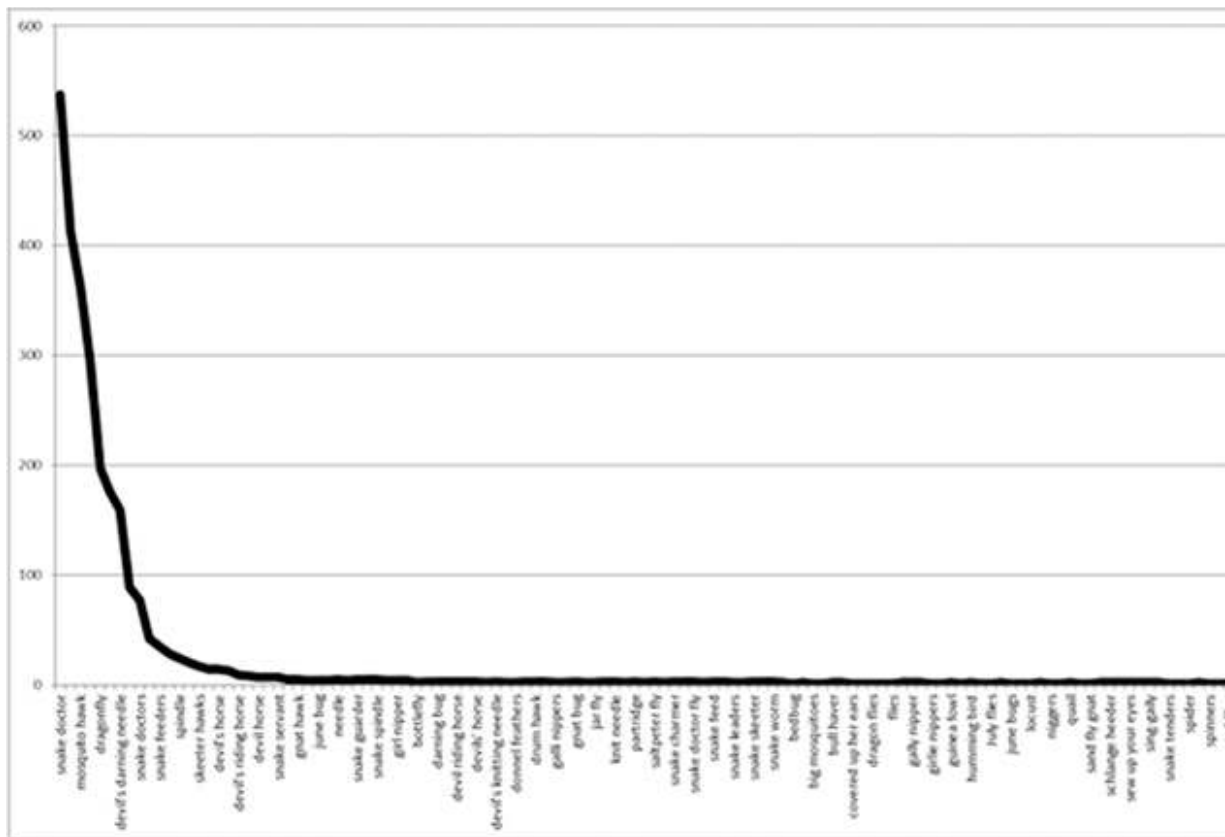


Figure 2.3 A-curve for *dragonfly* variants.

The curve always looks about the same for all the items in the survey, with a few forms at the left that occur frequently, a few more forms at the bend of the curve that occur fairly often, and a great many forms in the long tail of the curve that rarely occur. The technical name for this kind of curve is an asymptotic hyperbolic curve, but we will use a shorter name than that, **A-curve**. What about the list of forms after we take out the plurals and inappropriate responses? It looks pretty much the same ([Figure 2.4](#)):

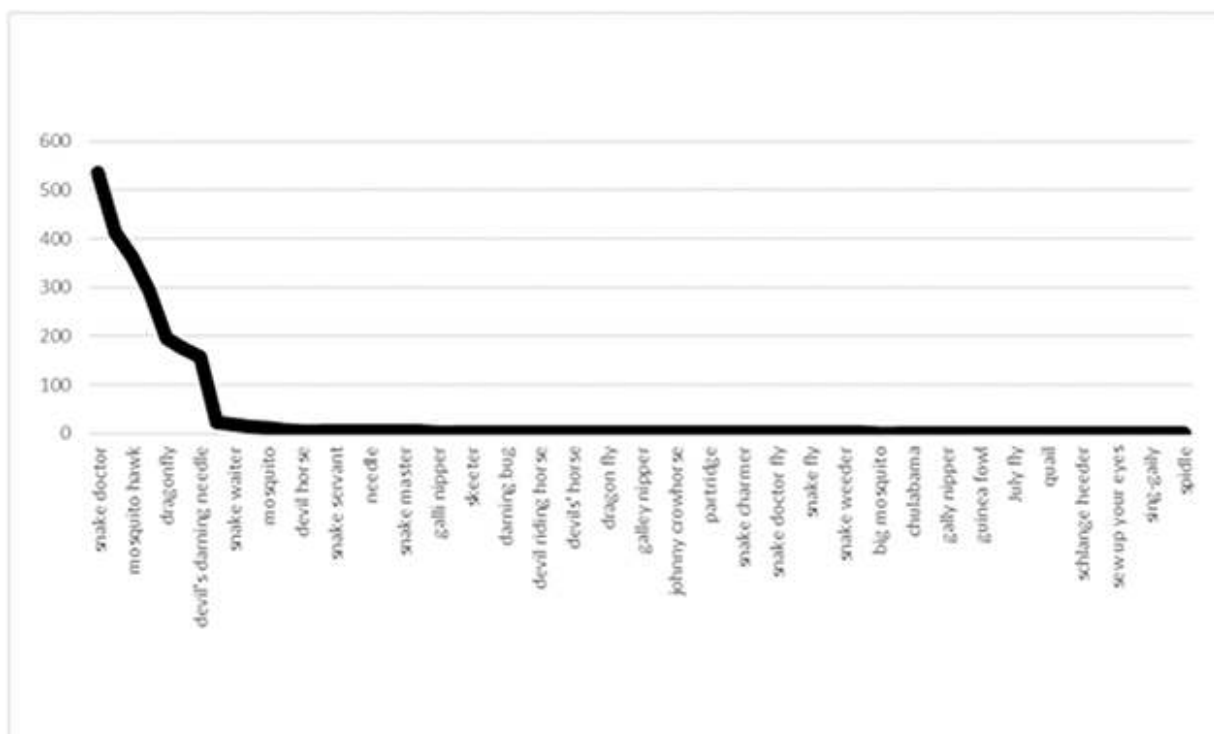


Figure 2.4 A-curve for *dragonfly* variants, after removing plurals and inappropriate responses.

The A-curve for the reduced set of sixty-four entries also has a few entries that occur frequently, some that occur fairly often, and a great many that hardly ever occur. The **frequency profile** of the different names for a dragonfly, or the variation observed for other items in the survey, is thus very robust since you can leave out numerous questionable entries and still see the same picture.

The frequency profile, shaped as an A-curve, is evidence of what has happened after the operation of the complex system of speech, after feedback has led to reinforcement of speakers' choices. The components are all the different words for "dragonfly." The activity in the system is people talking to each other in conversations that include dragonflies, and as they do so they use the different terms for the insect. It is easy for people to introduce a new term for a dragonfly, and people do that all the time. However, people do use some terms much more often than others in their conversations, and these are the terms in the top ranks of the A-curve. Is there some reason that *snake doctor* is a better term for "dragonfly" than *mosquito hawk*, or than *dragonfly* itself? No, it just emerged that people used *snake doctor* more often, as a result of feedback as people heard what other people said, which reinforced the frequency of the term. Sometimes we use the same term (for a dragonfly or for any other object) that other people use. Sometimes we use our own term. All of the activity and feedback in the complex system always produces an A-curve, whether for different terms for something, or in different pronunciations of a word, or in different ways of putting words together. While it is not predictable *which* term for an object will emerge as the one most often used in a population of speakers, we know that the frequency profile of all the terms that people used will be shaped like an A-curve.

What's more, the same picture appears when we look at different subgroups in the survey data. To be clear, in [Figure 2.5](#) we are looking at exactly the same data as we saw in the listing for all speakers, now just broken up into subgroups. Here we see the top ten different forms and the frequency profile for the whole list of forms for just the men in the survey, and for just the women in the survey.

Men (803; 81 different entries)

snake doctor	355
snake feeder	317
darning needle	210
mosquito hawk	203
devil's darning needle	118
dragonfly	116
skeeter hawk	112
spindle	23
snake waiter	18
devil's horse	8

Women (359; 47 different entries)

snake doctor	181
mosquito hawk	157
snake feeder	96
darning needle	84
dragonfly	80
skeeter hawk	63
devil's darning needle	40
mosquito	6
devil's riding horse	6
devil's horse	5

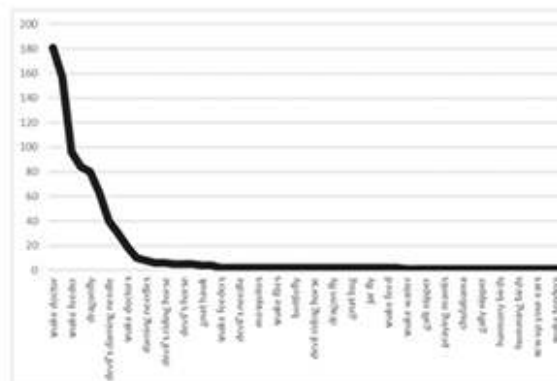
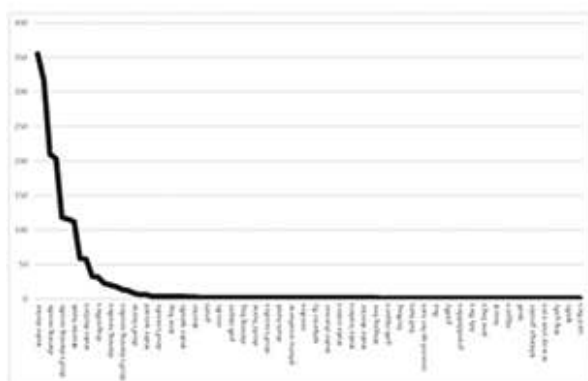


Figure 2.5 *dragonfly* variants just for men, and just for women.

There were 803 men in the survey and only 359 women, and we see that the men had eighty-one different entries for *dragonfly* and the women had only forty-seven different entries, yet the A-curve appears for both groups. Moreover, we see that, while most of the top ten different names are the same, the men have *spindle* and *snake waiter* that the women do not have, and the women have *mosquito* and *devil's riding horse* that the men do not have. In fact, people of both sexes used these forms, just not in the top ten. The forms that men and women both have in the top ten occur in a different order. *Snake doctor* is the most common form for both, but women use *mosquito hawk* more than the men and they use *devil's darning needle* less. This difference in order in the frequency profiles is what can make us think that men and women talk differently. They do so, however, within the same frequency framework, always an A-curve.

We see the same thing if we compare subgroups for three different regional groupings of speakers: New York, New Jersey, and Pennsylvania in the North; West Virginia, Maryland, Delaware, the District of Columbia, and Virginia in the middle; and North Carolina, South Carolina, Georgia, and Florida in the South (Figure 2.6). The A-curve is apparent below each list. Again, we see that most of the entries in the top ten lists overlap, and that the order of the entries is different. Six entries are on all of the lists – *darning needle*, *snake feeder*, *devil's darning needle*, *dragonfly*, *snake doctor*, and *mosquito hawk* – but in a different order each time. The other entries, like

skeeter hawk or *spindle* , would be found further down on all the lists if not in the top ten. Again, the order of the lists, how often speakers in the group use each name even though all the groups use it, is what allows us to think that speech is different in each of these areas.

<u>North</u>		<u>Middle</u>		<u>South</u>	
darning needle	288	snake doctor	321	mosquito hawk	276
snake feeder	170	snake feeder	164	skeeter hawk	131
devil's darning	118	mosquito hawk	76	snake doctor	124
needle		skeeter hawk	42	snake feeder	79
dragonfly	112	devil's darning	36	dragonfly	60
snake doctor	91	needle		mosquito	12
spindle	23	dragonfly	24	devil's horse	11
mosquito hawk	8	snake waiter	17	devil horse	6
snake servant	6	devil's riding	8	darning needle	4
devil's needle	4	horse		devil's darning	4
needle	4	gnat hawk	4	needle	
		darning needle	2		

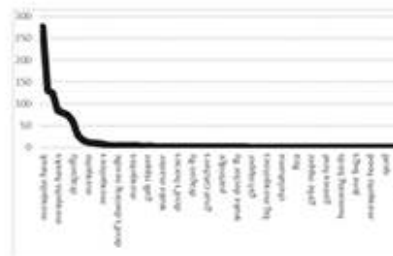
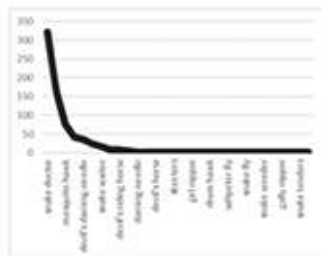
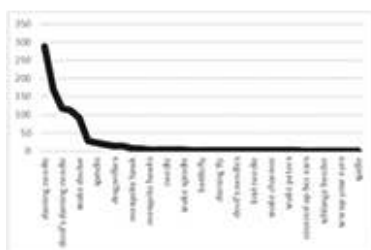


Figure 2.6 *dragonfly* variants for regional groups of speakers.

Let us look at one more set of subgroups, this time by age (Figure 2.7). The youngest group of speakers includes people up to forty-nine years old. The second group includes speakers between fifty and seventy-nine years of age. The last group has people between eighty and one hundred years old.

<u>Youngest (up to 49)</u>		<u>Middle (50-79)</u>		<u>Oldest (80-100)</u>	
snake doctor	126	snake doctor	339	snake doctor	71
snake feeder	114	mosquito hawk	241	snake feeder	70
mosquito hawk	71	snake feeder	229	darning needle	66
darning needle	50	darning needle	178	mosquito hawk	48
dragonfly	50	dragonfly	120	skeeter hawk	34
skeeter hawk	26	skeeter hawk	115	devil's darning	34
devil's darning	24	devil's darning	100	needle	
needle		needle		dragonfly	24
snake waiter	8	spindle	13	spindle	8
spindle	2	devil's horse	11	mosquito	7
mosquito	2	devil's riding horse	8	snake waiter	6

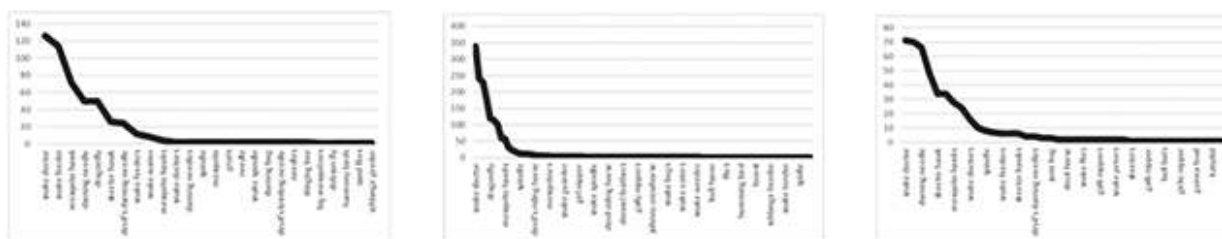


Figure 2.7 *dragonfly* variants for groups of speakers by age.

Again, the A-curve appears every time. For these groups, *snake doctor* is always the most common form, but after that the shared forms are in different orders in the frequency profiles. The same basic pattern occurs in the tallies for each group, whether overall or the smaller groups: there are a few words at the top that are very common, but the numbers pretty quickly decline to much smaller numbers. The constant presence of the A-curve pattern shows the characteristic **scaling** behavior (also known as **scale-free** behavior, in the same strange way that *flammable* and *inflammable* mean the same thing) that occurs in complex systems, where the A-curve pattern is repeated over and over in every subgroup of the data as well as in the data set overall. The A-curve and scaling properties that we see in speech match what is known in mathematics as a pattern with **self-similarity**. Fractal mathematics with self-similarity was named by mathematician Benoit Mandelbrot (e.g. 1982), and it works better than the mathematics we are usually taught (whether calculus or statistics) for many aspects of the natural world, including language. As the Fractal Foundation says,

A **fractal** is a never-ending pattern. Fractals are infinitely complex patterns that are self-similar across different scales. They are created by repeating a simple process over and over in an ongoing feedback loop Geometrically, they exist in between our familiar dimensions. Fractal patterns are extremely familiar, since nature is full of fractals. For instance: trees, rivers, coastlines, mountains, clouds, seashells, hurricanes, etc.

(<https://fractalfoundation.org/resources/what-are-fractals/>, viewed January 7, 2025).

The A-curve and the scaling properties of language are the best signs that language is self-similar as it arises from a complex system of interactions.

We can illustrate the notion of scale in economics. We all know that there are different markets at different levels of scale. In your neighborhood you can buy essential items (in America often at a “ convenience store ”), but you can also go a bit further away and participate in the town market to buy things at a large grocery store, or at a general-purpose “ big box store ” (e.g., Walmart in America) or one that may specialize in electronics or products for pets. Prices in the bigger stores are likely to be lower. If what you need is more specialized or exotic than what you can get in town (like your favorite imported mustard or a specialized repair service), you may have to go to the big city, which supports markets in exotic foods and special services. Thus markets organize themselves, everywhere, into different levels of scale. So it is, too, for language in use. It is possible to document characteristic uses of language by very small groups who are interested in the same activity, each known as a **community of practice** (that is, a group of people who “ share a concern or a passion for something they do and learn how to do it better as they interact regularly, ” as described in Wenger-Trayner (2015); see [Chapter 10](#)), and by larger groups of speakers who live in the same town or interact in the same social group, up through the national level of scale at which we can distinguish American English from British and other world varieties of English.

The idea of scale thus solves the problem of how we can have a national language variety at the same time that we can recognize regional and social varieties in the same population. It cannot be the case that speakers, or buyers, are uniquely associated with their smallest level of interaction. If you could only talk like your associates in a community of practice, how could you make yourself understood in wider communities or nationally? Speakers, and buyers, naturally participate at different levels of scale, as well as in different regional and social groups, by manipulating their choices among the same sets of variants for linguistic features. As for regions, a Southern American consumer can buy “ grits ” (a cornmeal product enjoyed for breakfast) at every level of scale, one or two kinds in the convenience store, additional kinds in the town grocery store, and fancy coarse-ground grits only in the big-city or online in the national marketplace. If the Southerner leaves her region, say to go to the North, she may find no grits at all in convenience stores, perhaps one or two kinds in a local grocery store, and more kinds in the big city, and she would have to go online to get her favorite coarse-ground variety. It goes without saying that the same is true for language in different regions. Regions and social groups, Zelinsky ’ s cultural slices, are relatively different between themselves, as well as being different within themselves by levels of scale. Speakers of a language can recognize and must negotiate levels of scale as well as differences they perceive between regional and social groups in language use.

Consequences of Emergence

There is always much more variation than we might have thought in a population of speakers, but usually we get things right because the ever-present A-curve in the frequency profiles of the variants offers us a huge perceptual advantage for what people usually say ([Figure 2.8](#)). Top-ranked words for a particular situation, the things that people normally say, are massively more likely than all the other possible things. Language is *flexible* because we can accommodate a great many possibilities in the long tail of the curve when we choose to use them, but language is *understandable* because we usually do not take advantage of the flexibility.

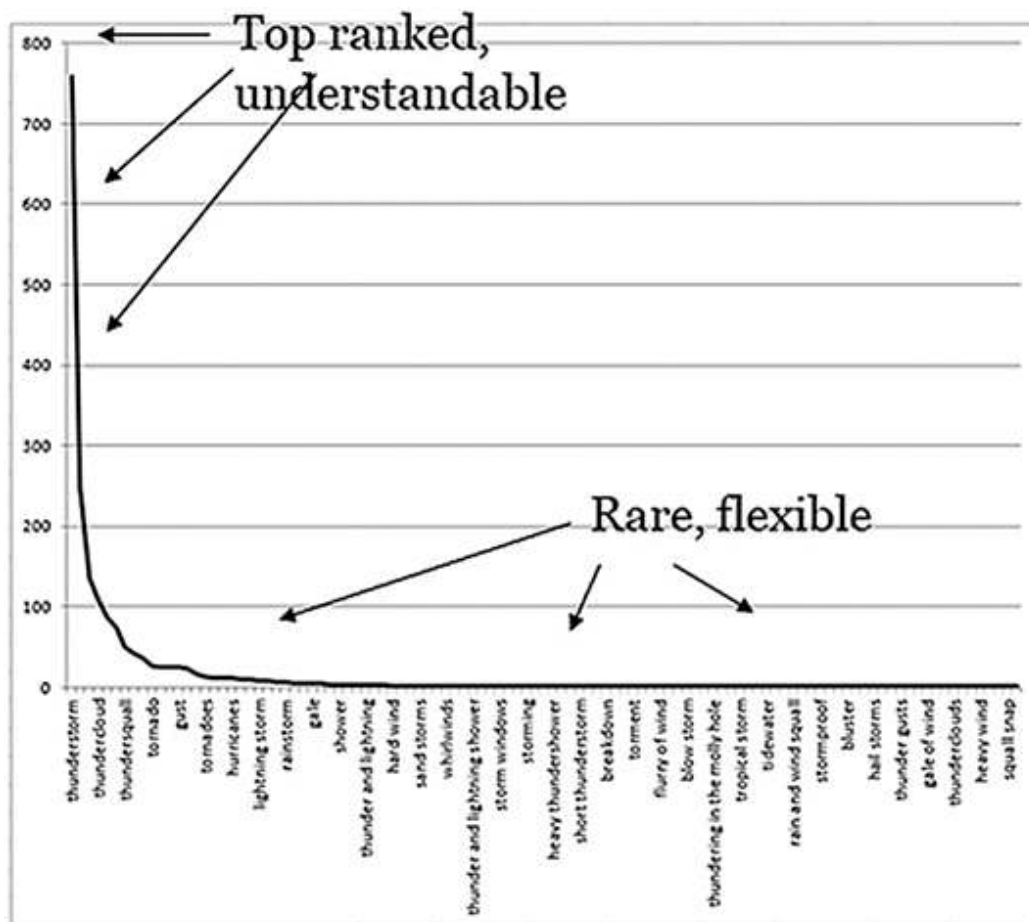


Figure 2.8 Flexible and understandable.

[Figure 2.8 long description.](#)

The A-curve frequency profile is thus not only a curious effect of a complex system but something functional, something that makes language work for us in every population of speakers. Wide variation in the components of speech, as processed in the activity of speakers with feedback and reinforcement, lets us understand each other and also express our individuality in American English – and in every other human language.

Perhaps the first person ever to notice this nonlinear frequency profile in speech was George Zipf, a mid-twentieth-century Harvard professor. **Zipf's Law**, so-called, says that if you count the frequency of words in any large text and then put the frequencies in descending order, there is an inverse relationship between each frequency and its rank in the order, roughly $P = 1/r$ where P is the frequency and r is the rank (see Kretschmar 2009 : 190 – 198 for more information on Zipf's Law). So, in concrete terms, the second-ranked variant in a list will be half as common as the first one ($P = 1/2$), and the third-ranked variant will be one third as common as the first ($P = 1/3$), and so on. This formula yields a nonlinear plot of frequency and rank, what we have talked about in this chapter as the A-curve. **Nonlinear** just means 'curved,' like the A-curve, rather than straight. An A-curve, however, is not just any old curve: as it happens, if both axes of an A-curve chart use logarithms instead of simple counts of the data, the chart produces a straight line rather than the sharp curve. This is the special property of an A-curve, what makes the term *nonlinear* especially interesting for our study of language. Zipf's Law, however, is not a "law" in the same way that physics has natural laws. Zipf's formula produces a curve that follows the **80/20 Rule**, also called the Pareto Principle after an Italian economist who had noticed that 80 percent of the land in Italy was owned by 20 percent of the people. In speech, the 80/20 Rule predicts that 80 percent of the **tokens** (that is, the terms or other linguistic features that people actually say) come from 20 percent of the **types** (that is, the list of all the terms or features that people could say). However, when we count tokens and types in speech, we get a range of proportions, sometimes 90/10, sometimes 70/30. In every case there is a big quantitative difference between the one or a few terms/features at the top of the A-curve and the many terms/features that do not occur

very often in what is called the long tail (or fat tail) of the curve. Zipf ' s curve, then, is less a precise formula for a law and more like a guideline. Thus the A-curve: it avoids unnecessary implications of formulas and laws from Zipf while showing the characteristic quantitative difference in the frequency of terms/features as a nonlinear curve.

The complex system of language may actually work in a way that is not precise and rule-based but, ironically, the A-curve also creates our universal perception that language is structured. Grammar is a perceptual consequence of the complex system of speech, not a description of it. It is highly likely that the A-curve distributional pattern gave rise to the idea of grammar in the first place, because speakers of any language perceive that, for any question about how to put words together, there will be one or a few constructions that occur a great majority of the time, at the top of the A-curve. The idea that there is a fixed objective language hierarchy, a linguistic system, originates as an **observational artifact** , something that we just *perceive* to be there because we usually do one of just a few things. The problem with traditional grammar is the assumption that there is only one grammar for a language. Instead, we should think of grammar as derived from what we say and write, and think that there is a somewhat different grammar for every situation in which we say or write something.

The existence of complex systems in our cultural interactions allows us to be diverse, and at the same time allows us still to show ourselves through our behavioral choices to be members of our regions and groups at every level. Complexity science thus describes the process by which we perceive our language behavior to be associated with our communities and practices; it is the underlying process for the creation of what we call language varieties or dialects. Complex systems, therefore, offers a model that can explain the multidimensional layering of cultural regions and groups described by Zelinsky. The complex systems approach accommodates the decisions that speakers make about their language in every kind of conversation and situation for writing. Complex systems allow us to recognize and honor the linguistic and cultural decisions that every individual has to make, and at the same time to understand how such decisions result in local and larger cultural patterns.

Summary

Complexity science provides an effective scientific model for how economic markets work and also for how language varieties work. Speakers of a language have frequency profiles for the variants they can use for any feature, like names for *dragonfly* . Every group of speakers has an A-curve in the frequency of variants, and different groups have different orders for the variants on their A-curves. This previously unsuspected frequency characteristic of language accounts for why we perceive grammar in language.

Key Terms

80/20 Rule

A-curve

activity

agents

community of practice

complex systems

complexity science

components

contingency

emergence

exchange

feedback

fractal
frequency profile
invisible hand
Newtonian mechanics
nonlinear
observational artifact
paradigmatic structure
reductionism
reinforcement
scale-free
scaling
self-organization
self-similarity
syntagmatic structure
three body problem
tokens
types
Zipf ' s Law

Audio Samples

These audio samples (available at www.cambridge.org/williamakretzschmar) all come from American speakers from the Southern states. When you listen to them, imagine that you are hearing their words and pronunciations according to the model of a complex system: they can all use the same variants, but use them at different rates. They are all talking about their families.

a2.1 Speaker from Tennessee (LAGS 025)

a2.2 Speaker from Alabama (LAGS 387)

a2.3 Speaker from Texas (LAGS 847)

Exercises

1. How many different words do *you* know for a dragonfly? These days, you may be more familiar with different names for soft drinks, or for athletic shoes, or for sandwiches the come in long buns. Choose three different items, and list the variants you have heard (you can ask friends what they know, too).
2. People say that men talk differently from women, but can you name any specific differences? Perhaps how many colors they know? Are such differences associated with particular settings for conversations (like locker rooms or kitchens)? Do you think men and women mostly know the same words, but use some of them at different frequencies?

3. How does the principle of understandable high-frequency words vs. flexible low-frequency words play out in communities of practice? What about health-related words that doctors use as opposed to words their patients use? What about game-related words that people who play video games use that might be used much less by people who do not play? Can you think of other communities of practice who use some words at higher frequencies than people outside the community of practice do?

Computer Exercises

Exercise App3.2 in [Appendix 3](#) goes well with this chapter. It asks users to tally and chart the number of occurrences of each response type from three different items, in order to test the hypothesis that all of the charts will show an A-curve.

Further Reading

Mandelbrot, Benoit. [1977](#) . *Fractals: Form, Chance, and Dimension* , and [1982](#) . *The Fractal Geometry of Nature*. San Francisco: Freeman. These are the foundational books for the idea of fractals. There is lots of mathematics in them – nonlinear mathematics, at that – but the graphic designs are fascinating. The American public TV program called *Nova* produced a program on fractals called “ Fractals: The Hidden Dimension, ” available on YouTube. It has interviews with Mandelbrot.

Mitchell , Melanie . 2009 . *Complexity: A Guided Tour* . Oxford : Oxford University Press .

This book provides a thorough introduction to complexity theory, including its history and its application to the physical sciences. Mitchell illustrates her examples, making more detailed points about complex systems accessible.

Kretzschmar , William A. , Jr. 2009 . *The Linguistics of Speech* . Cambridge : Cambridge University Press , and 2015 . *Language and Complex Systems* . Cambridge : Cambridge University Press .

Burkette , Allison , and William A . Kretzschmar , Jr. 2018 . *Exploring Linguistic Science* . Cambridge : Cambridge University Press .

These books provide the foundational information about A-curves and the Linguistic Atlas Project. They can be challenging – especially [Chapter 6](#) in the 2009 book, which introduces complexity and dimensionality. The 2015 book applies complexity science to many subfields within linguistics. The 2018 book is an introductory textbook, both for complexity science and for linguistics. Kretzschmar, William A., Jr., Virginia McDavid, Theodore Lerud, and Ellen Johnson. [1993](#) . *The Handbook of the Linguistic Atlas of the Middle and South Atlantic States* . Chicago: University of Chicago Press.

The *Handbook* gives all the information you need about how the Linguistic Atlas of the Middle and South Atlantic States survey was conducted and who its speakers are.

Zipf , George . 1949 . *Human Behavior and the Principle of Least Effort* . Cambridge, MA : Addison Wesley . While Zipf was brilliant he was also a difficult person. He applied a principle of “ least effort ” based on his law to many things in society, and a number of these connections were more imaginative than substantial. As Bernard Mandelbrot wrote of Zipf ’ s [1949](#) book (Mandelbrot [1982](#) : 403),

It is one of those books ... in which flashes of genius, projected in many directions, are nearly overwhelmed by a gangue of wild notions and extravagance. On the one hand, it deals with the shape of sexual organs and justifies the Anschluss of Austria into Germany because it improved the fit of a mathematical formula. On the other hand, it is filled with figures and tables that hammer away ceaselessly at the empirical law that, in social science statistics, the best combination of mathematical convenience and empirical fit is often given by a scaling probability distribution.

3

Old World Origins for American English



In This Chapter

American English is part of a historical process. Within its own time, American English can be divided into periods that correspond to important stages in its development. Before that time, we begin with the ancient history of language and then move on to the beginnings of English. The chapter ends as American English begins, in the first years of the seventeenth century.

Timeline

449

Hengest and Horsa come to Britain: English begins.

1066

Norman invasion of Britain.

1400

Death of Chaucer.

1492

Columbus lands on several Caribbean islands.

1540

De Soto explores the South as far as the Mississippi River (1543).

1579

Drake claims New Albion (continent north of Mexico, at the Pacific).

1585

Roanoke colony founded.

1609

Hudson discovers Hudson River.

1616

Death of Shakespeare.

American English did not suddenly appear on July 4, 1776, as a new and fully developed variety of the language. It belongs to a process of change in the language that began over a millennium earlier and continues to this day. Still, American English could not exist before settlement of the New World, and so any account of the development of American English must mark a beginning at the time of the first permanent English settlements in North America. After that time different American voices began to take their own direction, which was different from the direction of linguistic change for English speakers in England and other places. The next chapters will trace the development of American English voices. First, in this chapter, we need to know about English before American settlement: where English came from, what it was like until the point that American voices began to branch off, and what circumstances influenced the branching process. In each of the following four chapters, we will consider one of the four major divisions in the development of American voices: the **Colonial Period** (beginnings to 1800), the **National Period** (1800 – 1865), the **Gilded Age to World War II** (1866 – 1945), and the **Information Age** (1945 – present). These periods are to some extent arbitrary divisions in the continuous history of the English language in America, and yet they do correspond to important cultural developments. The Colonial Period corresponds to the time when new North American settlements by English speakers retained their political and social focus on the British Isles, and therefore ends with the separation of political and social affairs in the American colonies from reliance on Old World culture. The National Period focuses on the creation of an American national culture, characterized by westward expansion across the eastern half of the continent and the creation along the way of regional cultural patterns. Regional differences culminated in the Civil War (1860 – 1865). The driving of the Golden Spike in 1869 marks the beginning of a new period, the Gilded Age. When the Union Pacific and Central Pacific railroads were joined, it also marked the connection between the West and the East (and other regions as well) that truly made the United States one nation. At the same time, the fact that the connection was made by an emerging industrial technology in transportation – railroads – marks the time when the American nation grew to become a world power, as shown by its involvement in World War II. The final division, the Information Age, builds on the foundations laid down in the earlier periods but is itself culturally distinct, characterized by new social and cultural patterns as new technologies like radio, TV, and computing accelerated the pace of communication across the country. These periods do not march towards some definite conclusion for the English language, whether in America or worldwide – it would be pretty conceited of us now to think that hundreds of years of American voices existed solely to produce our contemporary version of American English. To mark different periods in the history of American voices, including our own time, just helps to organize the facts of continuous change in the language into more manageable portions.

Ancient History

The English language is historically related to a family of languages called **Indo-European**. Nobody knows exactly where or when the actual people lived who spoke the first form of Indo-European, perhaps 6000 years ago, now reconstructed (there are no written records from that far back) as Proto-Indo-European. Written records from the Indo-European family go back as far as about 2000 BC, by which time the earlier Indo-European language had already begun to branch into what have become its main constituent language groups: Indian, Iranian, Armenian, Hellenic, Albanian, Italic, Balto-Slavic, Germanic, Celtic, Hittite, and Tocharian. Many of these groups in turn branched and rebranched into languages familiar in the modern era; some, Hittite and Tocharian, became dead languages when they no longer had living communities of speakers. To consider an example of what happens as groups continue to grow and change, the Italic group includes Latin (now no longer spoken by any living community but still taught as a historical language), which in turn developed into Romance languages such as Italian, French, Spanish, and others. Indo-European was not itself the first or only language spoken in early human cultures. Our earliest records of a written language, Sumerian, survive from about 3000 BC, for example, and Sumerian is not a member of the Indo-European family.

The next branch towards English from Indo-European is the **Germanic** languages, which arose in the northwestern part of the Indo-European area. The beginnings of the Germanic languages are still too old for there to be any written records. The various branches of the Indo-European language family, including Germanic, emerged and became distinct as a result of differential language change as people moved to settle new areas. That is, when groups of Indo-Europeans moved away from their original homeland, the members within each group would talk more to each other than they could talk to members of other groups. As the complex systems model predicts, such interaction allowed the emergence of different habits of speech in each of the groups. The central fact of language change is that new speech habits are always emerging, sometimes consciously but most times not through any deliberate intention; it happened for the Indo-Europeans and their descendants, and it is still happening today. These emerging habits tend to follow the residential and other cultural

groups to which people belong, then and now. The Germanic branch of Indo-European developed in just this way as the generations passed among the ethnically Indo-European people who settled the northwest. The same thing happened to Indo-Europeans who settled in other areas. The language habits of the Indo-European people who lived south of the Germanic group became Celtic, again with the passage of great stretches of time, and the language habits of the Indo-European people who lived east of the Germanic group in time became Balto-Slavic. As we saw in [Chapter 2](#), the regularities emerge from the operation of the complex system of language, in which there is room for a great many choices for words and sounds and in which, at the same time, speakers do tend to make similar choices.

The detective work in dictionaries and grammars that we call historical Indo-European linguistics had its great age of discovery only in the nineteenth century, and work continues today to unravel what must have happened to create the range of language branches and language habits existing today in the Indo-European region – and in all of the places to which Indo-European languages have been carried around the world. Most of this work attempts to explain the *differences* between language groups and languages, to make the branches of the Indo-European tree appear more separate and distinct, because people perceive that modern languages are separate and distinct (as discussed in [Chapters 1](#) and [2](#)).

Germanic is at the lower left of [Figure 3.1](#). Can you find English? It is important to keep in mind, however, that all of these groups and languages are still historically related to Indo-European and to each other. The language habits of the Germanic group are not entirely different from those of the Celtic group or the Balto-Slavic group. If they were, nobody could tell that these language groups were historically related to each other. The same is true for modern languages. There are systematic differences between them, to be sure, but there are also many similarities that testify to the connections between languages within branches and to the connections between branches within the Indo-European family. Consideration of the *similarities* and *connectedness* (as opposed to differences) focuses attention on the **linguistic continuum** within the Indo-European territory. Both then and now, people who live near to each other tend to be able to understand each other, as they must in order to carry on their daily affairs with each other. National boundaries even today most often do not prevent neighbors from talking to each other, and talking more like each other than might be predicted from their respective national languages as taught in schools or printed in books. For example, people who live in Alsace (today all in France) are part of a linguistic continuum which has, at different times, belonged to France or belonged to Germany. The line in [Figure 3.2](#) through the middle of Alsace shows where the German border was at the turn of the twentieth century. The historical development of the Indo-European languages was no different: near neighbors talked to each other, and the differences between particular daughter languages, and by extension the major Indo-European language branches, can be observed to emerge by historical linguists only as a function of the distance between the people who spoke them – we see the branches more clearly when we consider languages as they are spoken in their heartlands or capitals, not along the borders of the territories or countries in which they are spoken.



Source: Kretzschmar, William A. Jr. 2018. *The Emergence and Development of English* . Cambridge: Cambridge University Press.

Source: Kretzschmar, William A. Jr. 2018. *The Emergence and Development of English* . Cambridge: Cambridge University Press.

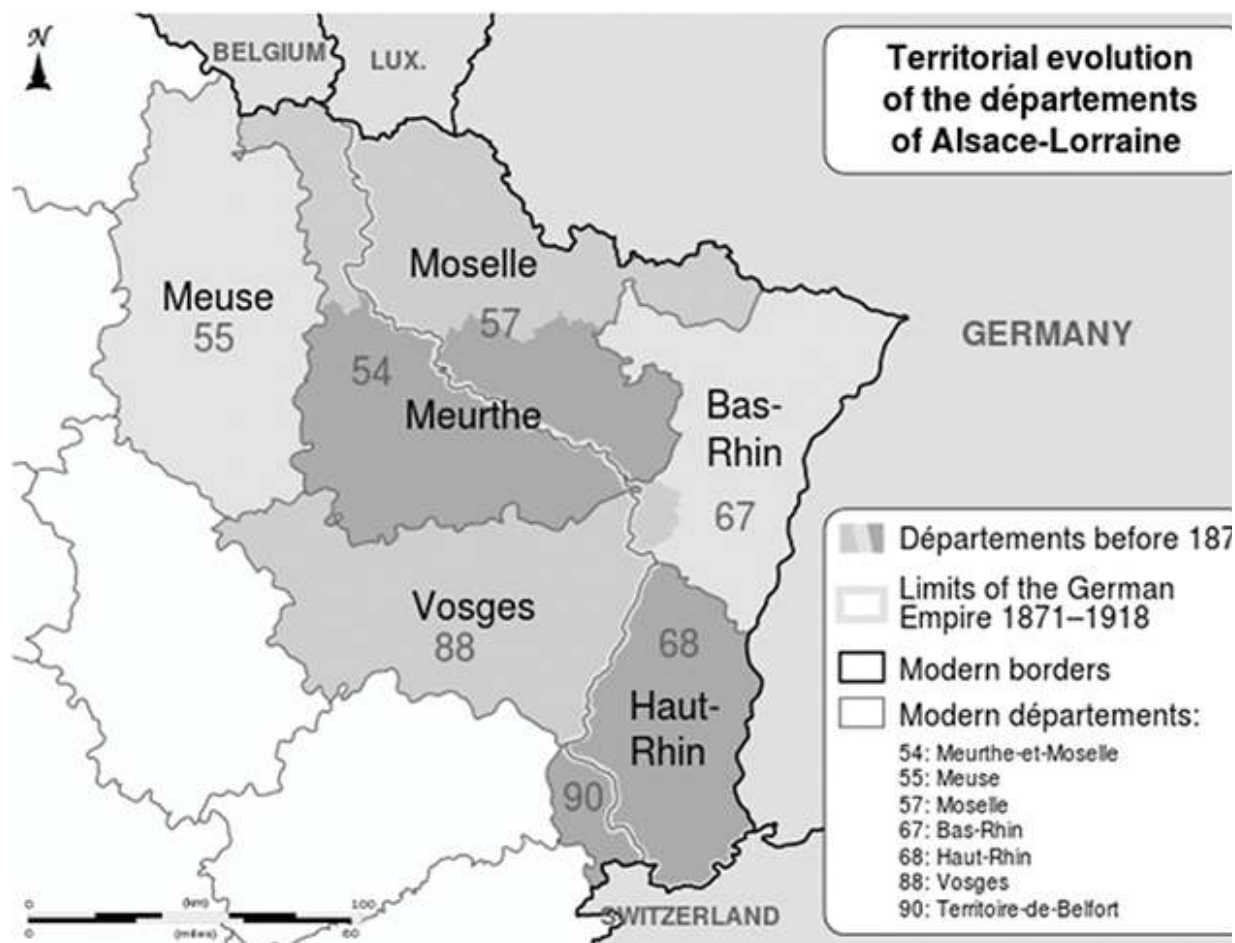


Figure 3.2 Alsace and Germany.

[Figure 3.2 long description.](#)

Source: Owen Blacker. 2011. 'Alsace Lorraine departments evolution map-en.svg'. Wikimedia Commons.

The idea of the linguistic continuum is a great match for the A-curve introduced in [Chapter 2](#), because the differences between heartlands and borders can be tracked in the frequency profiles: features that were rare in one place can become high frequency in another. So, for example, in Alsace we could count how often people said *Mann* or *Frau* (close to modern German) as opposed to *homme* or *femme* (close to modern French) for 'man, woman,' as a way to follow the continuum from central Germany towards central France. While it is sometimes useful to make binary distinctions, that a language is the same or different as in the Indo-European tree of languages, complexity science can explain the continuum of speech across time and territory that we always see when we observe more closely what people have actually said or written. Knowledge of the existence of a linguistic continuum is important for English because, historically, people who spoke the daughter languages that emerged from Germanic could often communicate with each other better, especially at the edges of their territories, than might be implied by the separate branches that historical linguists often draw for the Germanic family.

Origins of English

Unlike most other languages, English can date its origins with fair precision to about 449 AD. No written records of the language from that time still exist; the earliest written records of English come from about 700 AD. Still, between the **internal history** of the language (reconstruction of regularities in the features of a language, as for Indo-European and Germanic) and its **external history** (the historical record of cultural circumstances that affected the speakers of a language, and thus the conditions for change in the language), modern

observers can build a decent picture of what must have been happening before written records are available as evidence. The history of English is conventionally divided into three periods:

- Old English** 449 AD to 1150 AD
- Middle English** 1150 AD to 1500 AD
- Modern English** 1500 AD to the present

Thus, while the governor of the American state of Georgia once claimed that mountain people in his state spoke “ Old English, ” he was not using the term as we do in this book. These three periods are really just rough divisions in the history of English. Change in the language is continuous, both within the periods and across them. More specific references of the condition of the language often apply the labels “ early ” or “ late ” to the period name, and so Shakespeare ’ s stage of the language is often called **Early Modern English** (usually considered as coming from 1500 AD to 1700 AD). The earliest form of Old English is often called Prehistoric Old English (usually considered as coming from 450 AD to 700 AD). Periods in the history of English do give us specific boundaries in time to talk about, so long as we realize that, like the boundaries for periods in American English, they are arbitrary divisions.

Before the origin of English, the island of Britain was populated by a prehistoric culture that was displaced when members of the Celtic-speaking branch of the Indo-Europeans came to settle there. Much later, Julius Caesar invaded Celtic Britain in 55 BC, and Emperor Claudius conquered the island and made it part of the Roman Empire in 43 AD. Britain thus had roads and cities like the Romans, a literate culture, and new forms of religion (eventually including Christianity). The Romans created defensive walls and garrisons to protect the Romanized citizens from uncivilized Celts (the Welsh in the West, and later the Gaels, in Latin called *Scoti*, in the North) and Picts. Rome fell for the first time in 412 AD, and the disruption caused the Romans to withdraw their garrisons so that the Romanized British were no longer protected from the unRomanized Celts and Picts. The leaders of the British attempted to use the same mercenaries that the Romans had hired for defense, members of Germanic groups from across the North Sea on the continent. Hengest and Horsa were the leaders of these Germanic people, and they settled in Britain in 449 AD on their own isolated territory, the Isle of Thanet in the southeast. They did repel the Picts and Gaels, but then they began their own invasion of all Britain. It took the Germanic invaders nearly two centuries to complete their occupation of Britain, lacking only Scotland, Wales, and Cornwall, where some of the Romanized British sought haven with their ethnic relatives. It used to be thought that the British population was slaughtered by the Germanic invaders, but now there is evidence that many British people remained in England as second-class citizens, without the same rights or value as Germanic residents, as some early Germano-British legal codes show. Unfortunately for the victorious English people, by the end of the eighth century the **Vikings** , North Germanic raiders, had attacked the monastery at Lindisfarne and then the monastery at Monkwearmouth and Jarrow, and continued to attack other parts of Britain and Ireland for centuries. A new Germanic group thus threatened the people of Britain. But as before with the first wave of Germanic invaders, the Vikings eventually came to settle in Britain by about 900 AD, not just raid there, especially in the northeastern part of the island.

The English language is what has developed from the speech of the Germanic mercenaries, so we can say that the date of their arrival, 449 AD, is also the beginning of the English language. The Germanic mercenaries were members of a number of West Germanic groups, Angles, Saxons, Jutes, and Frisians, each certainly with their own speech habits but each able to understand speakers from the other groups. The names *England* and *English* come from the name of one of these groups, the Angles, but actually the Angles were historically no more important than the other groups. English grew more identifiable as something in itself, as something distinct from other West Germanic branches, over time as the various members of the Germanic groups settled most of the island of Britain. The Vikings, too, contributed to the English language, as they interacted from their own settlements in the Northeast of Britain with other Germanic groups.

The **Anglo-Saxon Chronicle** , prepared beginning in the ninth century and maintained for a long time afterwards in some locations, documents the volatile shifts in political power during this time. Here is what it says in the Anglo-Saxon Chronicle for the year 449:

449: Her Martianus 7 Ualentinus onfengon rice. 7 rixadon .vii. winter. 7 on þeora dagum gelaðode Wyrhtgeorn Angel cin hider. 7 hi þa coman on þrim ceolum hider to Brytene. on þam stede Heopwines fleot. Se cyning Wyrhtgeorn gef heom land on suðan eastan ðissum lande. wiððan þe hi sceolon feohton wið Pyhtas. Heo þa fuhton wið Pyhtas. 7 heofdon sige swa hwer swa heo common. Hy ða sendon to Angle, heton sendon mara fultum. 7 heton heom secgan Brytwalana nahtscipe. 7 þes lands cysta. He ða sona sendon hider mare weored þam oðrum to fultume. Pa comon þa men of þrim megðum Germanie. Of Ald Seaxum. of Anglum. of Iotum.

[Here Martianus and Valentinus seized the kingdom, and reigned seven winters. And in their days Vortigern invited the Angles here. And they came here to Britain in three ships, in the harbor called Heopwinesfleet. King Vortigern gave them land in the south-east of this country, on condition that they should fight against the Picts. Then they fought against the Picts, and had the victory wherever they came. They then sent to the Angles, ordered them to send more help, and had them told of the worthlessness of the Britons, and the virtues of the land. Then they soon sent here a larger army as help for the others. Then came men from three tribes in Germany, from the Old Saxons, from the Angles, from the Jutes.]

This passage describes events succinctly, but still includes the political statement that the Angles did fight and win against the Picts and that the British people were worthless. The Anglo-Saxon Chronicle says that the Jutes settled in Kent and Wessex, that the Old Saxons settled in Essex (between Mercia and Kent), Sussex (between Kent and Wessex), and Wessex, and that the Angles settled in Mercia and Northumbria ([Figure 3.3](#)).



Figure 3.3 Early regions in Britain (showing the modern borders for Scotland and Wales).

Source: Kretzschmar, William A., Jr. 2018. *The Emergence and Development of English*. Cambridge: Cambridge University Press.

We know, however, that a mixture of Germanic peoples lived in all of these areas, and that other Germanic groups such as the Frisians also participated in settlement, so that it is not possible to connect any of the four kingdoms exclusively with any Germanic group. Somewhat different varieties of Old English were spoken in these regions, however, owing to the emergence of somewhat different habits among speakers interacting with their neighbors in each one (again as the complex systems model predicts). Most surviving Old English texts, however, come from Wessex, the seat of King Ælfred and the place where manuscripts had a higher chance of survival. As for the language of the passage, it is quite different from Modern English at first glance. The passage has some letters that we no longer use (þ and ð, both used where we would use “ th, ” and 7, a symbol meaning ‘ and ’). But a closer look shows many similar words, like “ winter

” and “ lande, ” or like the verbs “ send ” and “ come ” though these have unfamiliar endings. This is not what the governor of Georgia thought his neighbors in the mountains were speaking! Old English does, however, create the foundations for English as we know it. You can listen to the sound of Old English online (a3.1, with transcripts in a separate file), in other passages from the Anglo-Saxon Chronicle.

When William the Conqueror took the English throne in 1066, it changed the course of emergence for English. William was the Duke of Normandy – of course “ Normandy ” means ‘ land of the North Men, ’ the same Vikings who had settled that region of France about the same time they were settling north-eastern Britain – and thus William had his Norse heritage in common with many Englishmen. But change did come because William, as a conqueror and not merely a successor, exchanged the nobility of the English state, and thus put speakers of Norman French into positions of authority all across Britain. While the common people in England continued to speak English, they now had to contend with an aristocracy who did not speak their language, and the consequence is a massive influx of French words into English. The Middle English period also saw the formation of English sentence patterns much more similar to Modern English. The most familiar Middle English author is from the end of the fourteenth century, Geoffrey **Chaucer** , who died in 1400. Here is the beginning of the General Prologue to *Canterbury Tales* , Chaucer ’ s most famous work.

Whan that Aprille with his shoures soote [
,
gentle, sweet
,
]

The droghte of March hath perced to the roote,
And bathed every veyne in swich licour
Of which vertu engendred is the flour;

...

Thanne longen folk to goon on pilgrimages,

And palmeres [
,
pilgrims
,
] for to seken straunge strondes

To ferne halwes, kowthe [
,
known
,
] in sondry londes;

And specially from every shires ende

Of Engelond to Caunterbury they wende [
,
go
,

]

The holy blisful martir for to seke,
That hem hath holpen whan that they were seeke.

A few of the words need to be provided with glosses; others may be spelled differently, or take a moment to recognize, like “ halwes ” ‘ hallowes, shrines. ’ Some French loan words are used with meanings we may no longer recognize, like “ licour ” ‘ liquid ’ when Americans use the word mainly for alcoholic drinks. And yet Chaucer ’ s English is not so different from Modern English that we cannot understand it after a little practice. You can listen to the sound of Chaucer ’ s Middle English online (a3.2, with transcripts in a separate file).

The Early Modern period from 1500 to 1700 saw the transition from English as a language of the common people to English as a language for all purposes. In order for this to happen, English acquired words from French and Latin: instead of using the words as parts of French or Latin sentences, these words became part of English sentences. So, for example, whereas law cases in England were conducted in French until 1362, pleadings after that were supposed to be carried out in English. French words became used as English words in legal situations: *justice, equity, jury, judge, plaintiff, defendant, attorney, larceny, torts, bail, parole*, and many others. **Loanwords** , or **borrowings** , are words used in one language, like English, that replicate words used in another language, like French. Of course, French lost nothing when English borrowed its words, and English will not be paying French back: the idea of a loan or of borrowing is a metaphor that describes what people do with features in languages. At the end of the sixteenth century **Shakespeare** made fun of those who mixed up Latin with their English in *Love ’ s Labor ’ s Lost* (V.i). The pedant Holofernes converses with the curate Nathaniel:

Holofernes :

Satis quid sufficit. [Enough is as good as a feast]

Nathaniel :

I praise God for you, sir. Your reasons [discourse] at dinner have been sharp and sententious [meaningful], witty without affection [affectation], audacious without impudency, learned without opinion [dogmatic view], and strange without heresy. I did converse this quondam [former] day with a companion of the king ’ s, who is intituled, nominated, or called, Don Adriano de Armado.

Holofernes :

Novi hominem tanquam te [I know the man as well as I know you]. His humor is lofty, his discourse peremptory [decisive], his tongue filed [polished], his eye ambitious, his gait majestical, and his general behavior vain, ridiculous, and thrasonical [boastful]. He is too picked [refined], too spruce, too affected, too odd, as it were, too peregrinate [foreign in manner], as I may call it.

Nathaniel :

A most singular and choice epithet.

While Nathaniel thinks that Holofernes has used a choice bit of description, another character, Moth, a serving boy, thinks that “ They have been at a great feast of languages, and stol ’ n the scraps. ” Holofernes and Nathaniel are “ book-men ” and mix their languages, mainly Latin with English, and Shakespeare pillories them throughout the play by having common people comment on their speech, as Moth here, or elsewhere Dull, a constable.

Words also entered English from other languages, and that often happened because the Early Modern period is when England and its navy began to engage with the rest of the world. In perhaps the most notable engagement of the period, the English defeated the Spanish Armada in 1588 and, besides repelling a Spanish invasion, signaled that England would be a player on the high seas. A decade earlier Sir Francis Drake had sailed all the way around the world, an expedition that was supposed to attack Spanish possessions in the New World, and had claimed New Albion, the North American continent north of Mexico. Henry Hudson found the Hudson River in 1609. Of course Christopher Columbus had traveled to the Americas in 1492, and the Spanish had explored much of Central America and southern North America in the early sixteenth century. The English were not the first to get to North America, but they eventually established long-lasting colonies there, as we shall see in the [next chapter](#) .

Great Vowel Shift

Perhaps the greatest change in the history of English occurred in the Early Modern Period in English pronunciation, the **Great Vowel Shift** (**GVS**) (see [Figure 3.4](#)), which made the vowels of English differ from those of continental European languages. Between 1400 and 1700, the **long vowels** ([i:, e:, ɛ:, æ:, a:] in the front, and [ɔ:, o:, u:] in the back; the long [e] and long [o] are now diphthongized to [eɪ, oʊ] ; see [Appendix 1](#) for discussion of vowel symbols, diphthongs) were raised in a process of **vowel rotation** . **Raising** just means that a vowel was pronounced at a higher articulatory position than it had been before. The term “ vowel rotation ” suggests that the individual acts of raising tend to raise vowels until they get to the highest position, and then vowels fall along a more centralized track.

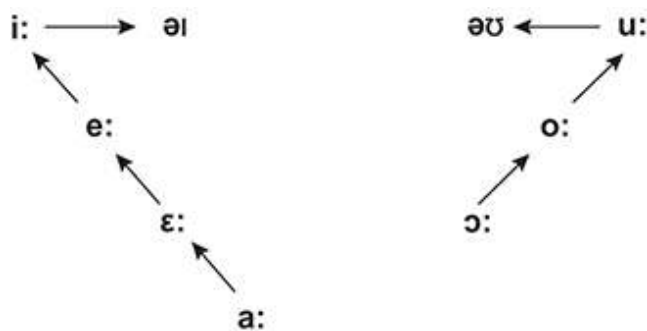


Figure 3.4 Phase 1 of the Great Vowel Shift.

The first step is that the highest long vowels, [i:] in the front and [u:] in the back, both become diphthongs [əɪ , əʊ] with the addition of the central vowel [ə]. To use words as examples, the word *bite* was pronounced [bi:t] in Middle English, but after the first step of the GVS the word was pronounced [b əɪ t]. The word *cow* in Middle English was pronounced [ku:], but after the first step of the GVS the word was pronounced [k əʊ]. Then the next highest vowels in front and back, [e:] and [o:], rise so that they are pronounced [i:] and [u:]. Again in words, in Middle English the word *see* was pronounced [se:], but after this step of the GVS it was pronounced [si:]. And Middle English *food* , pronounced [fo:d], was then pronounced [fu:d] after this step of the GVS. Then the vowels below those: in words, Middle English *meat* [m ɛ :t] became [me:t], and Middle English *boat* [b ɔ :t] became [bo:t]. Finally, Middle English *mate* [ma:t] became [mæ:t]. These changes were complete by about 1600. Next, there was a second phase of the GVS between 1600 and 1700 (see [Figure 3.5](#)).

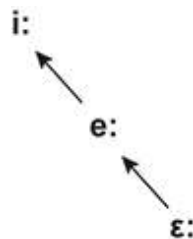


Figure 3.5 Phase 2 of the Great Vowel Shift.

Words that had previously been raised one step, like *meat* and *mate* , were raised one more step in a process called **second raising** , so that *meat* was now pronounced [mi:t], rhyming with *meet* , and *mate* was now pronounced [me:t]. A few words did not change, however: *great* , *break* , *steak* still retain their first phase pronunciations as [gre:t, bre:k, ste:k], rather than the pronunciations we might have predicted from second raising [gri:t, bri:k, sti:k]. Later, the original [i:] vowels, like *bite* that had changed to [b əɪ t], and the original [u:] vowels, like *cow* that had changed to [k əʊ], underwent a small further change to [baɪ t] and [kau] as many speakers would say them today. The remaining words with the [e:] vowel also changed slightly to be pronounced [eɪ], so *mate* [meɪ t] and *great* [greɪ t].

However, the sound change in real life was just not as neat and regular as this. The way that the complex system of speech works, with the emergence of particular habits of pronunciation or word usage in local and regional communities throughout the English-speaking

world, means that these changes occurred at different times – or sometimes not at all – among different regional groups in the British Isles. Indeed, modern dialect survey evidence shows that it is possible to find speakers somewhere in Britain whose pronunciation of particular words today still matches every stage of the GVS. There are longstanding dialect areas in Britain, from Scotland in the North to Land 's End in the Southwest. Top-level generalizations (that is, at the top level of scale in the complex system) like the GVS are still useful so long as we know that they are broad abstractions, and that we can expect linguistic life to be much messier on the ground among actual speech communities. As [Chapter 2](#) has shown us, the top-level frequency profile has other frequency profiles below it at every level of scale, so that regions or cities or even individuals will have their own frequency profiles that are unlikely to match the one at the top level.

One practical consequence of the GVS was its effect on English spelling. The fact that *meet* and *meat* now sound the same but are spelled differently was caused by the second raising step of the GVS. The same is true of *see* and *sea*. *Been* and *bean* sound the same for many speakers in Britain, but not for speakers in America. The pronunciation of English words also differs from the pronunciation of cognate words in European languages because of the GVS: an English *table* [teɪbəl] sounds different from a French *table* [tɑblə]. This is one reason for the many complaints by learners of English about spelling and pronunciation.

We cannot leave this chapter without one more look at Shakespeare (died 1616). Many modern readers have been exposed to his plays or poetry, perhaps to Sonnet 18 (you can listen to this passage online, a3.3):

Shall I compare thee to a summer
,
s day?

Thou art more lovely and more temperate:
Rough winds do shake the darling buds of May,

And summer
,
s lease hath all too short a date:

Sometime too hot the eye of heaven shines
And often is his gold complexion dimmed;
And every fair from fair sometimes declines,

By chance or nature
,
s changing course untrimmed;

But thy eternal summer shall not fade,

Nor lose possession of that fair thou ow
,
st;

Nor shall death brag thou wander
,
st in his shade,

When in eternal lines to time thou grow
,
st.

So long as men can breathe, or eyes can see,
So long lives this, and this gives life to thee.

The language is no longer difficult to understand, and perhaps the worst problem is that spelling disguises the fact that the GVS was not yet complete and Shakespeare's pronunciation is not the same as ours today. There are a few other differences, like the use of *thee/thou* (older forms of the *you* pronoun we use today), and ' *st* endings that we no longer use on verbs. These archaic forms may be familiar to some, however, from Sunday church services. The King James Bible was prepared at this time and also has these forms, and it is still in use in many churches (i.e., at a lower level of scale in the complex system than we expect in national use). More subtle differences in the meanings of words, not the same for Shakespeare as they are for us even though the words are spelled the same, may trip up the incautious reader. C. S. Lewis, in particular, has written wisely about such semantic change over time (1967).

The Old World origins of English, from 449 AD until Shakespeare, provide the source material for American English. We should not expect that one variety of English could cross the Atlantic unchanged to create American English, because there were many varieties of English in the British Isles in Shakespeare's day, as there had been at all times since Old English. This is just what the complex system of language predicts, the scaling property of varieties. So, we can expect that English speakers migrating to the New World – from Scotland or Land's End and all parts in between – will bring a broad collection of words, pronunciations, and grammatical habits with them. Out of those, the new English settlers would create American English as a consequence of their interactions with their neighbors in the new land.

Summary

The English language is part of a long process of development that began with the Indo-Europeans. It emerged from the speech of different Germanic groups who invaded Britain, and continued to emerge somewhat differently in different parts of the island. Borrowings from Latin and Norse began to occur in the Old English period. The Norman Conquest changed the circumstances for linguistic interaction, and English acquired many borrowings from French, as well as more from Latin and Norse. The Great Vowel Shift was a major change in pronunciation. All of these happenings set the stage for the emergence of American English.

Key Terms

Anglo-Saxon Chronicle

borrowing

Chaucer

Colonial Period

C. S. Lewis

Early Modern English

external history

Germanic

Gilded Age to World War II

Great Vowel Shift (GVS)

Indo-European
Information Age
internal history
linguistic continuum
loanword
long vowels
Middle English
Modern English
National Period
Old English
raising
second raising
Shakespeare
Vikings
vowel rotation

Audio Samples

Available at www.cambridge.org/williamakretzschmar .

a3.1 Anglo-Saxon Chronicle (Old English)

a3.2 Chaucer, General Prologue, Canterbury Tales (Middle English)

a3.3 Shakespeare, Sonnet 18 (Early Modern English)

Exercises

1. Listen to the audio samples of Old English (a3.1) (available at www.cambridge.org/williamakretzschmar), and while you do so, write down words that you recognize as still belonging to Modern English. You will find the task much easier if you look at the transcripts of the passages, also online.
2. In the passage from Shakespeare 's *Love 's Labour 's Lost* , many words are glossed. Look up each of those words in the *Oxford English Dictionary* (or another dictionary that gives etymologies) and write down what language they came from. You can skip the Latin passage in the first line – that ' s not English and will not have any etymology.
3. In the past when you had to read Shakespeare, you may have thought of it as “ old English. ” Now you know it is not – Early Modern English! Sometimes the differences between Shakespeare ' s English and Modern English sound “ poetic, ” and sometimes that just makes Shakespeare hard to follow. When you read Sonnet 18, which usages do you think are “ poetic, ” and which ones are just hard to follow? There is no correct answer here: do the best you can to talk about particular features of Shakespeare ' s language and how you interpret them (or find it hard to interpret them) today.

Computer Exercise

[Exercise App3.3 in Appendix 3](#) explores differences by age, to try to observe language change. The apparent time hypothesis from sociolinguistics (see [Chapter 10](#)) suggests that speakers from different age groups will show different stages of a linguistic change.

Further Reading

The ancient history of languages has fascinated many an imagination. See, among many other scholarly offerings, Derek Bickerton, *Language and Species* (Chicago : University of Chicago Press, 1990) ; Mark Kaiser and V. Shevoroshkin, "Nostratic," *Annual Review of Anthropology* 17 (1988), 309 – 329 ; Carl Darling Buck, *A Dictionary of Selected Synonyms in the Principal Indo-European Languages: A Contribution to the History of Ideas* (Chicago : University of Chicago Press, 1949) . Among literary treatments of the subject, notable is William Golding, *The Inheritors* (1963) .

There are numerous editions of the Anglo-Saxon Chronicle, which still exists in nine manuscripts, each one different. The translation prepared by Dorothy Whitelock (*The Anglo-Saxon Chronicle*, ed. and trans. Dorothy Whitelock, David Douglas, and Susie Tucker, New Brunswick, New Jersey : Rutgers University Press, 1961) aligns translations of several of the manuscripts. A recent translation is Michael Swanton, *The Anglo-Saxon Chronicle*, London : Routledge, 1998 .

Malcolm Parkes, *Pause and Effect: Punctuation in the West*, Berkeley : University of California Press, 1993 . This engaging book describes the history of punctuation, something we no longer notice – unless we get it wrong.

Peter Hunter Blair, *An Introduction to Anglo-Saxon England*, 3rd ed., Cambridge : Cambridge University Press, 2003 . The classic account of Anglo-Saxon culture. A compendious resource, over 600 pages and 700 articles, is the *Wiley-Blackwell Encyclopedia of Anglo-Saxon England*, 2nd ed. (Oxford : Wiley-Blackwell, 2013) , edited by Michael Lapidge, John Blair, Simon Keynes, and Donald Scragg.

Peter Baker, *Introduction to Old English*, 3rd ed., Oxford : Blackwell, 2012 ; Bruce Mitchell and Fred Robinson, *A Guide to Old English*, 8th ed., Oxford : Blackwell, 2011 ; Alastair Campbell, *Old English Grammar*, Oxford : Clarendon Press, 1959 . The first two books are popular introductions to Old English, both in advanced editions. Campbell is still the standard Old English reference grammar. A fine new Old English reader, with an introductory chapter on Old English, is Richard Marsden, *The Cambridge Old English Reader*, 2nd ed. (Cambridge : Cambridge University Press, 2015) .

The Riverside Chaucer, ed. by Larry Benson and F. N. Robinson, 3rd ed., New York : Houghton Mifflin, 1987 . A long-running popular collection of Chaucer's works. Besides *Canterbury Tales*, modern readers will still enjoy *Troilus and Criseyde*, perhaps the best love story ever written in English.

Hilary Mantel, *Wolf Hall*, London : Holt, 2009 ; *Bring Up the Bodies*, London : Holt, 2012 ; *The Mirror and the Light*. London : Holt, 2020 . Hilary Mantel's descriptions of England and court life in the sixteenth century are deservedly popular. The second book describes the relationship of Anne Boleyn and Henry VIII in great detail. The books have also been made into a BBC TV series. Can you imagine these TV programs presented with Early Modern pronunciations?

C. S. Lewis, *Studies in Words*, 2nd ed., Cambridge : Cambridge University Press, 1967 . Lewis talks about a number of keywords like *nature* and *world* as well as *free*, and along the way paints a picture of the kind of cultural humanism studied at Oxford and Cambridge in the mid-twentieth century.

For general coverage of the history of the English language, see William A. Kretzschmar Jr., 2018, *The Emergence and Development of English*, Cambridge : Cambridge University Press .

4

The Colonial Period (1600 – 1800)



In This Chapter

The beginnings of American English come from the way that Europeans settled in North America. The circumstances of early immigration were different from the circumstances of life in the Old Country, and the interactions of speakers in the new setting shaped local habits. Crèvecoeur reports a typical experience of an immigrant coming to America. Early formation of American English does follow Schneider's model for colonial Englishes, if we understand it from the point of view of complex systems.

Timeline

1607

Jamestown founded.

1619

Black slavery introduced in Virginia.

1620

Plymouth founded.

1625

Dutch establish New Amsterdam.

1636

Harvard University established.

1650

Population 51,700.

1670

Population 114,500; Charleston founded.

1682

William Penn settles Pennsylvania, Philadelphia founded

1690

Population 213,500.

1701

Detroit founded; Yale University founded.

1710

Population 375,500.

1730

Population 654,950.

1746

College of New Jersey founded, now Princeton University.

1750

Population 1,207,000.

1751

Philadelphia Academy founded, now University of Pennsylvania.

1754

French and Indian War (1754 – 1760).

1770

Population 2,205,000; Boston Massacre (riot put down by British soldiers).

1773

Boston Tea Party (protest against Tea Tax).

1775

Revolutionary War (1775 – 1783).

1776

Declaration of Independence.

1780

Population 2,781,000.

1782

Hector St. Jean de Crèvecoeur, *Letters from an American Farmer*.

1783

Noah Webster, *Grammatical Institute*, *American Spelling Book*.

1790

Population 3,929,214; Washington DC founded.

American English offers a good example of the general question of how new varieties of a language emerge, and what then happens to them over time. For America, this is the process by which particular linguistic features emerged with high frequencies in the English of

the colonies, and by which different features could become more common in different areas. American English and its varieties are the product of random interactions in a complex system, beginning in the first generation, between speakers who brought with them their use of different varieties of British English. The findings of this approach are not in conflict with Edgar Schneider's popular book about the general process of variety formation, *Postcolonial English* (2007). We can never answer the question "why" American English is as it is – there is never a good answer to the "why" question in the history of a language – but it is now possible to address more adequately the question "how" it came to be as it is.

Demographics

Let us begin with the facts of immigration and settlement. North American settlement by English speakers began in the seventeenth century, amounting at that time to about 150,000 migrants from all parts of Britain (Bailyn 1986). These English speakers and their descendants accounted for a majority of the colonial population of 275,000 people by 1700 ("new" immigrants seldom amounted to more than 10 percent of any local population at any one time). Two characteristics of European settlement – introduction of disease and violence towards the survivors – created a pattern of replacement of the native population rather than integration with it, a pattern that would continue long thereafter. Up to 90 percent of the Eastern **Native American** population was lost (see Dobyns 1983, Smith 1994), beginning with sixteenth-century Spanish explorers and the diseases they brought. The settlers themselves were not immune to disease. The earliest English settlements to survive at all after Sir Walter Raleigh's initial Roanoke colony (1585) disappeared without trace, Jamestown (1607) and Plymouth (1620), suffered mortality rates of 50 percent or more in their first years, and child mortality was up to 50 percent before the age of twenty (Bailyn 1986: 100). So, the population of English settlers, too, was subject to rapid and continuing replacement. This created mixed populations of English speakers in every settlement from different British regions.

This fact stands in contrast to more romantic views, such as historian David Fischer's book, *Albion's Seed* (1989). Fischer gives the impression that British regional culture was transplanted whole to North America, with section titles like "East Anglia to Massachusetts" and "The South of England to Virginia." He is simply wrong to write that "On Smith and Tangier islands ... immigrants from the far southwest of Britain founded a culture which still preserves the dialect of seventeenth century Cornwall and Devon" (1989: 784). Nobody today preserves in its entirety Shakespeare's English, or any other regional British variety from the seventeenth century, because no living language fails to change over time. Even settlements like Plymouth that are often supposed to be regionally homogenous were actually quite mixed, as we know from the Mayflower passenger list – half of the passengers were not Pilgrims – and from complaints by the Pilgrims about their non-Pilgrim neighbors (you can listen to Plymouth Records online, a4.1, with transcripts in a separate file). Moreover, many English settlers had already migrated to London before taking ship for America. Keene reports that "Most adult Londoners were born outside the city: in the eighteenth century the outsiders may have been as many as two-thirds of the total" (Keene 2000: 109). North American emigration accounted for as much as 70 percent of English population increase during the seventeenth century, and a majority of those people came to North America through London (Bailyn 1986: 40). So, early immigration from London did not constitute a population of "standard" speakers, but a pre-mixed blend of regional voices. The effect of early general replacement of the native population by English settlers, and of the continuous change in the immigrant population owing to mortality and new migrants, was to create a new complex system out of the interactions of the settlers.

To return to North America in the seventeenth century, complexity science tells about the process by which order, here a new American variety of English, emerged from the mixture of regional British characteristics among the settlers in every locality. We know that there were massive numbers of exchanges of linguistic features – whether words or pronunciation or grammar – deployed by human agents, the speakers thrown together in America. In the early American environment, the immigrants all contributed their own resources of speech as they tried to talk to their neighbors. Given the preponderance of early English settlement, it is no surprise that English features came to constitute the majority of the language in the new order that emerged. There were, of course, some contributions from Native American languages or other European languages in the seventeenth century; for example, New Amsterdam (later New York City) was founded by the Dutch in 1625. However, in every colony a variety of English emerged as the everyday language of the founding population of settlers (see McDavid 1958: 483, Zelinsky 1992 and Mufwene 2001a: Chapter 2 and 3, for the influence of original settlement populations, the **Doctrine of First Effective Settlement**, and the **Founder Principle** respectively). In Zelinsky's words, "the specific characteristics of the first group able to effect a viable, self-perpetuating society are of crucial significance for the later social and

cultural geography of the area, no matter how tiny the initial band of settlers may have been " ([1992](#) : 13 – 14). And after such a start, given that speech is a complex system, the variants available in the population of speakers for any and every linguistic feature began to be distributed according to the A-curve pattern simultaneously at every level of scale. Right from the beginning, somewhat different sets of variants, whether words or pronunciations or ways to put words together, would emerge as top-ranked elements in different localities. Also right from the beginning, a particular set of variants emerged as top-ranked elements at the highest level of scale, American English. The order that emerged at the national level of scale was not exactly the same as what emerged in any single locality or colony and yet, owing to the scaling property of complex systems, neither was it just an abstraction that avoided the special characteristics of any individual colony, nor was it just a kind of average of speech from lower levels of scale. The term **colonial leveling** is sometimes used to suggest that American English had avoided or leveled the differences between regional British varieties, and thereby simplified the language. The term **koinéization** is similarly sometimes used to imply that American English had created a simplified mixture of language features. Neither of these impressions is right. There was no particular avoidance of differences or simplification in the mixture of features; self-organization in the complex system of language simply allowed some features to emerge as most common, whether in American English overall or in the varieties of many different smaller populations of speakers. Massive numbers of interactions between speakers as agents in the complex system caused the emergence of noticeable differences, both between American regions and between American and British English – not simple causes like Fischer ' s idea of wholesale cultural transference.

Despite the high mortality rates, English settlers continued to flood to the colonies in the eighteenth century. And other Europeans came, too, including large numbers of Germans from the Palatinate (*Pfalz* in German, in the southwestern part of modern Germany) starting in 1709. Thousands of African people were brought involuntarily to the colonies after 1680 (the first African slaves arrived as early as 1619) to work on plantations in Southern colonies, many of them from Caribbean islands where plantation agriculture was also common. These non-English groups contributed to an even more mixed population of speakers. Thus, it is also no surprise that substantial numbers of features, whether words or pronunciation or grammatical influences, also emerged in the complex system from non-English sources (see the [next chapter](#) for contributions from various languages to American English, particularly the lexicon). By 1790, of the total colonial population of nearly 4 million, over 2.5 million came from the United Kingdom (including nearly 500,000 from Scotland and Northern Ireland), about 250,000 from Germany, and 100,000 from the Netherlands. About 750,000 African people had been imported as slaves, the largest group after settlers from the United Kingdom. Even though a new variety of English was established in the original colonies, the continuing operation of the complex system in every colony allowed new variants to be introduced, and sometimes to be preferred, owing to the continuing massive interaction of elements.

Pattern of Settlement

European village life was never recapitulated in the English-speaking New World, and so the demographics for the production of language varieties were never alike in the Old World and in the New. As Raven McDavid wrote ([1975/1980](#) : 114 – 115),

the European village has been and still is a viable organic entity ... for village life has always depended on a cooperative tradition, a tradition of a balance of shared rights and responsibilities.

McDavid ' s version of the American village that did share something of the European cooperative pattern was his picture of the Southern mill town that emerged later as a part of cotton culture, where the textile company owned the local store and by its extension of credit came to own the lives of its workers. Apparent similarities elsewhere, he said, were superficial ([1975/1980](#) : 115):

Even when a village – or “ township, ” as it is sometimes called – sought to emulate the European pattern, as in parts of New England or in some of the transplanted New England settlements in Upstate New York and [later] the Middle West, it rarely emulated the European model by being a place where people lived, who made their livelihood by cultivating the surrounding farmland. Rather, it was set up as a miniature city – with banks and shops and ambitions to become something different and bigger ...

The city, it seems, was always the American model, and according to McDavid this was one of the “ centripetal ” forces that worked “ toward a greater degree of uniformity in American speech ” ([1980](#) : 120). Charleston was founded in 1670, Philadelphia in

1682. Some cities further west were also founded early in the period, like Detroit in 1701 by the French explorer Cadillac. Again McDavid ([1975/1980](#) : 119),

Even by 1700 it was clear that the colonies had a new pattern of living. Instead of the society of villages, with urban clusterings, there was a string of cities in the wilderness, generally seaports which mediated directly between the mother country and the frontier.

The American alternative to the village was the city, a more impersonal, commercial entity and a gateway to other colonies and to the world.

McDavid ' s contrast between village and city needs a little further explanation. The historical European demographic pattern had residential villages as the norm, with a larger market town within a day ' s round-trip travel, and still larger population centers with expanded services at wider intervals (e.g., Russell [1972](#) : 29 – 37).

[Figure 4.1](#) shows that the larger “ city ” (population below 1000) of Leicester in the Middle Ages was surrounded by smaller towns, each of them surrounded by villages and hamlets. Linguistic habits emerged within the village according to the complex system of interactions of the residents, and differentiation of linguistic habits emerged between villages because people lived their lives in small, stable, intensely local groups. Village life was characterized by what Lesley and James Milroy would call **strong ties** (more about these in [Chapter 9](#) and [Chapter 10](#)), a network of close relationships between people in a community which allowed for the maintenance of linguistic norms within the group (cf. [1987](#) , [1992](#) , where the Milroys describe not villages proper, but rather their work in the separate neighborhoods of Belfast). Differences with nearby villages were small because of interaction at market towns, according to the scaling principle of the complex system of speech, and greater distances allowed for greater differences to emerge. The result was a classic linguistic continuum, as described in [Chapter 3](#) .

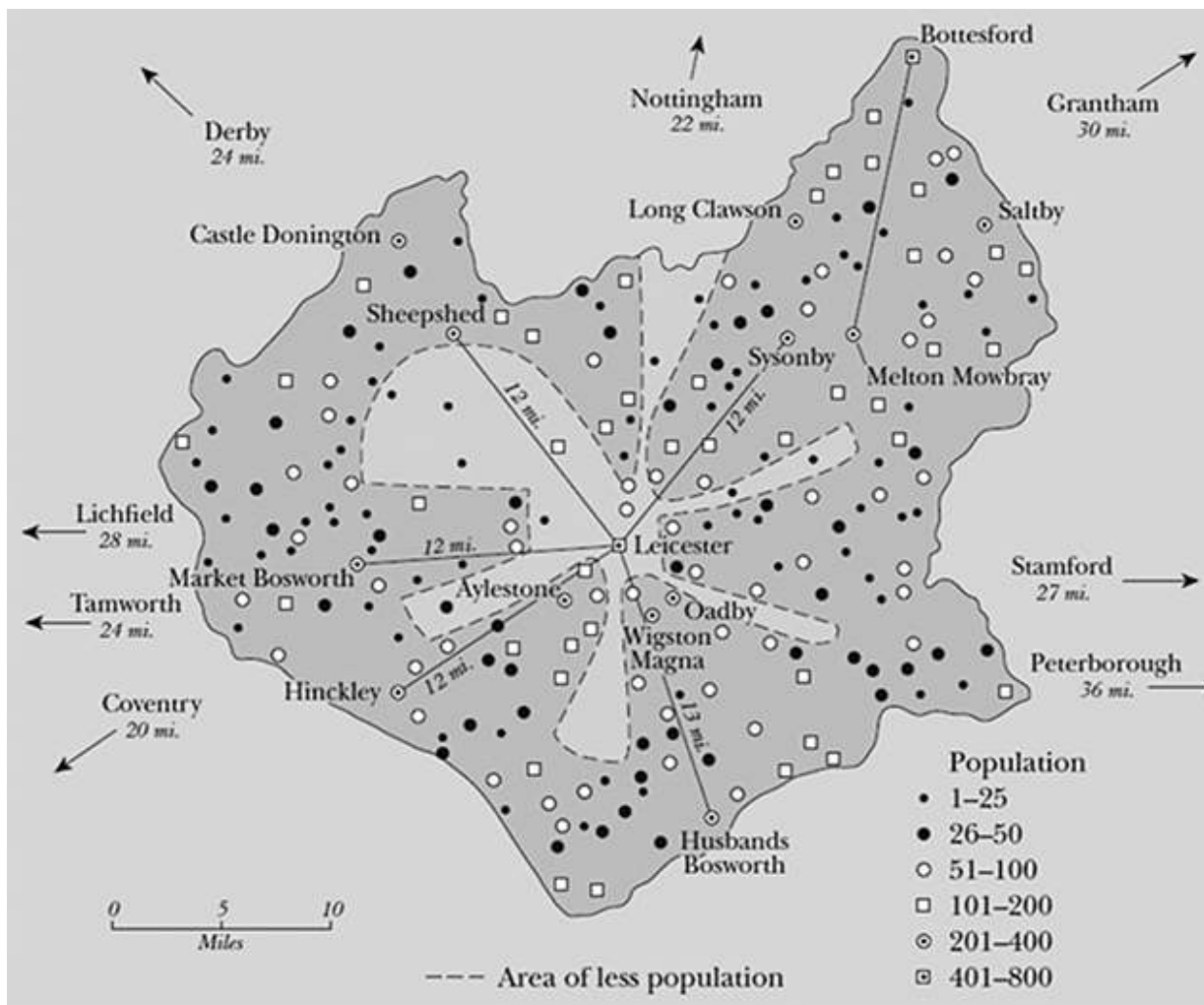


Figure 4.1 European settlement pattern near Leicester (England) in the Middle Ages.

[Figure 4.1 long description.](#)

Source: Kretzschmar, William A., Jr. 2010. Language Variation and Complex Systems. *American Speech* 85: 263 – 286.

The colonial American city, McDavida argued, did not have a supporting structure of feeder villages, but instead mediated linguistic habits for a fairly large number of people living under relatively isolated conditions on separate farms or other homesteads. Still, new American settlers did interact and cooperate with their neighbors, so local variation could emerge, and that variation could further emerge into patterns related to a city. Characteristic local variations in speech thus could and did develop in the more densely populated colonial cities, particularly among the local wealthy elite that ran commercial enterprises. Thus, American habits of settlement and communication created somewhat different possibilities for maintenance of linguistic norms than had existed in the Old World, although the same complex system of interactions worked in both places.

The main American port cities in the colonial period were Boston, New York City, Philadelphia, and Charleston. Early settlement in Virginia, beginning with Jamestown, was different in that it did not have a central port city; the port city of Norfolk only developed after 1750, and the capital Richmond was only incorporated in 1742. Each of the main port cities, and Virginia along Chesapeake Bay, developed its own culture region. Settlers who came through Boston eventually populated New England, as far north as Maine and as far west as the Berkshire Mountains, a part of the Appalachian Mountain chain that stretches from the Canadian border south to Alabama. The New York City culture region extended up the Hudson River. The Philadelphia region ran to the west of the city. Early settlement from Charleston in South Carolina occupied the lowland area north and south along the coast. The same is true of early settlement in Virginia,

which extended along the coast from the northern part of what is now North Carolina to the southern part of what is now Maryland. During the early period of settlement, the only way to get between these areas was by sea.

By 1800 ([Figure 4.2](#)), however, a road system was established near the coast, with western extensions to principal places like Pittsburgh at the headwaters of the Ohio River, founded in 1758, Charlotte in North Carolina, founded in 1768 at the intersection of two trading routes, and Augusta in Georgia, founded in 1736 at the fall line for the Savannah River (the place with a sharp drop in elevation causing waterfalls and rapids, so navigation upstream was interrupted). River travel was very important in this period with few roadways.

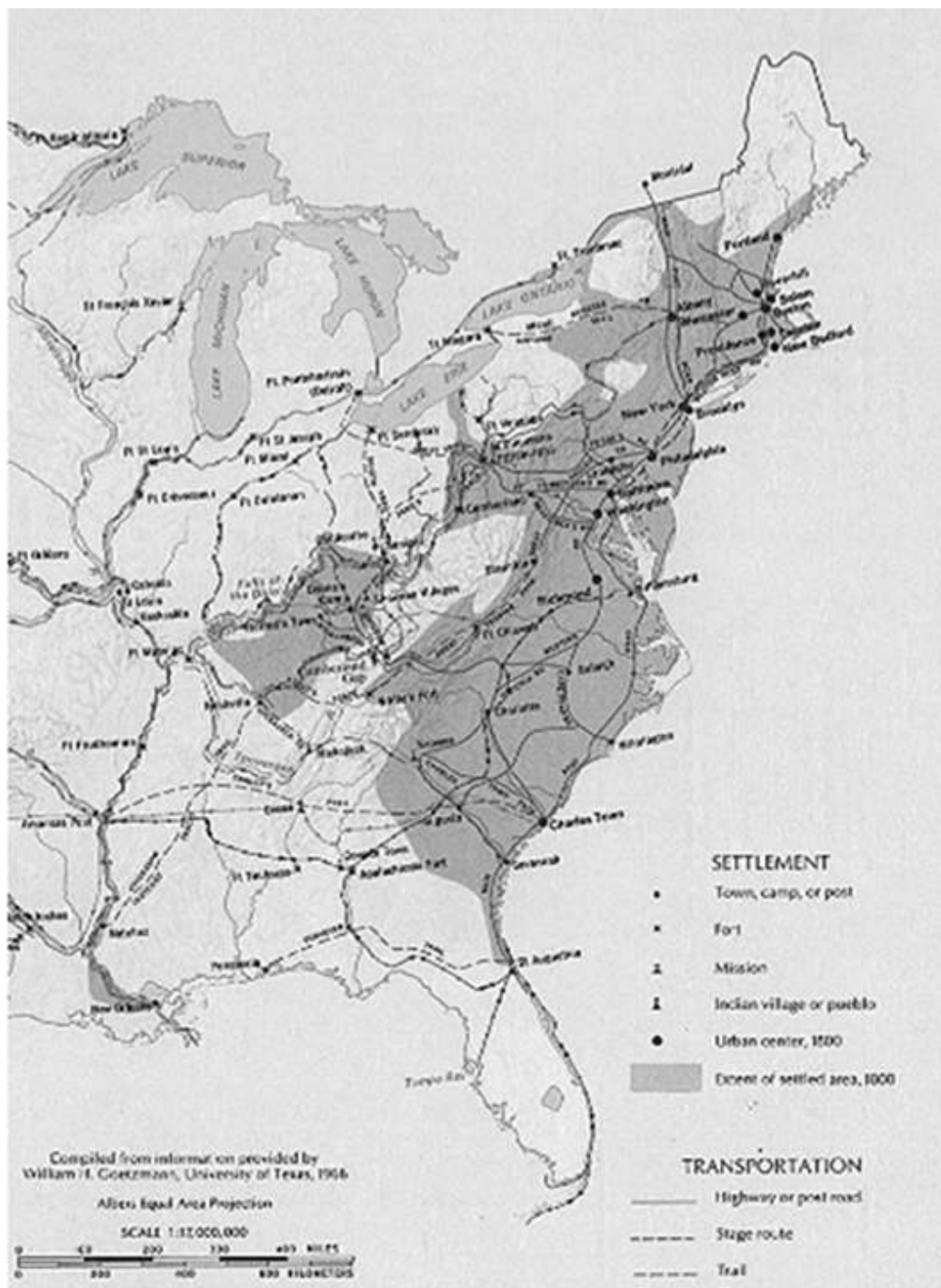


Figure 4.2 Settlement and transportation by 1800.

[Figure 4.2 long description.](#)

Source: *The National Atlas of the United States of America*. Arch C. Gerlach, editor. Washington, D.C.: U.S. Dept. of the Interior, Geological Survey, 1970, viewed at <https://legacy.lib.utexas.edu/maps/histus.html>.

Eighteenth-Century Immigration

Immigration in the eighteenth century proceeded according to a different pattern. In the seventeenth century new settlers stayed close to the coast, but in the following century what had been coastal frontier outposts developed into port cities, and new settlers, and children of colonial families whose lands could no longer support the youngest generation, passed through the coastal ports of entry and headed inland. As Bailyn has written, “ after the initial phase of settlement, the major stimuli to population recruitment and settlement were, first, the continuing need for labor, and, second, land speculation ” ([1986](#) : 60). For the labor market, in addition to single, male indentured servants, mainly from London, who had supplied the demand in the seventeenth century, about 50,000 English criminals were sent to North America (largely guilty of being poor, since dangerous criminals were typically executed at the time), large numbers of “ redemptioners ” came from Germany, and many thousands of Africans came as slaves. Because slaves took over many manual jobs from southern plantations north to Baltimore, indentured Europeans were often recruited for skilled jobs, especially in the building trades (Bailyn [1986](#) : 61 – 64). While the labor market served mainly the coastal cities and developed areas, inland settlement was often accomplished by families, whose pathways west were established by land speculators based in the port cities. Bailyn says that “ Boston was a nursery, Philadelphia a human warehouse, and New York was a staging center for the distribution of immigrants into the far northern frontier ” ([1986](#) : 53). The speculators ranged from large operators down to individual investors, like the author Crèvecoeur (see ‘ Crèvecoeur and the American Experience ’ below), who bought a small farm on the frontier as an eventual home for his daughter ([1782/1981](#) : 92); in the words of Charles Grant, “ the humblest pioneers were apparently speculating their heads off ” (cited in Bailyn, [1986](#) : 67). Boston was a nursery for inland settlement because it received little immigration, and its outlying territories were settled by its own excess population. Philadelphia and New York City, on the other hand, were major ports of entry, and new immigrants often spent considerable time there before leaving for the interior. The delay was not always good for them: unsanitary and crowded conditions led to high mortality rates. Bailyn notes that Philadelphia hosted a large number of German immigrants, while New York City hosted more Scots and Scotch-Irish, yet overall he reports that

The population that spread inland from coastal nodes to form new communities was a composite of ethnic and religious groups – Germans, French, Swiss, Scotch, Scotch-Irish, English, Caribbean islanders, Africans, Afro-Americans – carrying with them different cultural baggage ... And as these many groups spread through the backcountry and settled in growing inland communities and on farms and plantations scattered over millions of acres, complex regional configurations developed, which became in turn settings for later arrivals who filled in the interstices, thereby further complicating the emerging society. There was no single “ American ” pattern of family and community organization. There were many patterns, reflecting the variety of human sources from which the population had been recruited and the swiftly changing, fluid situations in which the people lived.

([1986](#) : 59 – 60)

More uniform large settlements like the Pennsylvania German (often called Pennsylvania Dutch) religious settlements were the exception that proved the rule. Most settlers found themselves in smaller groups or fending for themselves as individuals, and they had to make things up as they went along.

While large numbers of immigrants went inland, American institutions began to form in coastal cities. Higher education, for example, was supported by the foundation of numerous universities. Harvard was founded as early as 1636. Other schools followed in the eighteenth century: Yale in 1701, the College of New Jersey (later Princeton) in 1746, and the Philadelphia Academy (later the University of Pennsylvania) in 1751. The commercial and cultural opportunities of the cities supported inland migration, and also fostered political activity such as, in Boston, the Boston Massacre (1770, a confrontation between citizens and British soldiers, later publicized by revolutionary politicians) and the Boston Tea Party (1773, a protest against the Tea Tax). The Declaration of Independence and later the Constitution were discussed and approved in Independence Hall in Philadelphia. Washington DC was not founded as the capital until 1790, and the first session of Congress held there was in 1800.

Crèvecoeur and the American Experience

We can learn more about new American settlement patterns from a colonial witness, the *Letters from an American Farmer*, by Hector St. Jean de Crèvecoeur. Crèvecoeur was a Frenchman who had served in the British army in Canada, cultivated a 370-acre farm in New York State, and after the American Revolution became the French Consul in New York City. His *Letters* were published in London in 1782, with a French translation appearing in 1784. Crèvecoeur in the early letters idealized the American experience. He supplied a basic pattern for what somebody typically did to become an American:

If he is wise, he thus spends two or three years, in which time he acquires knowledge, the use of tools, the modes of working lands, felling trees, etc. [After acquiring friends, a good reputation, and a little money, he can use his acquisitions to buy land on credit.] He is now possessed of the deed, conveying to him and his posterity the fee simple and absolute property of two hundred acres of land, situated on such a river. What an epocha in this man's life! He is become a freeholder, from perhaps a German boor. He is now an American ...

([1782/1981](#) : 82 – 83)

The new immigrant began his new life in association with more established citizens, often but not exclusively with relatives or fellow countrymen, but as soon as possible abandoned their company for his own property on the frontier. Crèvecoeur's description of himself, though it leaves out his literary pretensions, probably did accord with his self-image before the Revolution:

I am but a feller of trees, a cultivator of lands, the most honourable title an American can have. I have no exploits, no discoveries, no inventions to boast of; I have cleared about 370 acres of land, some for the plough, some for the scythe, and this has occupied many years of my life.

([1782/1981](#) : 212)

Rather than live in villages, Americans lived on the land, and rather than share village rights and responsibilities, they owned their own land and made their own lives. There is an American tradition, also described by Crèvecoeur, of neighbors helping neighbors but these are people who lived at some distance down the road, not a few yards away.

A typical case of the speculative development and sale of land is described by Crèvecoeur ([1782/1981](#) : 90 – 105). He writes that “Andrew the Hebridean” – according to Bailyn, 40 percent of English settlement in the eighteenth century was Scots or Scotch-Irish ([1986](#) : 60) – arrived in Philadelphia with a group of Scots who had arranged a land deal with an agent; he himself however had no such arrangement, and Crèvecoeur picked him up on the docks and soon placed him with a local farmer and arranged a different job for his wife and teenage son. Andrew earned capital but he also learned the skills that he needed for successful homesteading, beginning with the use of the axe, which he had never had occasion to use in his treeless home country. After a couple of years, Crèvecoeur arranged for Andrew to be settled on uncleared land on the edge of the frontier, and Andrew was allowed to live there rent-free for seven years as he made progress in clearing the land. Thereafter for the rest of the thirty-year lease Andrew had to pay rent. Crèvecoeur concluded with an accounting of the money and possessions that Andrew was able to amass through his own efforts in the four years since his immigration, to a value of \$640 – when he had arrived with only about \$35 after selling all that he had acquired in a lifetime in Scotland. Crèvecoeur's account illustrates the hot labor market, the use of free labor to add value to wild land acquired for speculation, and eventual income to be derived from the property – and the same process is described in some detail by Bailyn ([1986](#) : 82). While some speculative deals did import a large number of Europeans directly for work on a particular parcel of land, the grand schemes of speculators often dissolved into mixed settlements or collapsed completely, so that individual initiative like Andrew's remained the rule. America had cities but its way of life was marked by the individuality of its new citizens on their own separate properties. It was not only the physical habits of settlement that affected the genesis of American English and its varieties, but the psychological preference for individuality that encouraged such settlement.

At the same time, Crèvecoeur insisted that the product of this individuality was a distinct American character:

Europe contains hardly any other distinctions but lords and tenants; this fair country alone is settled by freeholders, the possessors of the soil they cultivate, members of the government they obey, and the framers of their own laws, by means of their representatives.

([1782/1981](#) : 80)

This American character thus was a consequence of shared individual experience, not residence together in the same physical place. And with the exception of a few groups, like the Anabaptists who colonized land together and not singly as in the Pennsylvania German area, the American experience had the power to break down religious and national distinctions. Again Crèvecoeur:

Thus all sects are mixed, as well as all nations; thus religious indifference [i.e. lack of prejudice] is imperceptibly disseminated from one end of the continent to the other, which is at present one of the strongest characteristics of the Americans.

([1782/1981](#) : 76)

Of course this was the ideal. Crèvecoeur was scandalized by the treatment of slaves in Charleston. He was also confused during the Revolution, when his Tory sympathies made him the object of attack by his neighbors. We need not share his confusion, however, because we can see that even Crèvecoeur painted the American character in opposition to Europe: when American culture had torn down European social modes and replaced them with American ones, the American character could hardly be expected to tolerate attachments to the Old World once the Old World came to be perceived as a threat. Even as Crèvecoeur depicted it, the American character in the colonial period required political isolation. What Crèvecoeur gives us is a portrait of the new American social psychology.

To return to American English, it is clear that Americans' shared individual experiences did allow for the emergence of local variation, but not at first sharply delineated varieties in American English to parallel the historical regions in Britain. Learning to participate in the new American experience, according to Crèvecoeur, typically required some period of residence among longer-settled Americans, which would provide the opportunity for the future individualist to acquire some linguistic norms as well as capital and specialized skills for husbandry. The goal of new immigrants was to leave the place and people that they originally found and for whom they worked in order to settle on the frontier – not the wilderness, but the somewhat tamed and already marked areas made available for farming by legendary American “frontiersmen” like Daniel Boone. Thus, the new immigrants' desire to participate in the American experience included, to a greater or lesser degree, the motive and opportunity to sound like an American, but the circumstances for immigration weighed against the strong ties that would be expected in order for immigrants to maintain sharply distinctive local norms.

When, as Crèvecoeur suggested, new immigrants found employment for a time to learn American ways and to build resources before they went to homestead on the frontier, part of what they learned in the longer-settled areas was the local flavor of American speech. Some habits of speech from each port of entry would then be carried along settlement pathways throughout its focal area; the greater density of contact between speakers from the same port of entry than between those from different ports promoted the emergence of regional patterns as described in [Chapter 5](#). However, while distinctive local standards could be developed by city dwellers through their more frequent interactions, and local lexical and other linguistic norms were disseminated within typical settlement channels, still the variation stems largely from the somewhat different selection of features within the set of English features generally available in the colonies at the time. The American pattern matches the prediction of the A-curve from the complex system. Thus American social psychology and the demographics of settlement allowed simultaneously for the development of a relatively consistent American English both within and across the different regions of primary and secondary settlement, while they prevented the emergence of a marked national standard.

Schneider ' s Postcolonial English

Let us now consider how Edgar Schneider ' s [2007](#) book *Postcolonial English* discusses the emergence of new varieties of English in former colonies worldwide. His description of the histories of English in a number of places, including the United States, shows that the emergence of these postcolonial varieties does seem to follow a similar trajectory. His **Dynamic Model** suggests five phases in the evolution of such varieties: foundation of the colony, stabilization around the outside norm, nativization, formation of an internal norm, and diversification. American English began to form by self-organization out of the complex system of linguistic interactions in the new colonies. “Stabilization around the outside norm” represents the fact that, in America, English was imported as a language because of replacement of the indigenous population. “Nativization” began immediately in one sense, as settlers in every locality had to adopt words to describe local flora, fauna, and places. These were often terms taken from Native Americans, as recorded, for example, in

Thomas Harriot's *Briefe and True Report of the New Found Land of Virginia* (1588, cited in Bailey [2004](#) : 4 – 5), which was based on the failed Roanoke colony. The perception of nativization began in the eighteenth century, as British and American writers noted differences between the English of the Old and New World. John Witherspoon, for instance, commented in 1781 that (cited in Mathews [1931](#) : 16)

the vulgar in America speak much better than the vulgar in Great-Britain, for a very obvious reason, viz. that being much more unsettled, and moving frequently from place to place, they are not so liable to local peculiarities either in accent or phraseology. There is a greater difference in dialect between one county and another in Britain, than there is between one state and another in America.

Schneider cites no fewer than four other eighteenth-century writers who comment on the uniformity of American English ([2007](#) : 269 – 270). However, the period comments do more to distinguish American English from British English than they testify to any actual koinéization. The strongly marked regional dialects of Britain were certainly not maintained in America (no matter what Fischer said) owing to population mixture, noted here by Witherspoon. However, the complex system of speech did not create a uniform koiné; instead, somewhat different patterns of pronunciation, lexicon, and grammar emerged at different scales from locality to locality and from state to state, up to the national level of scale.

It was certainly possible then, as it is now, to describe the characteristics of an overall American variety, one clearly different from Britain as all the commentators tell us, even though the national description, then as now, was not an exact fit for any local variety. Schneider's " diversification " was already underway, if not yet strongly marked. Witherspoon also noted verbal differences between different regions, such as the word *chunks* for ' firewood ' in the middle colonies, and *tote* for ' carry ' in the Southern states (words still around today). Some other features that we associate still today with American regions were present then, such as r-lessness (when America was settled the change in Britain not to use the -r sound after vowels, so called **postvocalic -r** , was incomplete so some British immigrants had -r after vowels and others did not; for further discussion, see [Chapter 5](#)) and other matters of pronunciation, and grammatical choices like *hadn't ought*. This diversification of speech in the original colonies completes Schneider's picture of the initial emergence of American English, although we can say that diversification began to occur from the very beginning and just became more noticeable as the last stage. The stages of Schneider's Dynamic Model thus accord well with the process of the complex system of speech.

By the end of the eighteenth century, the eastern American seaboard had achieved a more settled status. Coastal port cities received new immigrants, who later moved inland to occupy their own land. The American population increased by a million people in the first half of the eighteenth century, and more than tripled by the end of it. Population growth in this century occurred within an existing matrix of English communities, and so English remained the dominant language of the colonies.

As for American English, at the end of the colonial period Noah Webster published his *A Grammatical Institute, of The English Language, Comprising, an Easy, Concise, and Systematic Method of Education, Designed for the Use of English Schools in America* ([1783](#)). Webster will be treated in more detail in the [next chapter](#) , but suffice it to say here that he was a promoter extraordinaire of American nationalism. While the *Grammatical Institute* as a whole may not have been universally adopted for schools in America, part of it, *The American Spelling Book* , certainly was, and it became one of the most popular textbooks of all time.

Examples of Colonial American English

Formal American discourse during the Colonial Period advances from the language of Shakespeare, and so it sounds quite modern to us today. The following passage from the " Sinners in the Hands of an Angry God " (1741) by fire-and-brimstone preacher Jonathan Edwards (1703 – 1758) can serve as an example (you can listen to the passage online, a4.2). Edwards was born in Connecticut, and was educated at Yale University. He participated in religious revivals, which serve as evidence that Americans were not uniformly pious.

The use of this awful subject may be for awakening unconverted persons in this congregation. This that you have heard is the case of every one of you that are out of Christ. – That world of misery, that lake of burning brimstone, is extended abroad under you. There is the dreadful pit of the glowing flames of the wrath of God; there is hell's wide gaping mouth open; and you have nothing to stand upon, nor any thing to take hold of; there is nothing between you and hell but the air; it is only the power and mere pleasure of God that holds you up. You probably are not sensible of this; you find you are kept out of hell, but do not see the hand of God in

it; but look at other things, as the good state of your bodily constitution, your care of your own life, and the means you use for your own preservation. But indeed these things are nothing; if God should withdraw his hand, they would avail no more to keep you from falling, than the thin air to hold up a person that is suspended in it.

Gone are the features of Shakespeare that can give pause to modern readers, like unfamiliar pronouns and verb forms. Still, the language is not quite what someone would use today, even in a sermon. “Unconverted persons” in the first line, and “this that you have heard” in the second line, are not uninterpretable by modern readers but may strike us as odd turns of phrase. The spelling of “any thing” at the end of the first paragraph as two words, not one, is not how we spell it now. Edwards wrote that “you probably are not sensible of this” in paragraph two, but today we might use the word “aware” instead of “sensible.” Finally, Edwards uses the semi-colon more than people today might use it. These are relatively subtle differences in comparison with Shakespeare a century before. It is worth noting that Edwards himself was not always as fire-and-brimstone as he appears here. He was very interested in natural history and the emerging sciences of his time, such as the work of Isaac Newton. Freedom of religion was a hallmark of the new American experience, but that did not mean that every citizen lived religious lives all the time.

We can observe a more colloquial version of the English at the end of the period in the diary of Amos Farsworth, a soldier in the Revolutionary Army (you can listen to the passage online, a4.3):

Saturday May ye 27 (1775). went on hog island And Brought of Six hoses, twentyseven hornd Cattel And fore hundred And Eleven Sheep. about the midel of the afternoon went From hog island to Noddles island and sot one Hous and Barn on fiar, kild Some hoses and Cattel Brought of two or thre Cows one horse. I with five men got of the horse And Before we got from Noddles island to hog island we was fird upon by a Privateear Schooner But we Crost the river and about fifteen of us Squated Down in a Ditch on the mash and Stood our ground. And thare Came A Company of Regulars on the marsh on the other side of the river And the Schooner: And we had A hot fiar untill the Regulars retreated. But not withstanding the Bulets flue very thitch yet thare was not A Man of us kild. Suerly God has A faver towards us: And He can Save in one Place as well as Another. we left the island about Sun-Set and Came to Chelsea: And on Saturday about ten At night Marchd to Winnisimit ferry where thare was a Schooner and Sloop Afiring with grate fury on us thare. But thanks be unto god that gave vs the Victry at this time for throu his Providence the Schooner that Plad upon us the day before ran Aground and we Sot fiar to hur And Consumed hur thare And the Ssloop received much damage. in this ingagement we had not A man kild: but fore wounded but we hope all will Recover. one of the fore was A tounsing man belonging to our Company the bullet went throu his mouth from one Cheek to the other. thanks be unto God that so little hurt was Done us when the Bauls Sung like Bees Round our heds.

Here we see many differences in capitalization and spelling from usage today. The use of “ye” in the date just means ‘the,’ since the *y* in “ye” is a replacement for the *þ* letter, pronounced as a *th* sound, that we saw in the [last chapter](#) in use in Old English. Some of these differences tell us about Farsworth’s pronunciation: when he wrote “Six hoses” in the first line, surely he was talking about horses, a sign that he did not pronounce *-r* after vowels as many people in Boston still do not today. In other places he wrote “horse,” not “hose,” so he knew that the word could be spelled with an *r* in it, he just did not do so consistently. The same thing happened for the word “marsh,” sometimes spelled with a *r* and sometimes without. In the third line he wrote “sot” as the past tense of *set*, a nonstandard verb form still heard today. Another nonstandard usage occurs in “we was fird upon,” which used the singular “was” where we might expect the plural “were.” There is an example of what is known as a *prefixing* near the end of the passage, “Afiring,” today a form still in vernacular use. A difference in usage occurs in the phrase “we had A hot fiar,” meaning ‘we had a hot battle.’ Still, we have less trouble with Farsworth’s language than with Shakespeare’s, so long as we allow for informal spelling and usage. Farsworth shows us about common speech in the period, whereas Jonathan Edwards showed us high style.

By the end of the Colonial Period, America consisted of the thirteen states that were party to the original Articles of Confederation, plus three others who joined the Union in the 1790s following ratification of the Constitution (Vermont, Kentucky, Tennessee). The population had reached 5 million people. Important port cities like Philadelphia (the largest), Boston, New York City, and Charleston served as focal areas for interior settlement. Plantation Virginia, too, though without a major city (Richmond was its most urban center), was an original colonial focal area from which settlers headed west. The east coast had its own culture, a little different in each region, that included higher education institutions and cultivated citizens as well as yeoman farmers in the interior. And in each region American English was firmly established, a little bit different in each region as the complex system of language would have us expect.

Summary

Colonial settlement of the American east coast came predominantly from Britain, which established the cultural matrix into which settlers from other places fit themselves. America did not have the European village plan, but instead coastal cities with people ranging into the frontier. Crèvecoeur described the American colonial experience, which possessed both formal (Edwards) and less formal (Farsworth) ways of speaking.

Key Terms

colonial leveling

Crèvecoeur

Doctrine of First Effective Settlement

Dynamic Model

Founder Principle

koinéization

Native Americans

postvocalic -r

strong ties

Audio Samples

Available at www.cambridge.org/williamakretzschmar.

a4.1 Plymouth Records (seventeenth to eighteenth century)

a4.2 Jonathan Edwards (late eighteenth century)

a4.3 Amos Farsworth (late eighteenth century)

Exercises

1. Go online (Wikipedia is fine) to look up the history of a state on the American east coast, any of them from Georgia north to Maine. Who were the first settlers? Did they stay and remain active? Was there a mixture of settlers from different countries?
2. Crèvecoeur wrote that “ Europe contains hardly any other distinctions but lords and tenants; this fair country alone is settled by freeholders, the possessors of the soil they cultivate, members of the government they obey, and the framers of their own laws, by means of their representatives. ” Is this a fair contrast for him to make? Is it all about the aristocracy who owned the land and tenants who worked it in seventeenth- and eighteenth-century Europe?
3. Look up the process of change for the English pronouns *thee/thou* and *you* . How did *thee/thou* disappear (and did it go out of use for everybody at once)? The pronoun *you* is supposed to be both singular and plural: has it always been that way? Are there any other forms of the *you* plural in use today?

Computer Exercise

[Exercise App3.4 in Appendix 3](#) explores how communities can have multiple terms for the same thing at different frequencies, following the idea of mixed speech communities discussed in this chapter.

Further Reading

Bernard Bailyn , *The Peopling of British North America* , New York : Vintage , 1986 . Bailyn ' s account of the early colonization of North America replaces earlier, more romantic views with a more modern history.

Richard Bailey , *Speaking American: A History of English in the United States* , New York : Oxford University Press , 2012 . Bailey ' s entertaining book selects a different place for every fifty-year period in American history for its chapters, from Chesapeake Bay before 1650 up to Los Angeles for 1950 – 2000, and provides a wealth of detail about the language in its place and time. The earlier chapters – Chesapeake Bay, Boston, Charleston, Philadelphia, New Orleans, and New York – touch on American places that had their own cultural regions during the settlement period, as mentioned earlier in this chapter.

Edgar Schneider , *Postcolonial English* , Cambridge : Cambridge University Press , 2007 . Schneider ' s Dynamic Model is the best current description of the common points of development for colonial varieties. He has also published a short textbook on the subject, *English Around the World* (Cambridge : Cambridge University Press , 2011) .

5

The National Period (up to the Civil War, 1800 - 1865)



In This Chapter

“ Go west young man, go west and grow up with the country ” (a famous quotation attributed to Horace Greely) tells the story of this chapter. Americans left the east coast to populate the territory as far as the Mississippi River and some parts beyond it. As immigration grew so did the effects it had on American English, though not always as scholars have thought about it. This chapter also describes the beginnings of Standard American English through the influence of Noah Webster.

Timeline

1800

Population 5,308,438

1803

Louisiana Purchase (828,000 square miles)

1804

Lewis and Clark Expedition (1804 - 1806)

1808

Importation of slaves prohibited

1810

Population 7,239,881

1812

War of 1812 (1812 - 1815)

1819

Florida Purchase

1820

Population 9,638,543

1821

Santa Fe Trail (Missouri to New Mexico)

1823

Monroe Doctrine (no new European colonies in the Americas)

1828

Webster, *American Dictionary*

1830

Population 12,866,020

1836

Lone Star Republic (1836 – 1845); Oregon Trail (Missouri to Oregon)

1838

Underground Railroad established (escape routes for African Americans)

1840

Population 17,069,453

1845

Texas annexed

1846

Mexican War (1846 – 1848)

1847

Mormons in Utah

1849

California Gold Rush

1850

Population 23,191,876

1852

Harriet Beecher Stowe, *Uncle Tom 's Cabin*

1860

Population 31,443,321

1860

The Civil War (1860 – 1865)

1863

Battle of Gettysburg; Emancipation Proclamation

1865

Lee ' s surrender at Appomattox; Lincoln assassinated; 13th Amendment outlaws slavery

The situation for American English after its initial emergence as settlement proceeded inland in the nineteenth century is somewhat different from the Colonial Period. The complex systems of speech in inland American localities were established, again, by mixed populations of speakers, including some people who had been resident in the original colonies, some speakers who had arrived at ports of entry and stayed some time there (a frequent occurrence), and some speakers who proceeded more directly to the frontier. Some Native Americans were present in the northern parts of the American East. There were still not many nearer the coast because of the spread of epidemics originated by Spanish explorers, but settlers met more Native Americans as they went west to areas not struck by disease. In the Southeast the Native American population had had a longer time to rebound after the epidemics had run their course but the survivors were displaced. In the state of Georgia in the nineteenth century the state militia forced Native Americans out, and new settlers participated in land lotteries to acquire 200-acre sections for homesteading. Under these conditions of the time, the largest proportion of the speakers who settled in any one locality was certainly formed by those who had lived further to the east along the settlement route that allowed new settlers to get to the frontier. The remaining Native Americans and people who came more immediately to available homesteading areas contributed linguistic variants which could become common in a locality, but which had to compete with variants that were already in frequent use in established complex systems of speech further east.

Settlement Patterns

There was some contact between regions in the colonial period because coastal cities were transportation centers, but the difficulty of such long-distance transportation tended to create focal areas that extended out from the cities. In the nineteenth century, settlers streamed inland from the coastal cities as the terrain allowed them to. As settlement proceeded inland from the coastal outposts, the speech habits of the coastal communities were carried to the interior by residents of the established colonies who wanted new opportunities, and by new immigrants who landed at the coast and acquired speech habits as they made their way to the frontier (which for some immigrants took years).

Settlement proceeded generally westward in three large geographical bands as far as the Mississippi River, corresponding to what is now the **Northern** tier of states, a **Midland** region, and the **Southern** region (see the arrows in [Figure 5.1](#)). In the North the stream of settlement in Upstate New York had to go around the southeast part of the state inland from New York City (originally Dutch in settlement), and followed the Hudson River (also river systems through Connecticut) far enough north to reach unsettled territory. In the early nineteenth century the Erie Canal, completed in 1825, was built to connect the Hudson River at Albany with Lake Erie at Buffalo. The waterway promoted westward settlement along the Great Lakes as far as Northern Illinois, Wisconsin, and Minnesota, a region we can call the **Inland North** . This region was separated from **New England** by the Appalachian mountains, and so settlers coming to New England through the port of Boston occupied New Hampshire, Vermont, and Maine to the east of the mountains. Thus the Northern region had two separate settlement areas, New England and the Inland North.

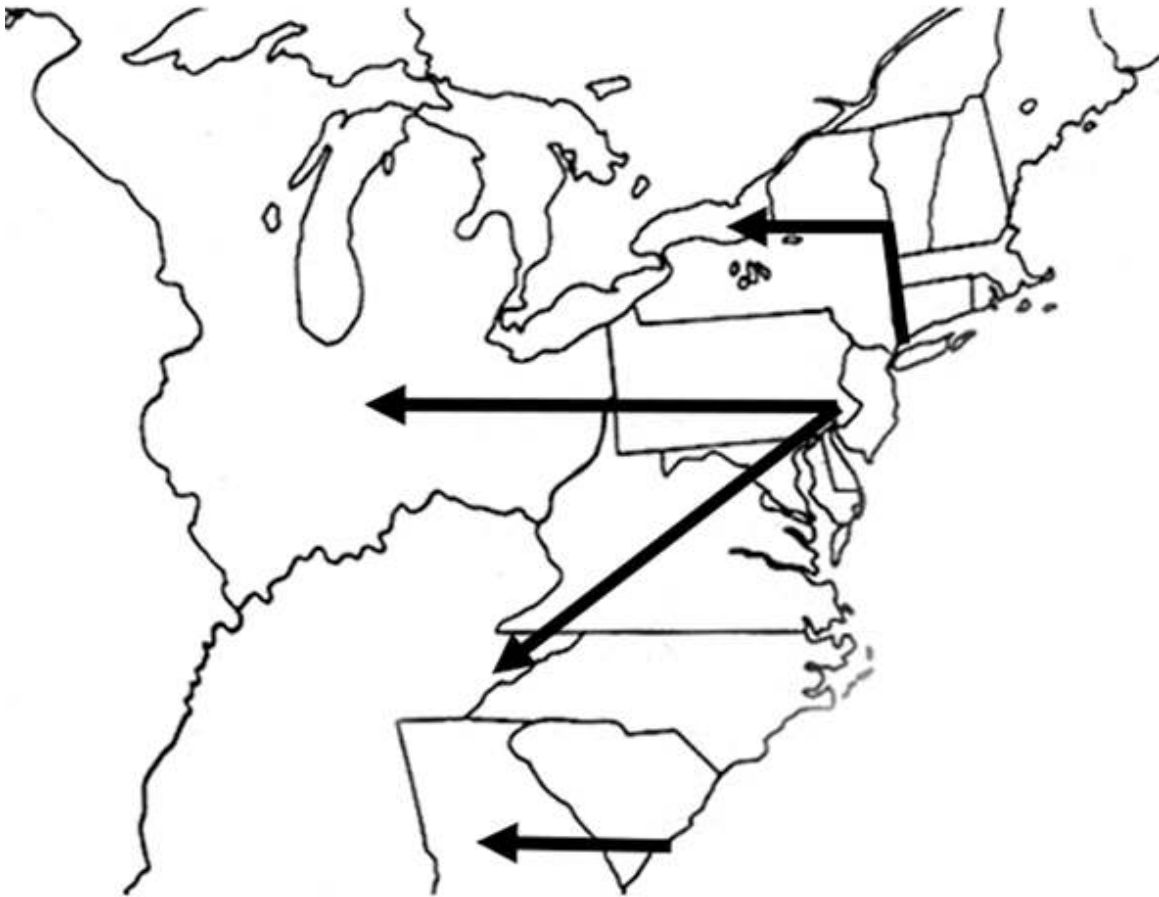


Figure 5.1 Settlement pathways from the American East Coast.

The South had no convenient waterway to facilitate travel to the interior, and the varied topography of the land – mountains, the piney woods, wiregrass – was not all well suited to the pattern of plantation agriculture that dominated the colonial economies of Virginia and the Carolinas. Southern settlement thus proceeded more slowly, in a patchwork of communities across Georgia and Alabama until settlers reached plantation lands in the plains and Mississippi Basin areas of Tennessee, Mississippi, Louisiana, and East Texas. The Florida Purchase of 1819 established American control from its former Spanish owners, but Florida only became a state in 1845. Development of plantations there was hampered by battles with the Seminole tribe of Native Americans, which ended only in 1858.

Philadelphia was the cultural center for the stream of settlement in the Midland region, which proceeded west in two different directions. The National Road was built to run due west from Philadelphia through Pennsylvania, eventually as far as central Illinois, close to the present-day route of Interstate 80 in southern Pennsylvania. Settlement took place along the road, and settlers could also reach the Ohio River valley at Pittsburgh and then use the waterway to settle farther inland. Because river travel was much easier than road travel, this meant that settlement often occurred sooner along the Ohio River than it did on land further from the river. This **North Midland** settlement pathway is often merged with the Northern region by those who would create just two American regions, North and South. The more southerly stream of Midland settlement, sometimes merged with the South by those who want just two regions, followed the course of the Shenandoah River southwest through Virginia towards the Cumberland Gap in Tennessee. Most of the **South Midland** settlers were subsistence farmers, and they occupied whatever land could support them throughout the Appalachian Mountain region and, eventually, the uplands as far west as Arkansas, and also in the lowlands of the Southern states where the land was not suitable for plantations. These historical patterns of settlement – North, Midland, and South – created the basic framework of regional American speech that we can still hear today (see [Chapter 8](#) for discussion of regional dialects).

Beyond the Mississippi, the Louisiana Purchase in 1803 greatly expanded territory nominally under American control (most of it was occupied by Native Americans) by over 2 million square kilometers. Thomas Jefferson commissioned the Lewis and Clark Expedition to explore the new territory, and the explorers reached the Pacific Ocean at the Columbia River (the present-day border between Oregon

and Washington) in late 1805. Beginning in 1823, the Monroe Doctrine recognized existing European colonies but declared that no further colonies could be created or states be controlled by Europeans. South of the Louisiana Purchase, settlers began to follow the Santa Fe Trail in 1821. The Lone Star Republic declared independence from Mexico in 1836, and Texas became a state in 1845 (its annexation was confirmed by the Mexican War from 1846 to 1848). Also in 1845 settlers began to take wagon trains across the Oregon Trail. Mormons settled in Utah beginning in 1847. The California Gold Rush began in 1849, and California became a state in 1850. Oregon became a state in 1859. [Figure 5.2](#) indicates the extent of American settlement and the trails west as they were in 1850.

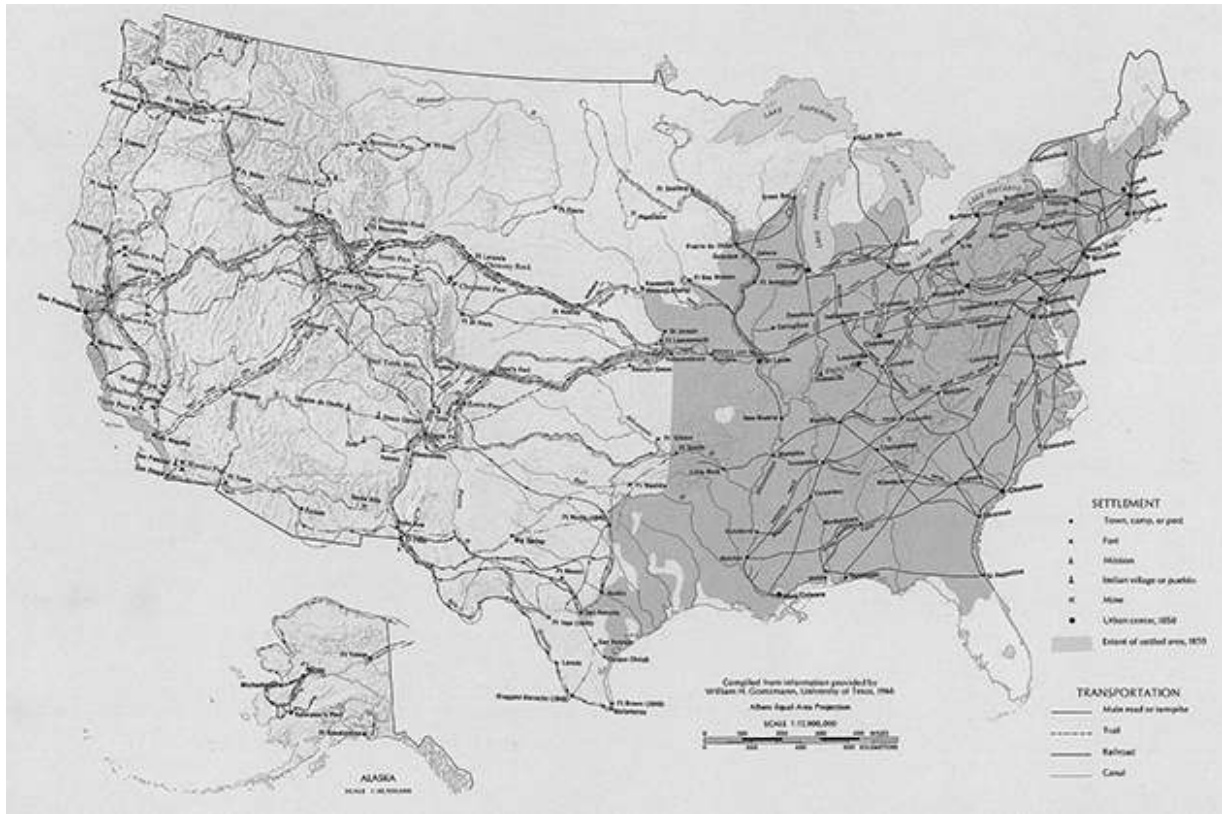


Figure 5.2 American Settlement by 1850.

[Figure 5.2 long description.](#)

Source: *The National Atlas of the United States of America*. Arch C. Gerlach, editor. Washington, D.C.: U.S. Dept. of the Interior, Geological Survey, 1970, viewed at <https://legacy.lib.utexas.edu/maps/histus.html>.

Differences in language between these regions were already in evidence by the early nineteenth century. For example, emergent regionalisms appear in the writing of Anne Royall, a travel and society writer. She wrote in 1831 (cited in Mathews [1931](#): 95):

I saw a piece in the papers not long since, which went to satirize the Tennessee dialect. I would advise such people to look at home. Those who live in glass houses, ought not to throw stones. Let us compare this with the dialect of Virginia ... ' you know da is heap of baw [bear] on da Kenhawa; so [we] are all goin to Kenhawa to hunt baw - Kenhawa mighty far - so we walk - we walk - last we come to da Kenhawa - Kenhawa b-i-g river, for true - Tell you what, it skears me - well, I goes out into de woods - I hear noise - I look up tree, and see a baw! ...' Now for the Pennsylvania dialect: ' Jim, where are you and Sam; why but ye 's pit [put] you cow in the pester [pasture]; ' am sure a towled ye 's the mornin. - Ye 's cruel bad children - and there a fine job ye 's done to leave you gears out by. ' The Yankee: ' Flora you want [ought] to wash them clothes right away. You hadn 't ought to left ' em so. ' ' What say? '

We see in this report that by the early nineteenth century there was common knowledge of dialect variation between the states. Further, we see that some features that we associate with those regions still today were present then, such as loss of postvocalic -r and other matters of pronunciation (represented with nonstandard spellings), lexical choices still at issue like *hadn ' t ought* or the second-person pronoun *ye* , and also grammatical choices like “ what say, ” “ for true, ” or “ am sure a towled ye ' s the mornin. ”

An Experiment in the Spread of Dialect Words

In order to measure the spread of dialect words, we first need to know how words are typically distributed across the land. [Figure 5.3](#) shows a map based on the distribution of the word *cloudburst* in the Linguistic Atlas of the Middle and South Atlantic States (LAMSAS) survey (page 6, line 1 of the questionnaire).

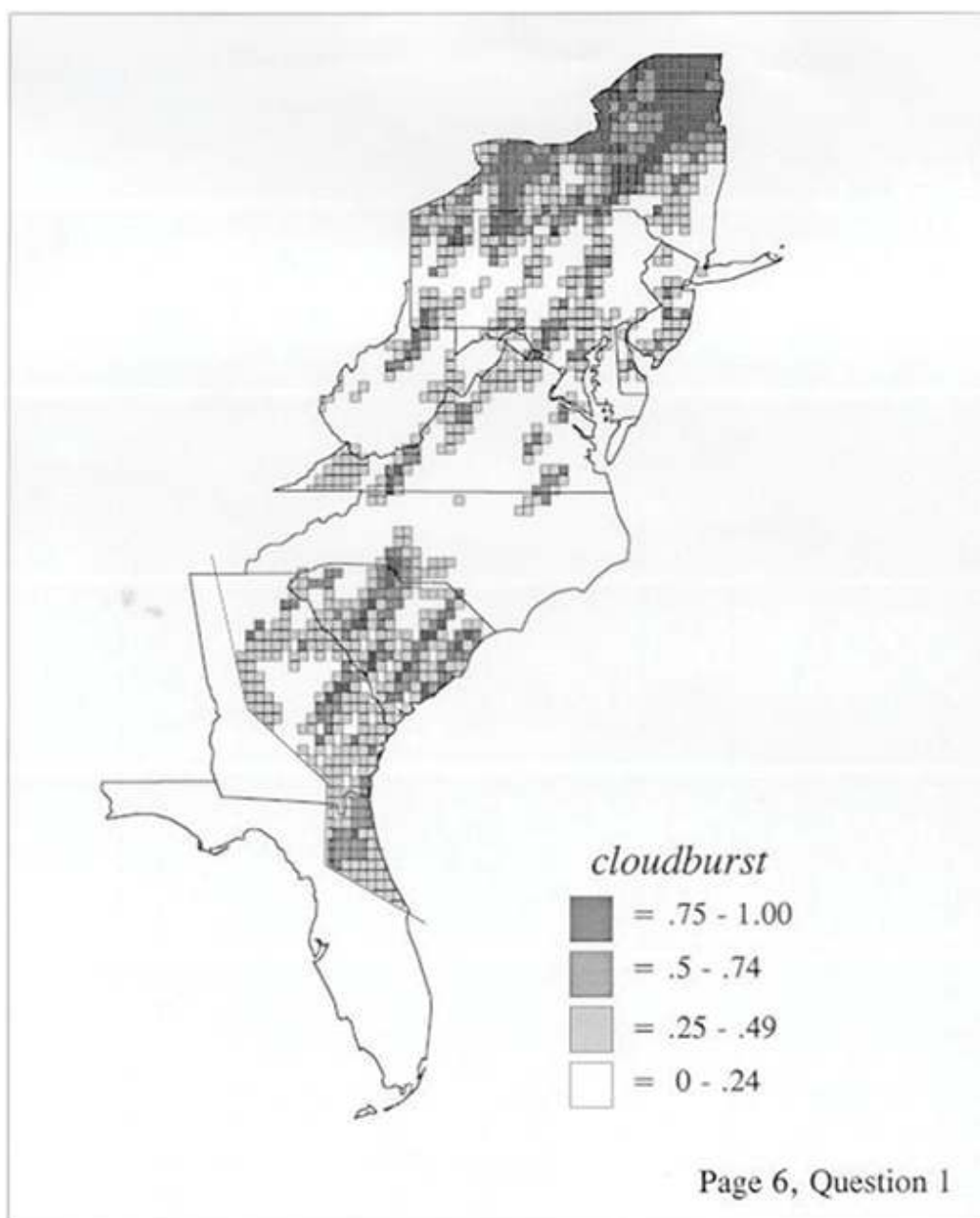


Figure 5.3 *cloudburst* in LAMSAS (density estimation).

The map shows a small square, in four degrees of shading from dark to light, for each 0.2 degree of longitude and latitude throughout the LAMSAS survey region (about 3,000 squares); the angular cutoff in Georgia and Florida separates the western and southern parts of those states that were not part of the survey area. Using a **density estimation** statistic to estimate the status of all the squares from the available data points (by looking at the nearest neighbors that do have data for the squares that do not contain an informant), the darkest squares show the highest probability of finding *cloudburst* (75 percent to 100 percent), with two lighter shadings to indicate lower probabilities; parts of the survey area without shading have a 0 percent to 25 percent probability of finding *cloudburst*. The main benefit of these probability maps is that each map gives a comprehensive analysis of the word whose distribution it illustrates. The set of maps (available online at emergence.libs.uga.edu) provides comprehensive coverage of 115 words processed in this way, each one a word that occurred at least fifty times in the LAMSAS survey. The general impression one gets from the whole set of maps is that words do not just exist in neat regions. The pattern for *cloudburst* is the most common, patchy distributions across the map. Some words have

dense, dark coverage throughout almost the entire survey area, such as *dry spell* or *wardrobe* ; others are widely scattered like *drought* ' dry spell, ' or strongly localized like *chifforobe* ' wardrobe. ' The overall statistical finding from this data is that all of the items show clustering (as opposed to data at random locations or evenly separated locations; see Kretzschmar 1996a).

In order to find out about the influence of settlement, we can check the probability of occurrence of each of the 115 words in each of twenty cities (as first reported in Kretzschmar 1996b): New York City and Rochester (NY); Philadelphia, Harrisburg, and Pittsburgh (PA); Baltimore (MD); Washington (DC); Charleston (WV); Richmond, Norfolk, and Roanoke (VA); Wilmington, Raleigh, and Charlotte (NC); Charleston, Columbia, and Greenville (SC); and Savannah, Augusta, and Atlanta (GA). In accordance with the shading on the maps, for each variant we can assign a value of 0 (no shading), 1 (light shading), 2 (moderate shading), or 3 (dark shading) to each city for each word.

Table 5.1 shows the number of words from the list that were strongly associated with each of the cities (i.e., when a word had the highest probability, 3, of being found there). There are not very many words that are never strongly associated with a city (7/115; *going down* , *thundersquall* , *back stick* , *chifforobe* , *week from Sunday* , *rich pine* , and *white frost*), and there are also not that many that are strongly associated with all the cities (14/115; *night* , *bureau* , *drizzle* , *sofa* , *closet* , *feet* , *frost* , *clear* , *half past* , *wardrobe* , *attic* , *thunderstorm* , *blew* , *three years old*). There are only six words strongly associated with a single city, so that it is not the case that we see what some people might have expected, that each city would have its own set of words not shared with other cities. On average, any given word was likely to be found in nine or ten cities. Again, on average, the typical probability of occurrence for a word in a city was level 2 (50 percent to 75 percent). Instead of each city having its own words, the distribution of words belongs to the realm of probability as we expect in the complex system of speech, a distribution of more and less rather than all or none. In these probabilistic terms, we can say that most variants tended to be widely distributed across American cities, especially if we consider that words often have a weaker association with a place than what Table 5.1 tabulated.

Table 5.1 Distribution of words by number of cities

Number of cities	Number of words
0	7
1	6
2	6
3	6
4	13
5	7
6	6
7	4
8	5
9	3
10	2
11	5
12	3
13	3
14	5

Number of cities	Number of words
15	3
16	6
17	2
18	4
19	5
20	14

[Table 5.2](#) shows a breakdown by city of the number of words with some probability of occurrence (those in levels 1, 2, or 3).

Table 5.2 Distribution of variants by city

City	Number of words
Greenville (SC)	74
Charleston (SC)	69
Roanoke (VA)	66
Augusta (GA)	63
Charlotte (NC)	62
Columbia (SC)	59
Richmond (VA)	56
Raleigh (NC)	56
Wilmington (NC)	54
Atlanta (GA)	54
Savannah (GA)	52
Baltimore (MD)	51
Norfolk (VA)	51
New York City	50
Charleston (WV)	48
Philadelphia (PA)	48
Washington (DC)	47
Pittsburgh (PA)	47
Rochester (NY)	47

City	Number of words
Harrisburg (PA)	42

The order of the cities suggests that the American South has a broader vocabulary than the North (as Metcalf [1997](#) first reported). The first eleven cities in the list are Southern, the first thirteen if we consider Baltimore, where slaves were common, to be Southern. The number of variants from each city ranges from 74/115 (64 percent) to 42/115 (37 percent), with an average of 55 (48 percent). Still, rather than having an exclusive set of words, each city participates in the pool of available words. While variation is not evenly distributed in American English, it is widespread and normal. One reason that Southern cities have more variants is a technical aspect of the LAMSAS survey: Raven McDavid, the main fieldworker in the South, collected more variants than other fieldworkers did. On the other hand, it is also possible that the complex social structure of the South, with plantations and slavery and yeoman farmers all playing a role, tended to preserve more variants than the relatively simpler farming culture of the North.

As for evidence from the settlement patterns of the National Period, we can look at four pairs of cities, each pair consisting of one of the coastal focal cities from the Colonial Period and a city further inland: New York City and Rochester (NY), Philadelphia and Pittsburgh (PA), Richmond and Roanoke (VA), and Charleston and Greenville (SC). When we look at the words with the highest probabilities (level 3) that are most closely associated with the cities, in every case the inland city shares more of these words with the coastal focal city than with other cities. In one case, Rochester, the inland city shares the same number of words with Philadelphia and Pittsburgh (from the neighboring pair just to the south) as it does with New York City. Rochester is not “inland” of New York City in quite the same way as for the other pairs, but even so New York City is one of its closest relatives. Amidst all the variability in vocabulary between all of the cities, these pairs still regularly show the effect of the settlement pathways: language followed the people moving west.

Immigration and Language

The American population increased rapidly during the National Period. From about 5 million people in 1800, the overall population grew to more than 30 million by 1860. In the first few decades of the nineteenth century foreign immigration was relatively limited, in part from the disturbance of the War of 1812 (1812 – 1815), so population growth came mainly from the established citizens, but settlement by foreign immigrants accelerated, starting in the 1830s. The largest sources of immigrants were Ireland and Germany, followed by England and France. At the end of the period, a great number of Spanish speakers, former Mexicans and others in Texas, the Southwest, and California, became Americans. Besides these large groups, settlers arrived from all across Europe, indeed the world. The California Gold Rush attracted about 100,000 people, not only Americans from the eastern states but also foreign immigrants from Europe, Australia, and China. The importation of slaves from Africa was officially halted in 1808 but the population of African Americans continued to grow, to reach about 4 million slaves by the time of the Civil War, plus another half million “free” African Americans. While slaves were concentrated in the Southern states, all of the different contributing groups of the population were heavily mixed. Large groups like the Irish and Germans did establish significant ethnic clusters in cities, like the Irish in New York and Germans in many new Midwestern cities. Owing to the time when large numbers of Scots and Scots-Irish got to America, they formed a large part of the population in the Appalachian Mountain region. Over time, other ethnic groups formed clusters in other areas that were open to settlement at the time when a large number of them immigrated (see [Chapter 6](#)). These clusters, however, existed within a heavily mixed population overall and were still governed by the Principle of First Effective Settlement (see [Chapter 4](#)).

The process of complex systems offers an answer to the problem of scattered evidence for ethnic influences on American English. Michael Montgomery, a meticulous scholar, worked hard to connect Scots-Irish immigration with dialect features in Appalachia ([1989](#), [1991](#), [1997](#)), but he was only able to find small traces of Scots-Irish English in the Southern mountains. We know that large numbers of Scots and Scots-Irish came to the Appalachian region in the eighteenth century and thereafter, and we can certainly find cultural connections with the Scots and Scots-Irish in Appalachia, from housing and farming patterns to ballads and songs. Montgomery found that **plural verbal -s** (like *they works*) had been retained in Appalachian English as a low frequency feature, and so had the use of **multiple modal auxiliary verbs** (like *might could* and *may can*), but a great many other possibilities that Montgomery checked could not be connected in this way. The operation of the complex system tells us how such grammatical variants could be retained at low frequencies on the A-curve, in competition with top-ranked usages of verbal -s and auxiliaries. The complex system also explains why the *needs*

washed construction (as opposed to the more common *needs to be washed*), another variant with a Scots and Scots-Irish history, is *not* found in Appalachia but *is* found in western Pennsylvania. Owing to the random interactions of the system, some variants will become common in some places and not others. The presence of speakers from some pre-existing cultural group creates the opportunity for variants to be introduced to the system, but does not require that any particular variant will become common in the regional complex system. Indeed, given the extension of eastern complex systems to the west, we might expect, on the odds, to find just what we see: the retention at low levels of variants from significant cultural groups in the population, within an overall pattern dominated by variants carried west from the coastal areas.

We can see a parallel problem with the distribution of lack of postvocalic -r (whether the -r is pronounced in words like *car*, *barn*) in primary American settlement areas. One theory to account for the fact that postvocalic -r was historically often lost in New England, New York City, and the Coastal South, proposed by George Krapp (1925), is that such r-lessness in both Britain and America “ was a natural and early change in language which took place in popular speech unaffected by learned or standard influences ” (cited in Stephenson 1968: 64).

The most common causal explanation, as in Kurath (see Figure 5.4) and McDavid 1961, is that the areas that lost postvocalic -r stayed in closer contact with England than the places that did not lose postvocalic -r, notably Philadelphia, and thus lost their -r as the change expanded in England. This theory has its attractions: we know that the social elite of coastal cities did send some of their children to be educated in Britain, and that they looked back to Britain, specifically London society, as an important source of style and custom. We also know that the Quakers of Pennsylvania had the reputation of rejecting social flummery, as in their maintenance of *thee/thou* in rejection of the honorific use of *you* as a singular second-person pronoun. And, as Raven McDavid argued, the demographics of the Plantation South, in which a very small white elite managed an overwhelming African-American majority of slaves and fostered the spread of r-lessness in plantation areas, fit the notion of strong influence by a social elite (1948).

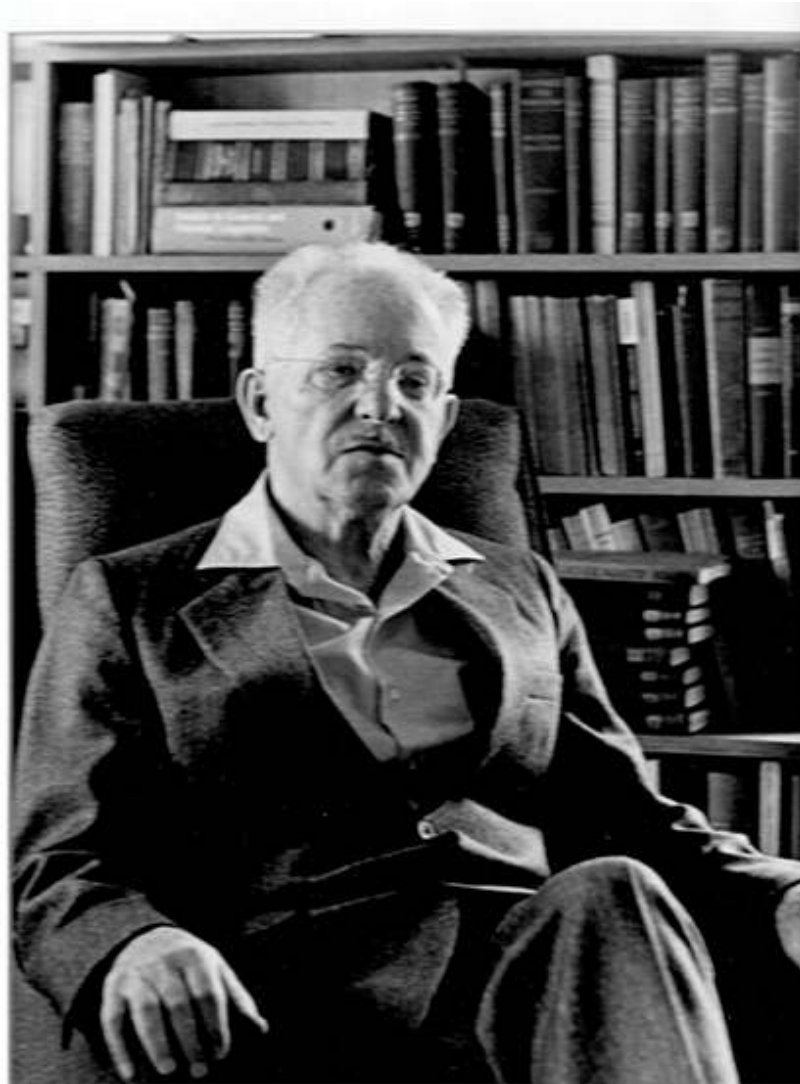


Figure 5.4 Hans Kurath.

As before, however, the facts of the case do not correspond to expectations, as demonstrated in a classic detailed study of North Carolina by Edward Stephenson (1968). An earlier article by Archibald Hill had shown that loss of postvocalic -r often occurred in Middle English in three environments: in unstressed syllables (like the final syllable in *father*, *brother*), through dissimilation in words with a second syllable with r (like *murder*), and in consonant clusters before non-labial, non-velar consonants like /s, t/ (like *first*, *burst*). Stephenson says that all areas of colonial America could thus be expected to have some kinds of r-lessness, and he finds examples in North Carolina. Still, Stephenson points out that more general r-lessness remains to be explained for the colonies. His careful study of variant spellings in eighteenth-century North Carolina documents indicates that, while Hill's r-lessness was present near the beginnings of settlement in North Carolina, the more general kind of r-lessness began to appear there only later in the eighteenth century. Further, the areas of general r-lessness in central North Carolina probably arose through settlement from Virginia, and general r-lessness is not present in areas of Eastern North Carolina that should have had it if either the theory of elite contact with Britain were true (as through the port of Wilmington) or if McDavid's theory of diffusion from South Carolina planters were valid (as in eastern North Carolina where settlements have come from South Carolina). Stephenson also points out that, even if general r-lessness entered Virginia from the social elite in Richmond, it was immediately a property observed in all social groups in North Carolina – which must cast doubt on the likelihood of any gradual melting of the feature through the population. We can share Stephenson's conclusion that “the causes of the loss of postvocalic /r/ in North Carolina are complex, and no simple version of either the Krapp theory or the Kurath-McDavid theory will suffice to account

for the development ” (1968: 70). As in the case of Scots-Irish influence in Appalachia, a better answer comes from the complex system of speech. Speakers could, but did not have to, drop their postvocalic -r, and as a result of feedback from interactions between speakers, the probability that they would do so emerged at different levels in different places. The loss of postvocalic -r does not require a particular cause, just the operation of the complex system with differing results in different places as we might expect.

Albert Marckwardt has provided us with lists of words that English-speaking Americans borrowed from groups speaking other languages (1958). Of course, borrowing here is not something that will be given back, just the term that linguists use for acquiring a word from a different language. From the opposite point of view, linguists also talk about loanwords, but of course these loans are not paid back any more than the borrowings are. Marckwardt ’ s point of reference was that these words existed in “ present-day American English ” (for him the 1950s), so he did not offer specific dates for the borrowings. Many of these could be looked up in the *Oxford English Dictionary* (online) or the *Dictionary of American English* (1936 – 1944). In this chapter, words from different groups are presented, but not all of the words were necessarily borrowed (or loaned) during the National Period.

Borrowings from Native Americans began as soon as Europeans arrived in North America, as mentioned in the [previous chapter](#) . Of course Native Americans did not all speak the same language; in fact, they spoke hundreds of different languages, such as those in the Algonquian and the Iroquoian (including Cherokee) language families in the North and Central regions, and the Muskoghean family in the South. Other Native American language families in the West become relevant later in the National Period (like the Siouan family) and thereafter. A great many place names came from Native Americans. Some Native American borrowings were their names for native trees or plants, like *hickory* , *pecan* , and *squash* . Others animals: *chipmunk* , *moose* , *possum* , *raccoon* , and *skunk* . Some came from items of food or culture: *hominy* , *succotash* ; *powwow* , *squaw* , *moccasin* , *tomahawk* . Many more words from Native American languages were borrowed into American English but would be less familiar to most English speakers (like *scuppernong* , a native grape). Many Native American words were used in a local area and never made it into general use in American English, and other words may have been in wider use at one time but now no longer. In the complex system of speech it is easy for individual speakers to use a word they may have heard, and perhaps their neighbors may begin to use it, too. The word may catch on in wider and wider populations. But it may not. A novel word may never get established even at the neighborhood or local level, much less nationally. And a word that has become common in a population may, without any particular reason, become uncommon again.

One aspect of Native American speech that became popularized in Hollywood films and television shows is Indian grammar. “ How, ” a chief might say when he meets a cowboy. A fluent English speaker might rather have said “ How are you? ” Tonto, the Indian friend of the Lone Ranger on radio and television in the 1950s (but not Tonto as played by Johnny Depp in the 2013 movie; you can see the original version on YouTube), used to say “ Me understand, kemosabe. ” While there is dispute about what *kemosabe* could mean (‘ trusty scout, ’ ‘ idiot, ’ ‘ white man ’), Tonto ’ s grammar was always a little different, such as his use of *me* instead of *I* as the subject of a sentence. When speakers of two different languages have to communicate with each other, say for trade purposes, it has often happened around the world that the speakers in a less-powerful position begin to use a limited form of the language from the more powerful group, a **pidgin** language. A pidgin is a language with simplified grammar, and with a limited vocabulary mainly drawn from the words of the more powerful group. The “ How ” is an example of a simplified greeting. Native American pidgin language has been discussed by scholars mainly with respect to speakers in the Pacific Northwest (a relatively late development), so Hollywood may have overgeneralized the contact situation between Native Americans and European Americans (see Meek 2006 for more about representations of Native American English). It is highly likely, however, that contact between English speakers and Native Americans did involve limited interactions when someone fluent in both languages was not available to translate. [Chapter 11](#) offers information about the current status of Native American languages and the “ Reservation Accent. ”

The German immigrant group came to America in several waves. The wave in the Colonial Period is responsible for the group usually called the Pennsylvania Dutch, with Anabaptist religious convictions. This inward-oriented group has to this day maintained German as the matrix language of their communities, though with many loans from English; members of these communities are bilingual in German and English, especially in localities where German is now only used in church. Subsequent waves of German immigrants starting in the 1830s did not have religion to hold their communities together, but they often did establish German-language church services and newspapers in urban areas, and the German language continued in family or local use for some time. In the author ’ s own family, the first German immigrants settled in Illinois in the mid-nineteenth century, and some of their children moved northeast to Michigan in search of cheaper land. The author ’ s grandfather, born near 1900 and living his life entirely in central Michigan, retained only a few words of German and trotted them out to annoy his grandchildren. Community use of German outside conservative religious

communities has survived the longest in Wisconsin and Texas, but even in these places it declined in the twentieth century in parallel with negative perceptions of German created by World War I and World War II.

Marckwardt reports a long list of food words coming to English from German, including *delicatessen*, *hamburger*, *lager beer*, *pretzel*, *pumpernickel*, and *sauerkraut*. Words in the field of education, a German strongpoint in the nineteenth century, include *festschrift*, *semester*, and *seminar*. *Christmas tree* is a German loan. A number of little colloquial words came from German: *bum*, *hex*, *loafer*, *nix*, *ouch*, and *phooey*. In areas with German populations one can hear borrowed grammatical constructions like “make the light out,” or “come by” to visit someone, or words perhaps less common in English like *liverwurst* or *schnitzel*. Some loanwords come from a related language, Yiddish, spoken by Jewish settlers. Yiddish as a language began in the Middle Ages, consisting of a German core with additions from Hebrew and Aramaic; it later spread to Eastern Europe, with further influences from Slavic languages there. In America, *kosher* and *kibitz* are the most familiar words, but in Jewish groups a great many more Yiddish words are common. In the mid-twentieth century many more such words were widely known, following the success of Jewish American comedians in the media.

Dutch settlement was first concentrated in downstate New York and northern New Jersey, inland from originally Dutch New York City. Later the Dutch settled in western Michigan, for example in the town of Holland, near Grand Rapids. Even though the numbers of settlers were smaller than the number from Germany, Dutch gave American English very common food terms like *cole slaw*, *cookie*, and *waffle*. Dutch *Santa Claus* is much more common than the German *Kris Kringle*. Other common words include *caboose*, *scow*, *sleigh*; *boss*, *Yankee*; *dope*, *dumb* (meaning ‘stupid’), *snoop*, and *spook*.

French loans into American English are complicated by the long history of the relationship between French and English owing to the Norman Conquest and its aftermath. The aristocracy in England was French-speaking for hundreds of years after the conquest, and even after that the kings of England laid claim to much of southern France for centuries further. England retained control of the mainland port of Calais until 1558. In North America the French were early settlers of Canada, and explorers in the Great Lakes region and the Mississippi River. American cities *Detroit*, *St. Louis*, and *New Orleans* were founded by the French. In the National Period, the French sold the United States their inland territories, largely unoccupied by Europeans, as the Louisiana Purchase. Some French loanwords to American English came from the North: *caribou*, *crappie* (a fish), *gopher*, *pumpkin*, *portage*, *prairie*, *toboggan*. Many more came from the Louisiana Delta and New Orleans: *bayou*, *jambalaya*, *levee*, *praline*. Words like *bureau*, *cent*, *depot*, *dime*, and *rotisserie* are not associated with a specific region.

Spanish borrowings in America are mostly associated with Texas and the West, although Spanish explorers first came to North America in Florida and explored through the (future) Southern states in the sixteenth century. They were responsible, by accident, for the introduction of smallpox and other European diseases with horrible effects upon the Native American population, resulting in the depopulation of large areas east of the Mississippi River (before the arrival of other Europeans). St. Augustine, Florida, is the longest continuously occupied European settlement in mainland North America, founded by the Spanish in 1565 (San Juan, Puerto Rico, was founded in 1521). The Spanish were also involved in New Orleans. Marckwardt lists no fewer than eighty-eight different Spanish loanwords in American English. Among plants and animals: *alfalfa*, *marijuana*, *bronco*, *cockroach*, *coyote*, and *mustang*. Spanish loans for food and drink make up staple fast foods in America today, like *chili*, *enchilada*, *taco*, *tortilla*. Western ranches provided many words: *corral*, *lariat*, *lasso*, *poncho*, *ranch*, *rodeo*, *sombrero*, and *stampede*. The words *canyon*, *fiesta*, *pronto*, and *tornado* are also very common.

African Americans did not come to the country as immigrants but instead were brought as slaves. Some came direct from Africa, others by way of the Caribbean islands such as Barbados (claimed by the English in 1625 and a center of the slave trade). Words such as *gumbo* and *voodoo* are said to be borrowed from African languages and many more words may have come from that source, but a relative lack of knowledge of African languages by European and American scholars has complicated the explanation of these word origins (but see Lorenzo Turner’s [1949](#) *Africanisms in the Gullah Dialect*). In later years a great deal of language associated with the African American community has become mainstream, such as the words *jazz*, *juke box*, and *hip hop* (see [Chapter 9](#) for more information).

Again, as mentioned above in connection with Scots-Irish borrowings, the presence of speakers from some pre-existing cultural group creates the opportunity for words and other linguistic features to be introduced to the complex system of speech in America, but that does not mean that any particular word or feature will become common. What we see, overall, is the retention of some words and features from significant cultural groups in the population, within an overall pattern dominated by English.

Webster and Standard American English

Standard American English is not a product of the same process that creates and continues to change American English. Regional and social varieties and the American variety as a whole emerge from all the linguistic interactions between members of regional and social groups, and, at the top level of scale, by all participants in American culture. Standard American English, on the other hand, is an institutional construct. It has no native speakers. It is, however, a fact of life for American speakers in formal settings, especially in the educational system (see [Chapter 12](#)).

The main push behind the idea of a standard variety of a language (like **Standard English**) occurred in the nineteenth century, not only in England but elsewhere in northern Europe (see Milroy [2000](#)). The development of notions of purism and a focus on educated speech in the nineteenth century led to the expectation that the standard language would be uniform in structure, and mainly treated the written language instead of the more highly variable use of language in speech. Standard languages, therefore, can be associated with the language of capital cities, not because the speech of the capital city provides a natural model for a national language, but because the political and social importance of the capital gives national status among the *literati* to written language originating in the capital. Standard English is not to be taken for granted as some sort of default form of the language, and neither should it be brushed aside as unreal. Standard English arises from particular historical circumstances and processes of thought, and it is now completely ingrained in the American educational system (and that of other countries as well).

Standard American English began with **Noah Webster** (see [Figure 5.5](#)). Webster had published his own *Grammatical Institute* ([1783](#)) soon after other grammars (e.g., by Robert Lowth in 1762) that launched the Standard English movement. He was interested in the creation of a specifically American variety of English, a national language for a new country:

The author wishes to promote the honor and prosperity of the confederated republics of America This country must in some future time be distinguished by the superiority of her literary improvements, as she is already by the liberality of her civil and ecclesiastical constitutions. Europe is grown old in folly, corruption and tyranny. For America in her infancy to adopt the maxims of the Old World would be to stamp the wrinkles of decrepit old age upon the bloom of youth, and to plant the seeds of decay in a vigorous constitution.

(written in 1783, cited in Commager [1958/1962](#) : 1)

As clearly expressed in this passage, and neatly characterized by Commager, “ The driving force in Webster, the compulsion that explains all particular expressions of his ambitions and his energies, was nationalism ” (Commager [1958/1962](#) : 5).



Figure 5.5 Noah Webster (1758 – 1843), American lexicographer.

Source: Bettmann/Getty Images.

Commager explains ([1958/1962](#) : 7):

But if nationalism was to work in the United States – and in 1800 that was still very much an open question – it would have to get along without the Monarchy, the Church, the Military, and the many other institutions that provided common denominators abroad, and work with more democratic ingredients and build on popular support. It would have to frustrate those class and religious and racial divisions which were potentially so dangerous; it would have to overcome differences not merely of accent but of language itself. The United States, dedicated to the unprecedented experiment of republicanism in a vast territory, a heterogeneous population, and a classless society, could not afford differences of accent or of language.

As we have seen in previous chapters, variation in language naturally self-organizes out of a radically mixed population in a complex system. Thus, regional and social varieties of English were inevitable developments in the United States. A uniform standard, however, was then and still remains a politically attractive idea. That there were fewer differences between the speech of American states than there were differences between British regions might well have been taken as evidence at the time that a standard language was actually developing in the speech of America. Such a notion is as much an example of wishful thinking now as it was then.

The development of Standard American English nonetheless took place, if not naturally in the complex system from which American regional varieties emerged, then by Webster's salesmanship. John Adams did lead an unsuccessful attempt to create an American Academy on the model of the Académie Française (see Mathews [1931](#) : 39 – 43), and Webster himself helped to create a

Philological Society, but Commager again states the crucial fact: " The Academy was never born; the Society withered and died; but they were not necessary. Webster ' s books did their work " ([1958/1962](#) : 8). Webster ' s *American Spelling Book* (see [Figure 5.6](#)) began its career as a part of his *Grammatical Institute* but was later published widely as a separate volume. A footnote (dated March 1818) in the preface of the 1831 edition of *The American Spelling Book* claimed that sales to that point " amount to more than FIVE MILLIONS of copies, and they are annually increasing " ([1831/1962](#) : 15). Webster wrote that his book had become " the principal elementary book in the United States. In a great part of the northern States, it is the only book of the kind used; it is much used in the middle and southern States; and its annual sales indicate a large and increasing demand " ([1831/1962](#) : 15). The justice of his claim is shown by Mathews ' estimate that *The American Spelling Book* had sold 50 million copies by 1865 ([1931](#) : 45), and by Pyles ' estimate that over 100 million copies were sold before it was replaced by other books ([1952](#) : 98).

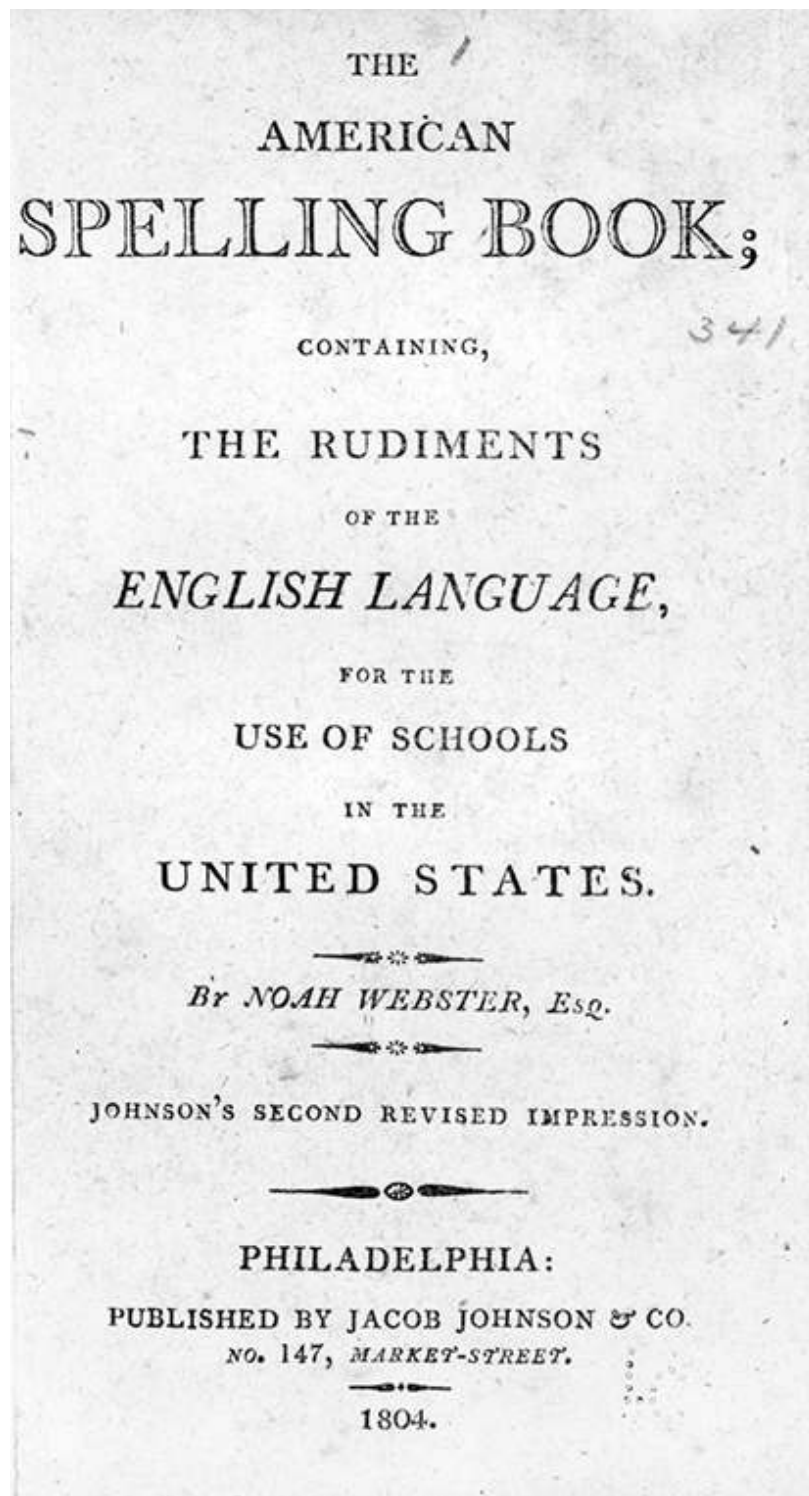


Figure 5.6 *The American Spelling Book* .

[Figure 5.6 long description.](#)

Source: MPI/Stringer/Getty Images.

More famous than *The American Spelling Book* but less successful in sales was Webster ' s *American Dictionary of the English Language* (1828). Pyles reports that " Unfortunately Webster, who was extremely good at the promotion of his books ... was not a very good man of business " (1952 : 98). Webster had sold the rights to *The American Spelling Book* and thus did not accrue royalties on most of the millions sold, and he had to borrow money to finance both the first and second editions of the *American Dictionary* so that they, in Pyles ' words, " did not pile up much of a profit " (1952 : 120). Still, the success of Webster ' s promotional efforts created one of the most successful textbooks of all time and made his name, in America at least, synonymous with the dictionary. Pyles offered the following summary assessment (1952 : 123):

It has been remarked that Webster may have taught us how to spell but taught us nothing else. With this it is difficult to agree. Webster was certainly one of the most influential commentators upon language who ever lived. More than any other single person, he shaped the course of American English, for he supplied us with the schoolmaster ' s authority which we needed for linguistic self-confidence. He was largely responsible for the dissemination in this country of an attitude toward language that prevails to this day, even among the rank and file of our people – an attitude which, while it is by no means exclusively American, is yet notably so.

Standard American English is Webster ' s legacy, but not primarily for the particular features of American spelling he advocated, but rather for the association of language with nationalism, uniformity, moral virtues, and authority, especially within the school setting.

The 1831 edition of *The American Spelling Book* had simply referred to " the most accurate rules of pronunciation, and the most general usage of speaking " (1831/1962 : 16). At the same time that this edition headed all of its pages with " An Easy Standard of Pronunciation, " its preface further asserted that, " A perfect standard of pronunciation, in a living language, is not to be expected; and when the best English dictionaries differ from each other ... where are we to seek for undisputed rules? And how can we arrive at perfect uniformity? " Webster and his revisers through numerous editions were interested in uniformity, authority, and the rules of English, even though they recognized variation in actual practice. It is interesting to note that grammar was not a large part of the system. The 1831 edition tells us that the abridged grammar originally included in the book had been omitted, along with the geographical tables, because " Geography and Grammar are sciences that require distinct treatises " and " It is believed to be more useful to confine this work to its proper objects, the teaching of the first elements of language, spelling and reading. " Authoritative treatment of grammar was not yet part of the American paradigm for elementary language teaching in these books.

The main content of the book is presented in numerous tables. Many of these consist of words deemed to belong to a " class " (e.g., one syllable, two syllables accented on the first, three syllables accented on the second, etc.), in which the spelling and syllabification of the words is accompanied by diacritical marks to indicate pronunciation. The earliest tables consist of single syllables, some of which are words in their own spelling (*h ē* , *sh ē*). Others are only syllables (*h ī* , *p ī*), considered valuable for later word formation. Many tables also contain example sentences, including very short ones in the early tables and more complex ones later. As the sentences get longer they begin to have useful content, such as " The world turns round in a day " or " The best paper is made of linen rags. " Moral lessons were also popular, such as " A rude girl will romp in the street " and " Bad boys love to rob the nests of birds, " or " I love the young lady that shows me how to read " and " The Holy Bible is the book of God. " Each sentence for a table tells its own story:

Strong drink will debase a man.
Hard shells incase clams and oysters.
Men inflate balloons with gas, which is lighter than common air.
Teachers like to see their pupils polite to each other.
Idle men often delay till to-morrow things that should be done to-day.
Good men obey the laws of God.

When sentences were introduced, they were explicitly religious and moral:

Lesson I
No man may put off the law of God:
My joy is in his law all day.
O may I not go in the way of sin!
Let me not go in the way of ill men.

Lesson II

A bad man is a foe to the law:
It is his joy to do ill.
All men go out of the way.
Who can say he has no sin?

Thus Webster and his revisers created Standard American English out of nationalism, and linked it explicitly with moral and religious teachings presented as reading instruction. The legacy in America of *The American Spelling Book* is an ideology of standard spelling and pronunciation, if not complete uniformity in either, as an expression of morality and patriotism.

It is now clear why an institutional language construct like Standard American English is not the same sort of thing as a natural language variety. The claim that there is a “ standard ” in the sense of a “ default ” variant for any linguistic feature is not compatible with the complex system of language in use. The only problem with the incorporation of Standard American English in the American educational system, beginning with Webster and continuing through the present day, is the unexamined assumption that Standard American English has an empirical basis in language in use. It does not. Standard American English is actually just another manifestation of a particular culture, amongst the many regional and social cultures in pluralistic American society (see [Chapter 12](#) for more information).

At the end of the National Period came the greatest disturbance ever for the American social experiment, the Civil War. The northern Union states opposed the practice of slavery, and eleven southern Confederate states (with two other states represented in the Confederate Congress) insisted on states ’ rights, really the continuance of slavery. The Confederate states had economic interests in plantations and cotton production that dominated their politics, although large numbers of their residents were small farmers in areas not well suited to plantation agriculture. Plantations were where large numbers of slaves were needed; small farmers often had no slaves. Opposition to slavery in the north had a long history beginning in the eighteenth century. The Underground Railroad (a means of escape from the South for African Americans) was founded in 1838, and Harriet Beecher Stowe ’ s anti-slavery novel *Uncle Tom ’ s Cabin* was published in 1852. During the four years of the war (1860 – 1865) as many as 750,000 soldiers died, about 50,000 alone at the Battle of Gettysburg (1863), and an uncounted number of civilians. The war ended in 1865 with General Robert E. Lee ’ s surrender, Lincoln ’ s assassination, and the passage of the Thirteenth Amendment to the Constitution which outlawed slavery. The confederate states were readmitted to the union between 1866 and 1870. Much of the fighting had occurred in the southern states so that the infrastructure of the South was destroyed and its way of life changed forever. Changed but not forgotten. To this day many Southerners look back to the genteel society of the mid-nineteenth-century South, and prefer to remember that gentility instead of the treatment at the time of African Americans. The South has remained a socially stigmatized region ever afterwards.

Summary

During the National Period America grew from coastal colonies into a large nation, and its population ended the period six times larger than when it began. Settlement patterns formed out of westward immigration from coastal port cities, and language features followed the people west. American English borrowed words from Native Americans and many European languages. Influences from other languages, however, were always subject to the operation of the complex system of speech. Noah Webster began the institutionalization of Standard American English that still obtains today.

Key Terms

American Spelling Book

density estimation

Inland North

Midland

multiple modal auxiliary verbs

Noah Webster

New England

North Midland

Northern

pidgin

plural verbal -s

South Midland

Southern

Standard English

Audio Samples

The following samples of the primary American regions were recorded in 1928 (available at www.cambridge.org/williamakretzschmar). Each is a recording of the Grip the Rat passage. Can you hear any differences?

a5.1 Inland Northern – 1928

a5.2 Midland – 1928

a5.3 Southern – 1928

Exercises

1. Try to rewrite the chapter ' s Anne Royal passage in modern colloquial English.
2. Look up the Mexican War (also called the Mexican-American War). How did it affect the territory of the United States? What do you think its consequences were for American English?
3. What do you think of *The American Spelling Book* as the most popular textbook of all time, given the passages mentioned in the chapter? Would it be permitted in schools today? Do you think it goes along with the American experience as a social experiment?

Computer Exercise

[Exercise App3.5 in Appendix 3](#) explores variation in individual communities, as discussed in the experiment about dialect words in this chapter.

Further Reading

Albert Marckwardt , *American English* (New York : Oxford University Press , 1958) ; Thomas Pyles , *Words and Ways of American English* (New York : Random House , 1952) . These are two earlier textbooks of American English, each notable in their own ways. Marckwardt ' s book was later revised and republished by Joey Dillard, which only diminished the value of the book. A more recent book by Walt Wolfram and Natalie Schilling , *American English: Dialects and Variation* , 3rd ed. (Oxford : Wiley-Blackwell , 2015) focuses on sociolinguistic aspects of American English.

James Milroy, " The Ideology of the Standard Language, " in Laura Wright , ed. *The Development of Standard English 1300-1800* (Cambridge : Cambridge University Press , 2000), 11 – 28 . Milroy ' s essay clearly describes how the idea of a standard arose and become entrenched in schools. His earlier book with Lesley Milroy , *Authority in Language: Investigating Standard English* , 3rd ed. (London : Routledge , 1998) , provides a longer account, especially including the " complaint tradition " in England.

6

Gilded Age to World War II (1866 - 1945)



In This Chapter

The industrialization of America created a Gilded Age of wealth and excess, at the same time as the Great Plains and West were settled and the population grew at a tremendous rate. Industrialization enlarged cities, which created new urban neighborhoods for new immigrants. The Great Depression caused a pause in this rapid growth, which again accelerated for World War II.

Timeline

1867

Purchase of Alaska

1870

Population 38,818,449; Standard Oil Company founded

1873

Twain and Warner, *The Gilded Age*

1876

Bell telephone, barbed wire invented

1880

Population 50,155,783

1885

Stanford University founded

1886

Statue of Liberty dedicated; Coca-Cola merchandised

1890

Population 62,947,714

1892

University of Chicago founded

1896

Edison introduces motion pictures in the United States

1899

Carnegie Steel Company organized

1900

Population 75,994,575

1903

Wright Brothers fly

1909

first mass produced Model T Ford

1910

Population 91,972,266; NAACP founded (African American organization)

1917

The United States enters World War I; emergence of Hollywood

1919

H. L. Mencken, *The American Language*

1920

Population 105,710,620; first commercial radio broadcast

1927

The Jazz Singer, "talking pictures"; Lindbergh flies New York to Paris

1929

Stock market crash: Great Depression

1930

Population 122,775,046; first supermarket

1939

Regular trans-Atlantic air service

1940

Population 131,669,275

1941

World War II (1941 – 1945)

After the terrible divisions of the Civil War, America was symbolically joined in 1869 by the driving of the Golden Spike at Promontory Summit, Utah, which connected the railway systems of the eastern and western states. Leland Stanford, who later founded

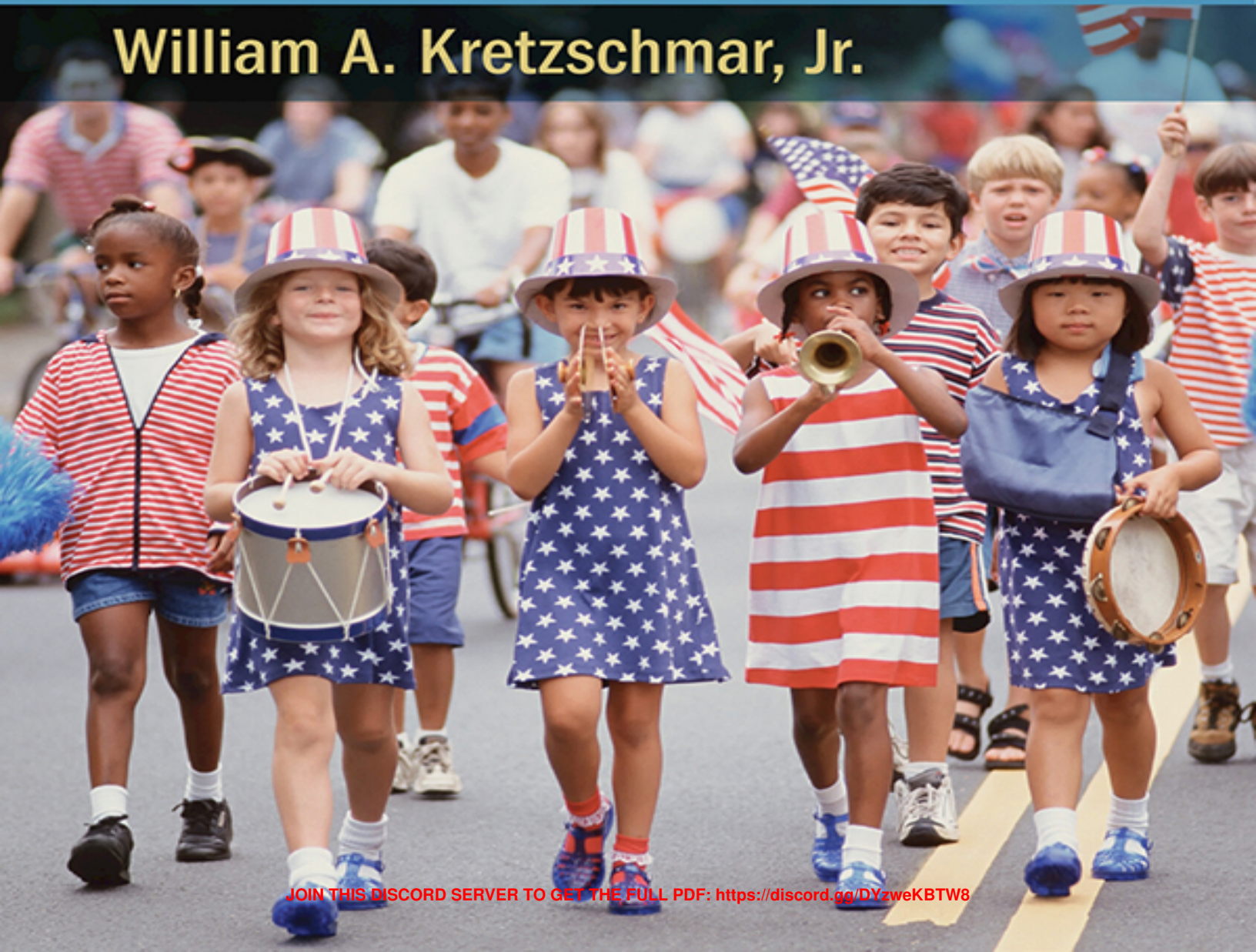
Stanford University (1885), drove the ceremonial spike. The whole event stands as an emblem of schizophrenic times in America: occupation of the full area of the original forty-eight states and acquisition of territories (Alaska, Hawaii) that would become the last two states, the advance of industry and technology, and parallel advance of higher education and culture, as against the importance of “gilded” ceremony, and the ruthlessness of robber barons out to acquire wealth and power. Near the beginning of this period, **Mark Twain** and co-author Charles Warner wrote the novel *The Gilded Age* ([1873](#)) to satirize the extremes of greed and corruption of the time, both in politics and industry. As they say, “if the shoe fits wear it,” and so Twain and Warner’s title has become the first part of the title of this chapter. If we take the **Great Depression** beginning in 1929 as the end of the Gilded Age, we can also see emerging what has been called “the American Century” of new involvement in world affairs, confirmed by America’s role in the second part of the title, World War II.

Robber Barons

Perhaps the first of the robber barons was Cornelius Vanderbilt (1794 – 1877) (see [Figure 6.1](#)). He made his fortune as a shipping magnate. He began his career as a ferry operator between Staten Island and Manhattan, and over the years came to dominate the new steamboat business around New York City owing to a combination of business ability, fiercely competitive prices, and accepting payments not to compete with rivals. He expanded to ocean-going steamships, and again in cutthroat fashion won a monopoly on the California steamship trade. He was later instrumental in the construction of railroads, eventually buying the New York Central Railroad (1867), which became one of the largest in America.

The Emergence and Development of American English

William A. Kretzschmar, Jr.



THE EMERGENCE AND DEVELOPMENT OF AMERICAN ENGLISH

William A. Kretzschmar, Jr.
University of Georgia



CAMBRIDGE
UNIVERSITY PRESS



Shaftesbury Road, Cambridge CB2 8EA, United Kingdom

One Liberty Plaza, 20th Floor, New York, NY 10006, USA

477 Williamstown Road, Port Melbourne, VIC 3207, Australia

314 – 321, 3rd Floor, Plot 3, Splendor Forum, Jasola District Centre, New Delhi – 110025, India

Cambridge University Press is part of Cambridge University Press & Assessment, a department of the University of Cambridge.

We share the University's mission to contribute to society through the pursuit of education, learning and research at the highest international levels of excellence.

www.cambridge.org

Information on this title: www.cambridge.org/9781009161213

DOI: [10.1017/9781009161220](https://doi.org/10.1017/9781009161220)

© William A. Kretzschmar, Jr. 2026

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 & Assessment.

When citing this work, please include a reference to the DOI [10.1017/9781009161220](https://doi.org/10.1017/9781009161220)

First published 2026

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

Library of Congress Cataloging-in-Publication Data

Names: Kretzschmar, William A., Jr., author.

Title: The emergence and development of American English / William A. Kretzschmar, Jr., University of Georgia.

Description: Cambridge ; New York, NY : Cambridge University Press, 2025. | Includes bibliographical references and index.

Identifiers: LCCN 2024057522 | ISBN 9781009161213 (hardback) | ISBN 9781009161237 (paperback) | ISBN 9781009161220 (ebook)

Subjects: LCSH: English language – United States – History.

Classification: LCC PE2809 .K74 2025 | DDC 427/.973 – dc23/eng/20241231

LC record available at <https://lcn.loc.gov/2024057522>

ISBN 978-1-009-16121-3 Hardback

ISBN 978-1-009-16123-7 Paperback

Additional resources for this publication at www.cambridge.org/williamakretzschmar

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

For EU product safety concerns, contact us at Calle de José Abascal, 56, 1º, 28003 Madrid, Spain, or email eugpsr@cambridge.org

Contents

[List of Figures](#)

[List of Tables](#)

[Acknowledgments](#)

[Introduction](#)

[1 The Idea of American English](#)

[American English as Language](#)

[American English as Culture](#)

[American English in Politics](#)

[" Spoken in the United States "](#)

[2 Emergence](#)

[Complex Systems](#)

[Evidence of Emergence](#)

[Consequences of Emergence](#)

[3 Old World Origins for American English](#)

[Ancient History](#)

[Origins of English](#)

[Great Vowel Shift](#)

[4 The Colonial Period \(1600 – 1800\)](#)

[Demographics](#)

[Pattern of Settlement](#)

[Eighteenth-Century Immigration](#)

[Crèvecoeur and the American Experience](#)

[Schneider ' s Postcolonial English](#)

[Examples of Colonial American English](#)

[5 The National Period \(up to the Civil War, 1800 – 1865\)](#)

[Settlement Patterns](#)

[An Experiment in the Spread of Dialect Words](#)

[Immigration and Language](#)

[Webster and Standard American English](#)

[6 Gilded Age to World War II \(1866 – 1945\)](#)

[Robber Barons](#)

[Demographics](#)

[The Great Depression](#)

[Common Language](#)

[Mencken and The American Language](#)

[Grip the Rat](#)

7 [The Information Age \(1945 – Present\)](#)

[America as a World Power](#)

[Information and Technology](#)

[Demographic Patterns](#)

[Language in Use](#)

8 [Regions and Localities](#)

[Traditional Dialect Patterns](#)

[More Recent Dialect Maps](#)

[Perceptions of Regional Dialects](#)

[The American South](#)

[Regional Differences in Frequency Profiles](#)

[Listening to Regional Voices](#)

9 [African American English](#)

[Race and Slavery](#)

[Demographics and Migration](#)

[Features of African American English](#)

[Academic Ideas about African American English](#)

[Language in Use](#)

10 [Social Differences in American English](#)

[Social Class](#)

[North American Sociolinguistics](#)

[Multidimensional Social Behavior](#)

[Roswell](#)

[Social Differences in the Complex System of Speech](#)

11 [Heritage Languages and American English](#)

[Ideas about Language Contact](#)

[Language Use across Generations](#)

[Language Learning](#)

[Heritage Languages in Communities](#)

12 [Standard American English](#)

[Mavens](#)

[Pronunciation](#)

[World English versus American English](#)

[Standards and Urbanization](#)

Appendix 1 [*Terms and Concepts for Studying the English Language: Expression of Words with Sounds*](#)

[*Words*](#)

[*Speech Sounds*](#)

Appendix 2 [*Terms and Concepts for Studying the English Language: Beyond Expression to Content*](#)

[*Words in Patterns*](#)

[*Patterns beyond Sentences*](#)

Appendix 3 [*The Linguistic Atlas Project and Excel: Working with Survey Data*](#)

[Linguistic Atlas Project \(LAP\)](#)

[LAMSAS](#)

[LAGS](#)

[Other Atlas Projects](#)

[Getting Started Online](#)

[Data Download Center](#)

[LICHEN](#)

[Tallies](#)

[Working with Spreadsheets](#)

[COUNTIF](#)

[VLOOKUP](#)

[Computer Exercises](#)

[Glossary](#)

[References](#)

[Index](#)

Additional resources for this publication available at www.cambridge.org/williamakretzschmar

Figures

- [1.1 The American states.](#)
- [1.2 American regions.](#)
- [1.3 Dennis Preston.](#)
- [1.4 North America.](#)
- [1.5 A schematic, three-dimensional representation to visualize Zelinsky ' s cultural systems.](#)
- [1.6 Cutting potatoes.](#)
- [2.1 The break in pool.](#)
- [2.2 A dragonfly.](#)
- [2.3 A-curve for *dragonfly* variants.](#)
- [2.4 A-curve for *dragonfly* variants, after removing plurals and inappropriate responses.](#)
- [2.5 *dragonfly* variants just for men, and just for women.](#)
- [2.6 *dragonfly* variants for regional groups of speakers.](#)
- [2.7 *dragonfly* variants for groups of speakers by age.](#)
- [2.8 Flexible and understandable.](#)
- [3.1 Indo-European tree of languages.](#)
- [3.2 Alsace and Germany.](#)
- [3.3 Early regions in Britain \(showing the modern borders for Scotland and Wales\).](#)
- [3.4 Phase 1 of the Great Vowel Shift.](#)
- [3.5 Phase 2 of the Great Vowel Shift.](#)
- [4.1 European settlement pattern near Leicester \(England\) in the Middle Ages.](#)
- [4.2 Settlement and transportation by 1800.](#)
- [5.1 Settlement pathways from the American East Coast.](#)
- [5.2 American Settlement by 1850.](#)
- [5.3 *cloudburst* in LAMSAS \(density estimation\).](#)
- [5.4 Hans Kurath.](#)
- [5.5 Noah Webster.](#)
- [5.6 *The American Spelling Book*.](#)
- [6.1 Cornelius Vanderbilt.](#)
- [6.2a Andrew Carnegie.](#)

- [6.2b Andrew Mellon.](#)
- [6.3a Leland Stanford.](#)
- [6.3b John D. Rockefeller.](#)
- [6.4 Russell Patterson \(1893 – 1977\), “ Where There ’ s Smoke There ’ s Fire, ” ca. 1920s.](#)
- [6.5 Settlement by 1890.](#)
- [7.1 United States population density \(2000\).](#)
- [7.2 Red and blue states as of 2020.](#)
- [7.3 Vaux survey, map for “ sandwich ” responses \(#64\).](#)
- [8.1 Kurath ’ s dialect map.](#)
- [8.2 Variants of *dragonfly*.](#)
- [8.3 Isoglosses.](#)
- [8.4 Hempl ’ s dialect map.](#)
- [8.5 Labov ’ s dialect map.](#)
- [8.6 The Northern Cities shift.](#)
- [8.7 The Southern shift.](#)
- [8.8 Raw Value Map for /ay/ before voiced consonants \(e.g. *bide* \) on Formant 2.](#)
- [8.9 Local Autocorrelation Map for /ay/ before voiced consonants on Formant 2.](#)
- [8.10 HCA Dendrogram based on Factors 1, 2, 3, and 4.](#)
- [8.11 Two perceptual maps.](#)
- [8.12 Percentage estimates of the South.](#)
- [8.13 Vowel system of a sample of Southern non-African-American men.](#)
- [8.14 A-curve of 6,214 examples of \[u\] from twenty-three Southern non-African-American men.](#)
- [8.15 A-curve for LAMSAS variants for *curdled milk* .](#)
- [8.16 A-curve for New York City names for *curdled milk* .](#)
- [8.17 A-curve for Philadelphia names for *curdled milk* .](#)
- [9.1 W. E. B. Du Bois.](#)
- [9.2 Race?](#)
- [9.3 Martin Luther King, Jr. at the Lincoln Memorial.](#)
- [9.4 Percentage of African Americans vs. all Americans by income class. Household distribution by income.](#)
- [9.5 Raven and Virginia McDavid.](#)
- [9.6 Lorenzo Dow Turner.](#)
- [9.7 John Baugh.](#)
- [9.8 John Rickford.](#)

- [9.9 The Southern shift.](#)
- [9.10 Atlanta African American Male vowel means vs. Kent and Read national means \(from the Atlanta Survey\).](#)
- [9.11 Atlanta African American Female vowel means vs. Kent and Read national means \(from the Atlanta Survey\).](#)
- [9.12 Roswell African American male front vowel means vs. Atlanta means.](#)
- [9.13 Roswell African American female front vowel means vs. Atlanta means.](#)
- [10.1 William Labov.](#)
- [10.2 Sali Tagliamonte.](#)
- [10.3 Class/Style model for -r in New York City \(redrawn from Labov 1972b\).](#)
- [10.4 *fog* overall in LAMSAS.](#)
- [10.5 *fog* for men \(765\) and women \(346\).](#)
- [10.6 *fog* for farmers \(545\), housekeepers \(265\), managers \(94\), and professionals \(52\).](#)
- [11.1 Native American Languages spoken in the United States.](#)
- [11.2 Joe Salmons.](#)
- [11.3 Carmen Fought.](#)
- [11.4 Separate balls, separate languages.](#)
- [11.5 Cake.](#)
- [11.6 Batter.](#)
- [11.7 Locative constructions among interviewers and learners.](#)
- [11.8 Levels of scale, domains of use.](#)
- [11.9 Levels of scale, domains of use, reorganized.](#)
- [11.10 Learning by self-organization.](#)
- [11.11 Type frequency, early vocabulary.](#)
- [12.1 William Safire.](#)
- [12.2 Bryan Garner.](#)
- [12.3 Antonin Scalia.](#)
- [App1.1 Places of articulation.](#)
- [App1.2 American English vowel system in F1/F2 space \(following Kent and Read 2002\).](#)
- [App1.3 \[i\] pronunciations in F1/F2 space, sixty-four DASS speakers.](#)
- [App1.4 Frequency profile of pronunciations of the \[i\] vowel, sixty-four DASS speakers.](#)
- [App1.5 Shaded cells for where sixty-four DASS speakers said the \[i\] vowel.](#)
- [App1.6 Vowel space for sixty-four DASS speakers, shown with ellipses.](#)
- [App3.1 Opening page of the LAP website.](#)
- [App3.2 LAP projects.](#)

- [App3.3](#) [Data Download Center: LAMSAS link.](#)
- [App3.4](#) [Spreadsheet of LAMSAS speakers \(first twenty rows\).](#)
- [App3.5](#) [LAMSAS field book page.](#)
- [App3.6](#) [Portion of spreadsheet from LAMSAS page 4.](#)
- [App3.7](#) [Portion of audio spreadsheet for LAGS020.](#)
- [App3.8](#) [LICHEN opening screen.](#)
- [App3.9](#) [LICHEN map of LAP speakers.](#)
- [App3.10](#) [LICHEN search tab.](#)
- [App3.11](#) [LICHEN search for LAGS middle-aged, highly educated, upper class women.](#)
- [App3.12](#) [LICHEN display for LAGS 024.](#)
- [App3.13](#) [Map of LAGS middle-aged, highly educated, upper class women.](#)
- [App3.14](#) [LICHEN items tab.](#)
- [App3.15](#) [Dragon fly chart \(partial\).](#)
- [App3.16](#) [Map for *skeeter hawk* .](#)
- [App3.17](#) [Excel file for *dragon fly* tally, after CSV download \(partial\).](#)
- [App3.18](#) [Adjusted Excel tally with chart inserted \(partial\).](#)
- [App3.19](#) [Excel with LAMSAS page 60 A file open \(partial\).](#)
- [App3.20](#) [Sorted LAMSAS page 60 A file \(partial\).](#)
- [App3.21](#) [New sheet for responses to line 4 of page 60 A file \(partial\).](#)
- [App3.22](#) [Results of deleting duplicates in Column L \(partial\).](#)
- [App3.23](#) [Tally for dragon fly item \(partial\).](#)
- [App3.24](#) [Dragon fly tally with chart inserted.](#)
- [App3.25](#) [VLOOKUP results for Sex added to the data file for dragon fly \(partial\).](#)
- [App3.26](#) [VLOOKUP results for Sex and Age added to the data file for dragon fly \(partial\).](#)

Tables

[2.1 Top ten names for *dragonfly*](#)

[2.2 All the names for *dragonfly*](#)

[5.1 Distribution of words by number of cities](#)

[5.2 Distribution of variants by city](#)

[6.1 Differences between American and British English](#)

[7.1 Twelve “ Southern ” features for Roswell residents](#)

[8.1 Variants for “ extra bed on the floor ”](#)

[8.2 Variants for “ cornbread ”](#)

[8.3 Top LAMSAS variants for *curdled milk*](#)

[8.4 New York City names for *curdled milk*](#)

[8.5 Philadelphia names for *curdled milk*](#)

[9.1 When the plantation accent developed \(following Bailey 1997\)](#)

[10.1 Variants for *fog* overall in LAMSAS](#)

[10.2a *fog* for men \(765\)](#)

[10.2b *fog* for women \(346\)](#)

[10.3a *fog* for farmers](#)

[10.3b *fog* for housekeepers](#)

[10.3c *fog* for managers](#)

[10.3d *fog* for professionals](#)

[11.1 L-vocalization in the Australasian region \(adapted from Table 2, Horvath and Horvath 2003: 147\)](#)

[11.2 No nouns \(one child at age two, twenty-five most frequent words\) \(adapted from Tomasello 2003: 82\)](#)

[12.1 Standard American English Vowels \(adapted from Kurath and McDavid 1961: 6 with IPA symbols used in Upton and Kretzschmar 2017\)](#)

[App1.1 IPA symbols for English sounds](#)

[App2.1 Sentence patterns](#)

[App3.1 Community/Age Word Table](#)

[App3.2 Community Word Table](#)

[App3.3 Community/Job Word Table](#)

[App3.4 Community/Type Word Table](#)

[App3.5 Community/Race Word Table](#)

App3.6 [Community/Sex Word Table](#)

App3.7 [Community/Education Word Table](#)

Acknowledgments

My first acknowledgment is to my students, who have put up with my efforts to teach them in a different way and who have made many suggestions for how to do it better since my work on complex systems has begun to appear. But those were students in my History of the English Language classes: I have been unable to teach American English for nearly a decade because of my need to cover other courses at my university. Then, in Autumn 2019 I had the opportunity to teach American English again as Fulbright Distinguished Chair at Adam Mickiewicz University in Poznań, Poland. In Autumn 2020 I did teach American English again at my own university, though remotely during the pandemic so students had much to cope with.

My greatest debt is to my teachers and friends, particularly those who have participated with me in the American Dialect Society. Raven and Virginia McDavid gave me my first opportunity to study American English, and what a chance that was! Lee Pederson, another of Raven's students with whom I met regularly for lunch over two decades, greatly influenced my thought about American English – and provided the timelines in [Chapters 3](#) through [7](#). I have had fewer chances to connect with another of Raven's students, Roger Shuy, but I value greatly the chances I have had to talk with and learn from him. Finally, Richard Bailey was a teacher I could have had but never did when I was an undergraduate at Michigan, and who became a good friend only later in life. He encouraged me by exclaiming to others that my current research was “exactly what we needed,” and his own writing in a series of books provided an example for detailed, urbane, and witty research. I have been fortunate to live my academic life with such people, and I am – as complexity science would say – a product of our interactions.

I am very grateful for numerous good suggestions from anonymous readers of the manuscript for Cambridge University Press. Any remaining errors are of course my own.

Introduction



This book is about American English, a textbook meant to be a relatively brief, highly teachable volume designed for undergraduate courses in the area. *The Emergence and Development of American English* (*EDAE*) is meant to be an all-in-one volume, and so it includes introductory treatment of basic terms and concepts for language study in the first two Appendices. *EDAE* takes a historical perspective in that it offers a set of chapters that bring readers from the origins of English up to the present day in America. It also has chapters that flesh out the modern situation for American English: regions, social groups including a separate chapter on African American English, heritage languages, and Standard American English. The book is meant for undergraduates who lack training in English language studies or training in linguistics but of course can also be used by people who have more training. *EDAE* is designed for global readers, with an awareness throughout of the global reach of American English. There is a strong demand for new approaches suitable for a wide range of faculty with some training in language studies who want more comprehensive modern coverage. These teachers will benefit from the structure of chapters, modeled after the structure in the Cambridge Introductions to the English Language series (CIEL). This book is a companion for *The Emergence and Development of English* in CIEL, a brief but general coverage of history of the English language, and *EDAE* provides more audio and computer opportunities for teachers and students.

The key challenge for students and instructors in *EDAE* will be the incorporation of the science of complex systems into the mainstream coverage of American English. The book pursues a narrative thread throughout the chapters on “ emergence. ” Emergence is the key term from the study of complex systems, a new (literally only a few decades old) science currently useful in physics, genetics, evolutionary biology, and economics, but also a perfect fit for the humanities. The science of complexity describes how massive numbers of random interactions can give rise to order, self-organization of regularities that “ emerge ” from the interactions without specific causes. The drive of twentieth-century linguistics to make the study of language more scientific by means of grammatical and exceptionless “ rules ” has never been as successful as linguists might have hoped. The reason is that speech, language in use, is a complex system, as demonstrated from first principles and copious evidence in the author ’ s *The Linguistics of Speech* (2009) and *Language and Complex Systems* (2015), foundational books in the field. *Exploring Linguistic Science* (Burkette and Kretzschmar 2018) is a complete textbook meant to offer an easy introduction to complexity science and linguistics. Emergence in American English is not once-and-done; it continues in every place where Americans talk or write, in every locality and in every kind of conversation or text. Thus, in this book, while the text will apply the common terms and concepts of contemporary language study and linguistics, the story of the language will be about continual emergence and re-emergence of lexical, phonological, grammatical, and discourse forms of English out of the interaction of its speakers and the contingencies of their history. Complex systems are adaptable and so this method predicts linguistic change. The central aim of *EDAE* is to produce a compelling account of American English that does not leave out the people in favor of paradigms and rules, and that casts the important facts of the language as regularities that exist within a matrix of variation, subject to continual change. Of course, this book may be taught without engaging with complex systems if an instructor wishes to do so.

The subject of complex systems is explained briefly and non-technically in [Chapter 2](#) ; additional aspects of complex systems will be introduced in later chapters, but nowhere are students and their instructors subjected to heavily mathematical or otherwise technical discussion. Complex systems can describe the process by which we perceive our language behavior to be associated with our communities and practices; thus, the study of speech as a complex system addresses language as an aspect of culture that emerges from human interaction. The key point about the nonlinear A-curve and the property of scaling (see [Chapter 2](#)), signs that a complex system has operated in a speech community, is that these are understandable on a conceptual basis. Moreover, the book cannot replace normal linguistic terminology because the complex systems approach leads to discussion of emergence, and exactly what has emerged in the

language must be described in linguistic terms, introduced in basic terms and concepts in [Appendix 1](#) and [Appendix 2](#) for those who have not encountered them. These discussions are quite compressed, and so they provide a framework for teachers to explain using their own backgrounds, not a comprehensive resource about linguistics. A more thorough and detailed approach to complex systems in relation to linguistic terms and concepts can be found in *Exploring Linguistic Science* (Burkette and Kretzschmar 2018).

The point to emphasize about *EDAE* is that the theme of emergence will not throw the baby out with the bath water. This book is unique in its historical approach, and covers the same linguistic ground as other American English textbooks, but through emergence it does a much better job than other texts of talking about natural and inevitable change in the language, and about the fact that English is different in different places and social situations even while we can still talk about it as one language. Emergence provides an improved quantitative model for sociolinguistic analysis of language in communities (see [Chapter 10](#)), so that sociolinguists might reconsider some findings in a new light. Emergence also offers historical linguists an improved way to think about evident variation in the historical record. Complex systems does not replace sociolinguistics and historical linguistics, but instead stands beside them with the chance of improving our understanding of social and historical change. Complexity science tells us what *change* really means in quantitative terms, rather than the qualitative view of structural change often applied in linguistics. While some students (and teachers) may think originally that *EDAE* as a title refers to the progressive march of English towards its contemporary institutional standard, they will learn that the complex system of speech offers instead a richer description of our language in which the institutional standard is only a part.

[Appendix 3](#) is different in that it explains how to use data from the Linguistic Atlas Project (LAP). LAP is the oldest and largest survey research project on American English. It has collected information about Americans' everyday words, pronunciations, and grammatical choices in thousands of interviews across the country. Most of these interviews are concentrated east of the Mississippi River, in America's area of highest population density. The LAP website provides a great deal of this data, in text, audio, and images. The website has different parts, a Data Download Center and the LICHEN user interface, to provide the data to users. [Appendix 3](#) describes access to these sections. It also provides detailed instructions about using Excel (or similar programs) to access all the data provided in spreadsheet form. These instructions will also enable readers to create their own spreadsheets and analyze them, based on their experience with LAP data. Students can test their skills on a series of exercises, enough that instructors can assign one exercise per chapter as students progress through the full text. The Computer Exercises in [Appendix 3](#) take students from introductory exploration of the LAP website in the earlier exercises, to the opportunity to do their own research on data from the site. While each individual student's findings may be unpredictable, use of the structured exercises by the author in classes over many years has shown that, in a class of students, their overall findings always go along with the teaching in the text. [Appendix 3](#) thus does for linguistic analysis what is meant by the old saying, "if you give someone a fish you feed them today, but if you teach someone to fish you feed them for a lifetime." [Appendix 3](#) looks forward to students and teachers doing their own research through instruction about spreadsheets based on LAP. My own experience teaching American English with LAP data is that students really enjoy the chance to look at primary data, and to make their own maps and tables.

Each chapter in *EDAE* is provided with Exercises (according to the CIEL pattern). The volume is also provided with online audio supplements (available at www.cambridge.org/williamakretzschmar) in addition to its instruction in the use of the online LAP resource. A special section at the end of every chapter offers students a chance to listen to relevant short audio passages. As referenced in the text of the volume, readers and teachers can access many audio samples from Jess Bessinger and Diane Bornstein, *A History of the English Language* (1973), from Cabell Greet's 1928 recordings, from a 1967 NCTE album that illustrates American speech, and from various LAP projects, in the Cambridge University Press online companion to this volume.

1

The Idea of American English



In This Chapter

American English is not a simple thing to define. The United States is a big place, with many different regions. American English is certainly different from British English, and yet it is hard to set boundaries on the differences. American culture also plays a role in American English, and some say that politics does as well. In the end, the multitude of voices of Americans of whatever belief and whatever region come together to emerge as what people around the world recognize as American English.

Mitford M. Mathews started his book called *The Beginnings of American English* with the following statement ([1931](#) : vii):

The expression ‘ American English ’ is used in this work in its generally accepted sense of ‘ that variety of English which is spoken in the United States of America. ’

This definition can also serve to launch the present book. Mathews ’ definition contains two key components:

- the idea that American English is a “ variety of English ”
- the idea that American English is “ spoken in the United States ”

Pretty obvious, you might think, perhaps not worth saying at all – until you start to think more closely about these ideas. Just what should we think of “ a variety ” when it has to do with a language, especially the American variety of English? What makes how some English speakers talk “ American ” (as something recognizably different from other speakers of English around the world)? How did it happen that a language like English came to have different varieties, especially the American variety? And what should we think about the relationship between the speech of a place and the place itself? Do English-speaking people from elsewhere around the world automatically begin to speak American English as soon as they arrive within the physical borders of the United States, or is there more to it than that? Unraveling these questions constitutes the purpose of this book.

The United States of America is a very large place. A convenient way to talk about America is to refer to the individual states, as on the following map ([Figure 1.1](#)).

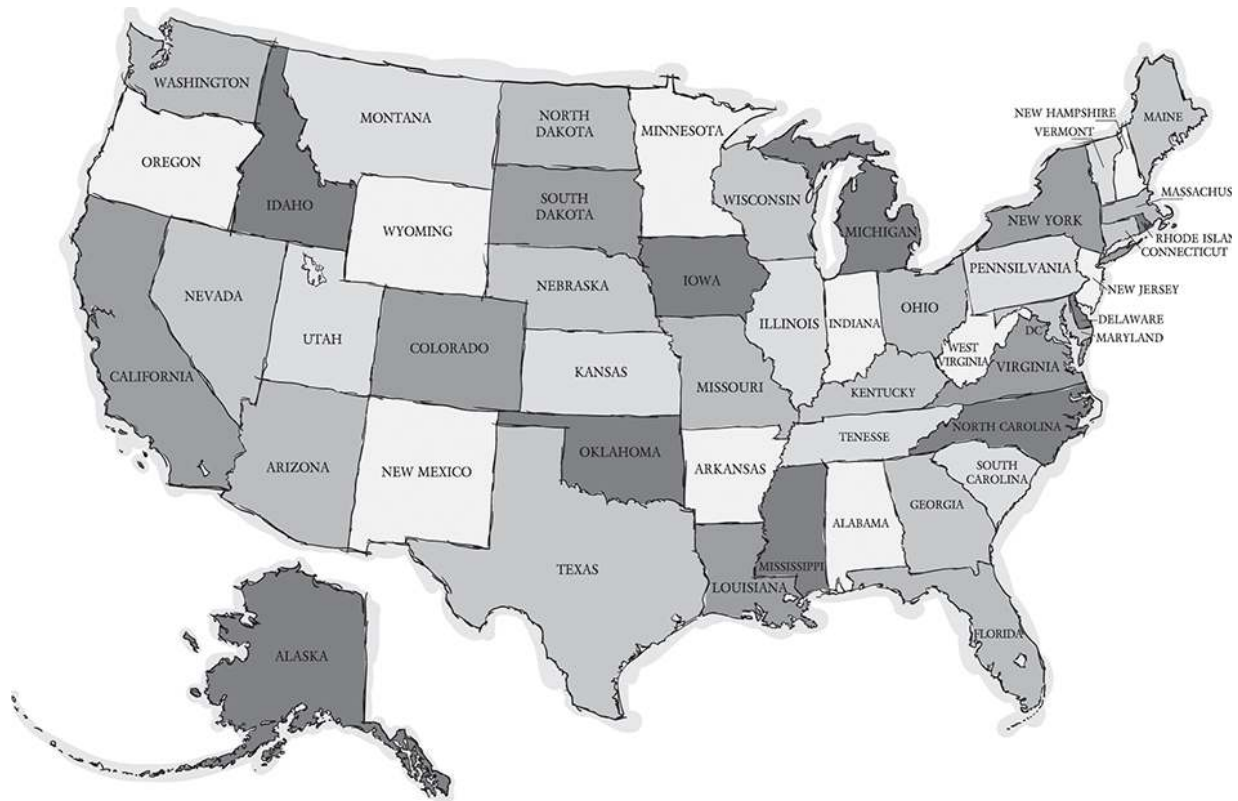


Figure 1.1 The American states.

Source: Jobalou/Getty Images.

There are also names for **regions**, collections of states. New England is the group of states east and north of the state of New York. Everybody talks about the “ South, ” but there is no general agreement about which states belong to it. One definition is east of the Mississippi River (the very large river that runs from north to south, along the western borders of Illinois, Kentucky, Tennessee and Mississippi), and from Tennessee and North Carolina South to the Gulf of Mexico, as in [Figure 1.2](#) . Others would include the old Confederate states (from Civil War days in the 1860s) of Virginia, Kentucky, Arkansas, Louisiana, and Texas. Still others might include Oklahoma. The “ Midwest ” is the same: some people would say it includes Ohio, Indiana, Illinois, Michigan, and Wisconsin, while others would also include Minnesota, Iowa, and Missouri across the Mississippi, and still others might include the Dakotas, Nebraska, and Kansas, as in [Figure 1.2](#) .

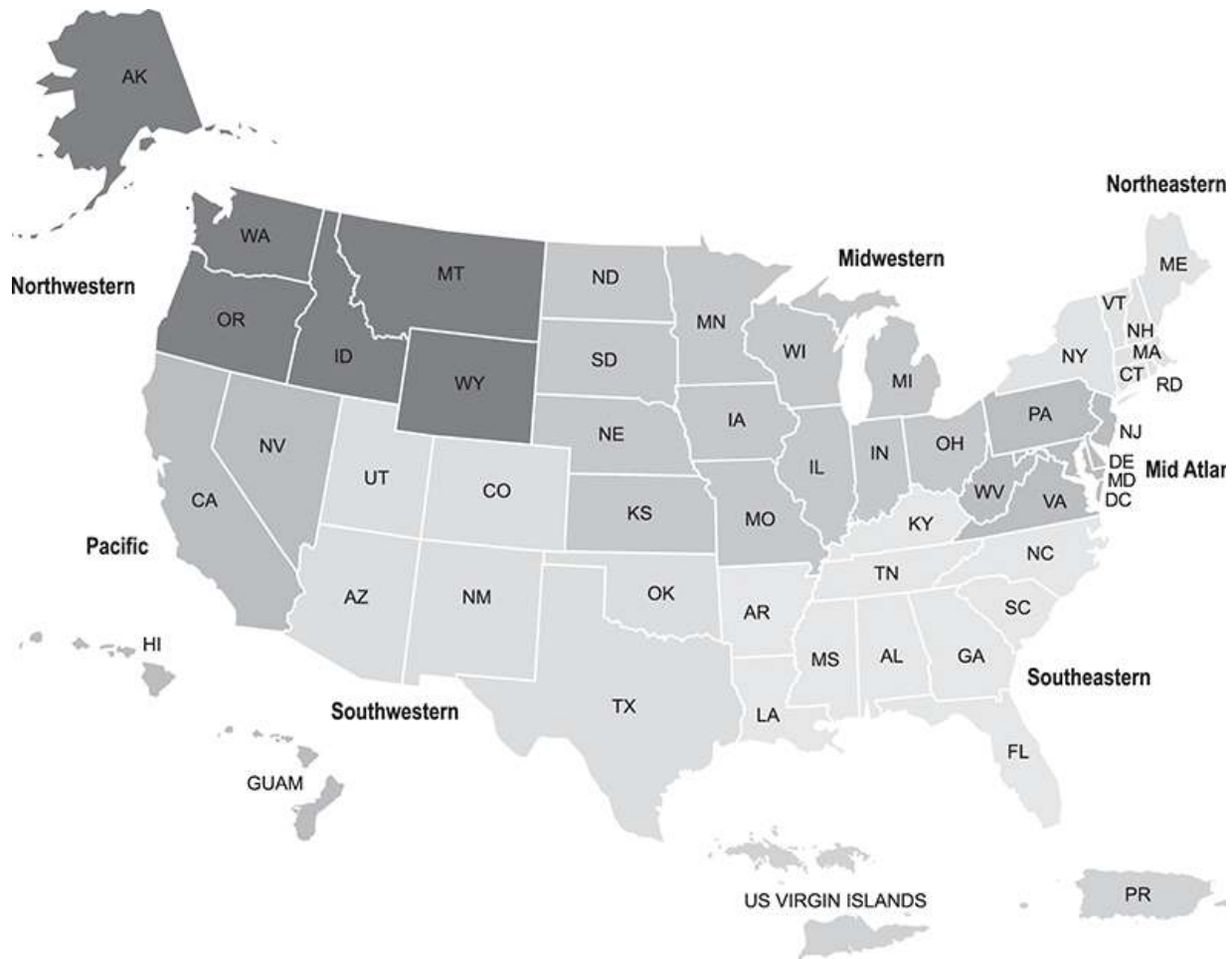


Figure 1.2 American regions.

Source: Getty Images.

The “ West ” might be all the states west of the Mississippi, but other people might start it with Montana, Wyoming, and Colorado, where the Rocky Mountains divide the continent. [Figure 1.2](#) puts California and Nevada in a Pacific region. Texas is often considered to be in a category by itself, as is the state of California. Other regional names, like “ Southwest, ” and “ Northwest ” (as in [Figure 1.2](#)) and “ Great Plains ” (as separate from the “ Midwest ”) are in common use, but again without precise definitions of what states belong to them. American geography across the states played an important role in settlement patterns, where rivers were conduits for travel and mountains blocked the way. In the rest of this book the names of states and prominent land features will be named – if you are not familiar with the places and features, they are easy to look up online.

American English as Language

The reason that a great many people are satisfied with their own impressions of American English, instead of wanting to make a study of it, is that their impressions are so clear. American English has a certain concrete reality for them, based on their experience with Americans speaking English in comparison with non-Americans speaking English. Citizens of the United States know that their own talk is not the same as the English used by somebody from another English-speaking country, say English in Britain – even if they have never traveled far from home. Since we hear people ’ s pronunciation all the while that they are talking, it is only natural that this characteristic of speech, often called **accent** , becomes identified with the behavior of the people doing the talking.

The term **Americanism** was coined in 1781 by John Witherspoon to describe “ use of phrases or terms, or a construction of sentences, even among persons of rank and education, different from the use of the same terms or phrases, or the construction of similar sentences, in Great Britain ” (Mathews [1931](#) : 17). This term seems perfectly appropriate to most people as the designation for words and phrases of American origin, but since the English language first appeared in Britain it may seem strange to some people to consider a word or phrase to be a **Britishism** . John Algeo, the foremost student of Britishisms, defines them as expressions with a form or use that originated in Britain after 1776 or one that is more characteristic of British than of American English ([2006](#)). Algeo distinguishes a more common kind of Britishisms, those that appear in American sources but in material by or about the British, from a more subtle variety, those that appear in American sources in native contexts. Among the latter, Algeo ([2006](#)) lists

<i>gaol</i> (Am <i>jail</i>)	<i>skinhead</i>
<i>now do you?</i> (a “ tag question ”)	<i>loo</i> (Am <i>toilet</i>)
<i>the occasional</i> (Am <i>an occasional</i>)	<i>on average</i> (Am <i>on the average</i>)
<i>Filofax</i> (Am <i>portfolio</i>)	<i>flat</i> (Am <i>apartment</i>)
<i>infra dig</i> (Am <i>undignified</i>)	<i>roundabout</i> (Am <i>traffic circle</i>)
<i>value for money</i> (Am <i>good deal</i>)	<i>flog</i> (Am <i>try to sell</i>)

While the terms “ Americanism ” and “ Britishism ” commonly refer to the origins of words, Americanisms and Britishisms are used in both countries, just at different rates. The words *flat* and *apartment* , for instance, are both used in both Britain and America, but *flat* is the more common word in Britain while in America people more commonly say *apartment* . As we shall see in later chapters, frequency differences like this (as opposed to all or nothing usage) are characteristic of how groups of people use language.

While many English speakers would find it difficult to cite particular differences in usage between, say, British and American English, most of them could also offer an imitation – more or less effective – of the speech of a British or American English speaker. Imitation here is not flattery but a declaration of differences: even people who give very bad imitations believe that there is a difference and try to enact it.

Dennis Preston ([Figure 1.3](#)) has studied what he has called **folk linguistics** or **perceptual dialectology** ([1989](#) , [1993](#) ; Preston and Niedzielski [2000](#)). He has found that people are not slow to form perceptions of how other people speak, and that the perceptions are bound up with how these folk (by which Preston means nothing bad, just that his subjects are not trained to analyze speech) see themselves as English speakers. We can accept individual people for themselves without abandoning our stereotypes. And we can maintain the stereotypes even if we cannot readily make a list of actual differences between them, whether in pronunciation or lexicon or syntax. This, then, is what most people mean by “ a variety of English. ” For most people a **variety of a language** is constituted by the perception of a difference.

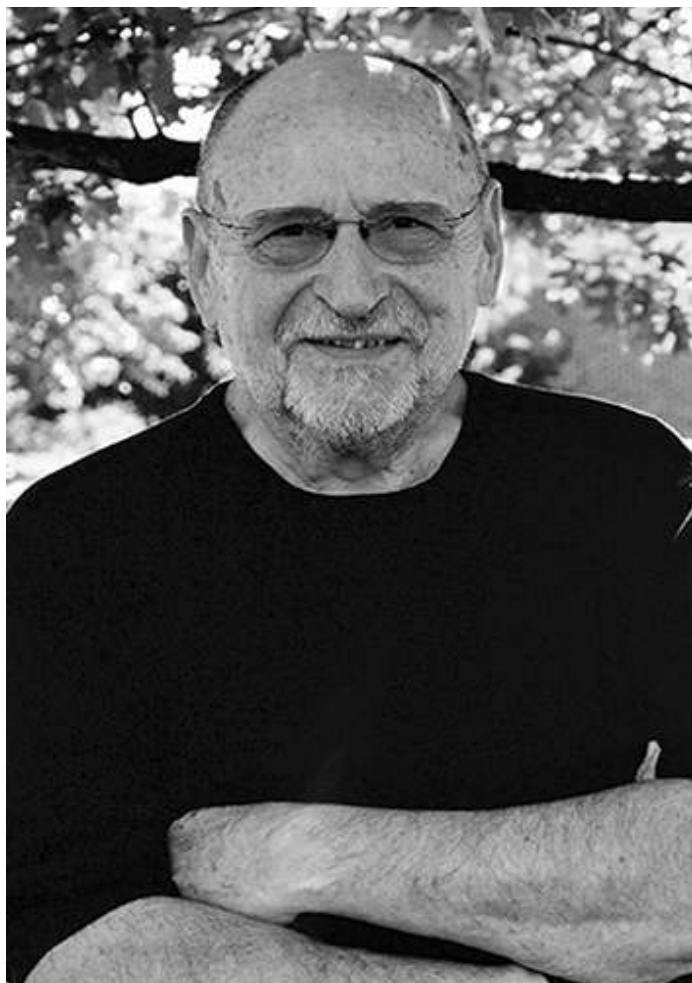


Figure 1.3 Dennis Preston.

Source: <https://linguistics.as.uky.edu/users/dpr235> . Courtesy of Dennis R. Preston.

The boundaries of such a variety are usually convenient designations of linguistic borders, rather than accurate assessments of linguistic evidence. It is very convenient, for instance, to use national boundaries as definitions for varieties of languages, like British English and American English. The problem remains even at the national level, as we can see from Canadian English. For British English speakers, Canadian English often gets lumped together with American English – rightly so, because Canada is also part of North America (see [Figure 1.4](#)), and the United States need not, though in practice it usually does, grab the label “ American ” all for itself.



Figure 1.4 North America.

Source: bergserg/Getty Images.

Besides the facts of geography, however, non-North-Americans perceive the pronunciation of Canadians to be essentially similar to that of US speakers. One prominent difference between American and Canadian English is the vowel sound in words like *out* and *knife*, so-called **Canadian raising**. The vowel sound in such words begins with the vowel found in *hot* for Americans, but Canadians begin it with a vowel more like that in *love*; the vowel for both Americans and Canadians ends with an *oo* or an *ee* sound, respectively (see [Appendix 1](#) for more accurate phonetic descriptions). Americans typically hear Canadian *out* as *oot*, but do not seem to notice as much that words like *knife* are pronounced differently by Canadians. The Canadian pronunciation may now be spreading in the Northern United States. This and many other differences are discussed in Charles Boberg's *The English Language in Canada* (2010).

We now can see that the idea that American English is "spoken in the United States" is problematic because what is "American" is defined less by the national border than it is by people's perception and point of view. The idea of a variety of a language is hopelessly entangled in perceptions, unless and until we can conduct a rigorous study of the parts of a language variety, of the features that speakers of the variety commonly use. Features of pronunciation, lexicon, syntax, and discourse (for more information on these, see [Appendix 1](#) and [Appendix 2](#)) all come together to form the whole of a language or a variety. Since we cannot take into consideration all of the actual conversations that people have, instead we have to concentrate on the features of language that are constantly repeated to form those conversations, as we derive them from examples of speech. The modern study of linguistics accepts four different ways for studying such features of a language, the names of which have already been introduced: **pronunciation**, **lexicon**, **syntax**, and **discourse**. As for pronunciation, each language and variety has a range of sounds that are commonly used in the expression of its words. There is also an inventory of words, a lexicon, that belongs to every language and variety. Each language and variety has characteristic patterns, syntax, with which its words can be arranged in sentences. Finally, each language and variety has characteristic habits of arrangement of words and sentences to form meaningful discourse. Pronunciation, lexicon, syntax, and discourse, then, tell us where to look for particular features that may be produced differently in different varieties. As we will see in [Chapter 2](#), the features of pronunciation, lexicon, syntax, and discourse in different varieties are matters of "more and less," not "on and off," so we will always be looking for tendencies, not sure indicators of a difference.

That said, given an assertion of the existence of a language variety on perceptual grounds, we should examine evidence from the speech of people who are said to speak it so that we can discover what we can about their pronunciation, lexical, syntactic, and discourse features. We will not be interested solely in features that we may find strange, different from what we consider to be normal in our own language variety, but instead we will want to build our knowledge of features in order to know more about the range of sounds, the lexicon, and the characteristic patterns of the language variety under study. Linguists have developed an array of technical terms and concepts for the study of linguistic features, as well as methods for collection and analysis of linguistic evidence (as in [Appendix 1](#) and [Appendix 2](#)).

American English as Culture

Even when we know a good deal about the linguistic features of a variety, we still must account for how people come to have their perceptions of the variety. Our perceptions of speech are often bound up with our perceptions of behavior, and this clue can lead us to consider how our speech is bound up with the whole range of social behavior, often known as **culture**. The cultural geographer Wilbur Zelinsky proposed a three-dimensional plan that could be used as a template for the analysis of cultural systems (1992: 72; [Figure 1.5](#) is a schematic cube for illustration). In his graphic representation of the plan it takes a moment to locate "Language": it is one of the **mentifacts** down near a bottom corner, just one slice of a much bigger cultural matrix, grouped together with religion, magic, the arts, and folklore. Mentifacts, which Zelinsky describes as "cerebral, psychological, or attitudinal in character" are just one of the "intrinsic components" that compose one dimension of his plan, say the righthand side of the cube in [Figure 1.5](#). **Artifacts** have to do with people's livelihood within their culture, from material things like tools or food, to means of production like farming or industrial activity, to more abstract concerns like technology or transportation systems. **Sociofacts** are elements of interpersonal relations, like kinship or politics. These three aspects of culture, taken together, constitute one way of describing the entire range of human behavior in a culture, an entire side of the cube. Besides these intrinsic components, Zelinsky also proposes dimensions for location, the "spatial dimension" (say, the

left-hand side of the cube), and for “ subcultural components ” (say, the top side of the cube), which correspond to different occupations or ideologies such as (again in Zelinsky ’ s words, [1992](#) : 72) “ males and females, farmers, ditchdiggers, Presbyterians, mountain climbers, convicts, Freemasons, bowlers, and drug addicts. ” There is, then, according to Zelinsky, practically an unlimited number of ways to divide and to describe cultural activity. The important point about this set of cultural divisions is that it is comprehensive – any aspect of culture can be described as either an artifact, a sociofact, or a mentifact, whether in some particular location or over the entire geographic extent of a culture, and whether limited to a subculture or widely diffused throughout a culture. The role of language within such a comprehensive model is as just one slice of the whole, and this tells us that language is necessarily bound up with other mentifacts like religion, the arts, and folklore, as well as with kinship and politics (sociofacts), and with people ’ s livelihood, what they eat and make and create (artifacts). Moreover, language is also bound to vary according to subculture (occupations, religions, sexual orientation, and many others) and according to the different locations or regions in which the intrinsic components and subcultural components are happening. From a model like this one, we can understand that we are all bound to perceive a language variety as the particular and recognizable form of speech that is associated with speakers who have particular cultural characteristics, whether in mentifacts, sociofacts, and artifacts, or in their subculture, or in their spatial situation – or in all of these at once!

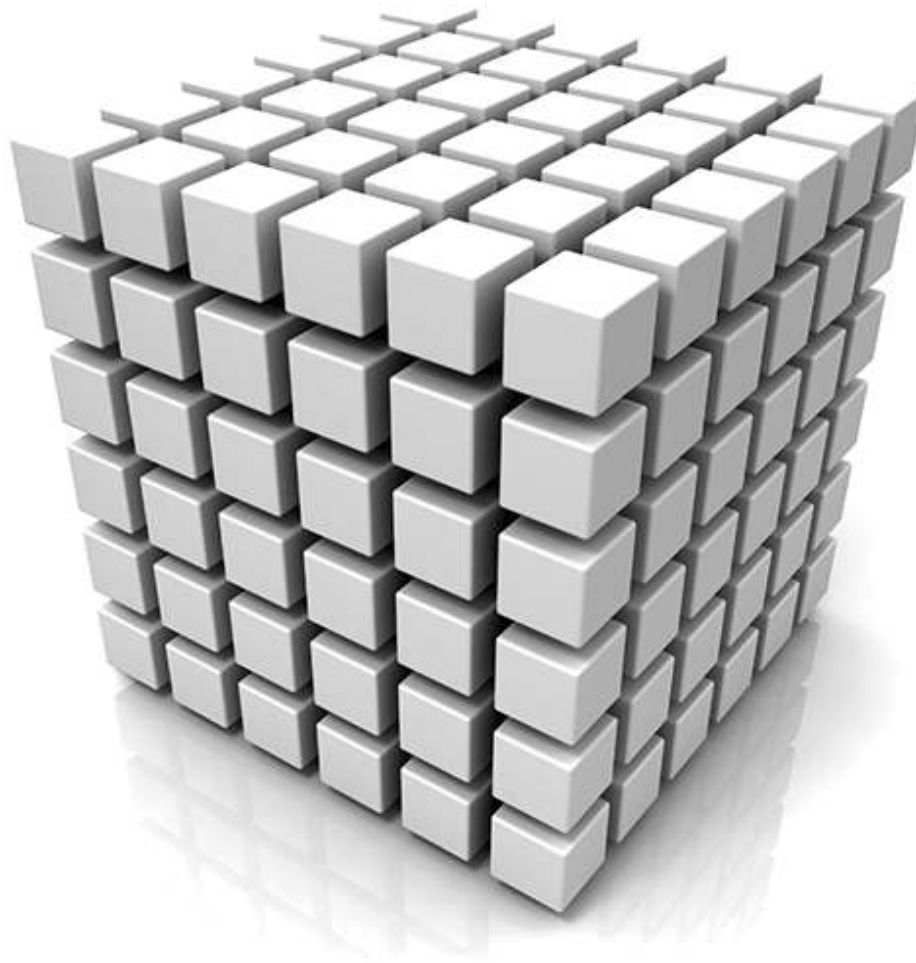


Figure 1.5 A schematic, three-dimensional representation to visualize Zelinsky ’ s cultural systems (Zelinsky [1992](#) : 73).

[Figure 1.5 long description.](#)

Source: Kuklev/Getty Images.

Zelinsky ’ s cube represents one entire culture, but the culture is not represented by the surface of the cube: Zelinsky proposes that we slice it in three different ways, by intrinsic components, by geographical groupings of people, and by social groupings of people. That

is to say, for any given culture region in the spatial dimension, it is possible to consider the whole range of artifacts, sociofacts, and mentifacts. So, too, for any given culture region and particular set of artifacts, sociofacts, and mentifacts, it is possible to observe variation in the dimension reserved for subcultural groups. On the cube in [Figure 1.5](#), you could choose to work on a whole side, or one layer of a side, or even on a single one of the smaller cubes that together make up the whole. Before this all begins to seem too complicated, it may be worthwhile to think of Zelinsky's model in terms of something very common and mundane: how you might want to cut up a potato in the kitchen. You can make slices in one direction, thin ones for potato chips (*crisps* in Britain) or thicker ones for cottage fries and potato casseroles. Alternatively, you can make slices in two directions and end up with pieces that are longer than they are wide, french fries, skinny like McDonalds or fat like the ones in a steakhouse. You can also cut the potato in three different directions and end up with diced pieces, big ones for stew or smaller ones for soup. The more times you cut, the more sides of each piece of potato you expose, and this creates different possibilities for the cook (see [Figure 1.6](#)).



Figure 1.6 Cutting potatoes.

Source: MarkAndrewPhotography/Getty Images.

To return to Zelinsky's cultural model, the more slices of culture you examine, the more sides of cultural activity you can reveal. More is not necessarily better – the slicing needs to match the intended result, whether for potatoes or culture. Potatoes cut up for stew will not make good potato chips! Besides the number of sides, you also have to think about how thick to make the slices. You can cut thicker or thinner, whether to make stew or soup with the potato, or to strive for more or less precision for cultural analysis. With either potatoes or culture, the more slices you want, the more work you have to do and, just as for the number of directions to cut, slicing thick or thin may be good for different purposes. Finally, it must be said that you can boil a potato whole, or mash together a whole collection of potatoes. So, too, it is possible to make gross generalizations about a culture or even a group of cultures when the occasion calls for it. Zelinsky's multidimensional model allows us to see that there is more than one way to examine culture, and that all of those different dimensions are still there waiting for us even if we choose not to cut in all the directions right away.

From Zelinsky's perspective, the cultural geography of the United States, language is a relatively small component of the whole; for the purposes of this book language takes center stage – but not the whole stage. When we choose language as our slice of American culture to examine, we cannot forget that American English is an integral component of American culture; the language of its speakers both helps to form the culture and is also formed by it. Cultural geographers, Zelinsky says, find it “more efficient and profitable ... to extract major subsystems from the total culture, then treat them independently of other aspects of the larger system, holding other things constant” ([1992](#): 74). For our purposes here, when we focus on language we are not obligated also to treat religion and folklore in depth, or to treat every culture region or subcultural component in detail, but neither should we forget that they are relevant. Indeed, because language is just one slice of the culture at large, we cannot expect to describe American English adequately without some discussion of different aspects of American culture. American English is not just “spoken in the United States,” but rather is spoken by people who are involved with American culture. When we focus on American English, we are not obligated to treat the English of other places (i.e., of other culture regions like Britain or Canada) in any depth, although they remain relevant, and we should be aware of the possibilities within American English for subsidiary cultural divisions and subcultural influences, like geographical regions, or occupational or ideological differences. As soon as we grant that language and culture are inextricably bound together, we have an answer for how to approach people's perceptions, and we can no longer be satisfied just with features of pronunciation, lexicon, syntax, and discourse as the sole target for our study. Zelinsky concludes that ([1992](#): 74)

It is only by taking into account the relevant multiplicity of components and dimensions at the particular scale chosen for observation, and also the fact that they are changing through time, that a realistic understanding of a given culture may be reached.

We can agree with him, and say that a realistic understanding of American English can only be achieved by locating its linguistic features in the context of the other dimensions of American culture.

American English in Politics

As we shall see in chapters to come, the United States began as a political (some might also say, religious) experiment. In the decades and centuries that followed, waves of immigrants brought into the new American ideal as it was enacted for them in North America by people who already lived in the country. Even today, many Americans subscribe to an American political ideal – about half the country to one version of it (the one currently expressed by Republicans) and the other half of the country to another, quite different version of it (currently expressed by Democrats). A surprisingly small number of Americans find themselves to be independent of these two points of view, free thinkers who might vote either way in an election, and this segment of the population often decides the direction of the government in Washington DC. This kind of split in American politics has always been present, whether between Royalists and Revolutionaries at the end of the eighteenth century, or between upholders of States Rights (in the South) and Abolitionists (in the North) in the nineteenth century. America has never spoken with a single voice. And that is an American hallmark: freedom of opinion, freedom of choice, whether as regards religion or for any of many other social options. At the same time, Americans have generally thought of themselves as different from the common ideas of the Old Country (whichever Old Country that was). Property rights have been a prime issue, since in America one can own one's own land while in the Old Country a few people might own the land while others worked it, or in other places nobody owned the land and strongmen struggled for control of it. The American Constitution and Bill of Rights began to codify this American difference into rules of law, and later Amendments to the Constitution and other laws have explored finer points. Neither the Republicans nor the Democrats today maintain the true and original ideal – no matter what they say! – since the American ideal has had to change over the centuries to fit emerging conditions in North America and the world at large.

Politics per se has little to do with the American variety of English except for the fact that different political groups have their own characteristics in speech, as in the terms for their preferred political issues. While some politicians may claim that American English is what holds American society together, actually the opposite is true. Yes, American English belongs to Americans, but it is the conversations and writings of Americans that create that relationship. There is no magical effect of an American standard language that makes Americans (as we shall see in chapters to come), but instead a bottom-up, grassroots process in which the interactions of people engaged in all of the different aspects of their daily lives (think Zelinsky's cube) produce what we can recognize as the American variety of English. Just as American politicians require the votes of their constituents to take office, American English requires the communication of people in America to be recognizable for itself among world varieties of English.

“ Spoken in the United States ”

To go back now to the second part of Mitford Mathews' definition, American English is a variety of English that is “ spoken in the United States. ” By this he meant much more than a mere coincidence of speech and geographical borders. Mathews' special topic was the developmental view of American English ([1931](#) : vii):

This form of English had its beginnings when the colonists and settlers began to adopt new terms and develop new senses of words, and, still later, it became more definite when the vernaculars of the various groups began to coalesce into one recognized form of language somewhat distinct from the English of the mother country.

We can observe in this statement different components in the separation of American English from British English. Mathews notes that features of the lexicon (and we may extend what he says to pronunciation, syntax, and discourse as well) are subject to a historical process. There were various groups that initiated new uses of words, and in time these originally separate groups came to “ coalesce ” to form a new, larger cultural entity – American culture. Following Zelinsky, we can understand Mathews' various groups of people originally to constitute different cultural (i.e., geographical) or subcultural (i.e., social) groups within English culture. In time, these originally separate groups came to share enough characteristics, whether in use of words or in the breakdown of previous geographical or

social barriers, so that they might be considered to form a new collective American cultural group that could be considered on its own terms as separate from the original English culture. Mathews does not mean by this that the identity of the original groups was necessarily lost, only that the groups came to participate in the identity of a larger American culture. Thus it makes sense to consider the “ beginnings ” of American English, and to consider that the characteristics of American English will necessarily be different at different moments in time, as American culture emerges, both develops and changes, over time.

In some ways the term “ American English ” is like mashed potatoes in our earlier metaphor: it groups together a large number of things to make a gross generalization. It is a valid generalization, certainly a useful one in discussions of World English, but mashing is not the only way to cook potatoes. This book is called *The Emergence and Development of American English* in order to emphasize that American English is not “ once and done, ” but that it continues to emerge and develop over time and across the culture. American speakers do not all speak alike. Americans come from different places across the wide expanse of the continent, they belong to subcultural groups too numerous to count, and they are free to hold many different beliefs and to lead their lives as they think best. Such pluralism and such freedom are undoubtedly the hallmark of American culture and the American experience, so it just seems wrong to name a book so that readers might get the idea that American English is something homogenous and exclusive, that there is some single way of speaking that all Americans must have, or else somehow be less than American. *The Emergence and Development of American English* instead emphasizes the inclusive quality of American English, that the multitude of voices of Americans of whatever belief and whatever region come together to emerge as what people around the world recognize as American English. This is the idea of American English to be explored in the chapters to come.

Summary

American English comes from a place, the United States, but that does not mean that all Americans talk the same way. Americans have somewhat different accents, lexicon, syntax, and discourse from place to place and from group to group. Still, American English can be recognized as its own variety of the language in comparison to other varieties of English around the world.

Key Terms

accent

Americanism

artifacts

Briticism

Canadian raising

culture

discourse

folk linguistics

lexicon

mentifacts

perceptual dialectology

pronunciation

regions

sociofacts

syntax

variety of a language

Audio Samples

In the online companion to this book (available at www.cambridge.org/williamakretzschmar), you can listen to audio samples that illustrate the state of the language. For this chapter you can hear three speakers from Roswell, Georgia. You will be able to hear that they talk differently, even though they all come from the same town just north of Atlanta (a big city known as an air travel hub and as the central place of the New South).

a1.1 Uptown-downtown in Roswell

a1.2 Civil War Story

a1.3 Baseball

Exercises

1. What regions can you name in the United States? Do your ideas go along with [Figure 1.2](#) , or would you put different states in the named regions? Or would you make other regions entirely, say one for New York City?
2. If our sense of a variety comes from our perception of a difference in how people use language, can you think of other ways in which our perception of differences gives us ideas? What about regions? What about kinds of foods? Styles of dress? Architectural designs?
3. Zelinsky ' s model of culture looks like a cube, in three dimensions. Can you think of anything he left out of the subdivisions of his cube (spatial, subcultural, intrinsic components)? Do you think that his multidimensional model, that allows you to slice and dice culture as you like, is a good representation of culture, or do you think it ' s harder than he says to take aspects of culture apart?

Computer Exercises

Computer exercises in [Appendix 3](#) are progressive, in that each exercise is intended to address a new skill or topic. They are not necessarily linked to the content of each chapter, although many of the exercises do parallel the content of the chapter. [Appendix 3](#) is the place that explains how to access data from the Linguistic Atlas Project website, in order to search, sort, and map it. In a classroom setting each individual user may get somewhat different results from examining the online data, so that it will be useful to discuss together what all the users found in order to understand the bigger picture. This, of course, is how science works, by adding together many observations to make a general point.

For [Chapter 1](#) it would be appropriate for the reader to do Exercise App3.1, which asks users to make maps online for features with different frequencies. The task is a good way to start using the website.

Further Reading

Preston , Dennis . 1989 . *Perceptual Dialectology: Nonlinguists ' Views of Areal Linguistics* . Dordrecht : Foris . " Folk Dialectology , " in *American Dialect Research* , edited by Dennis Preston . Amsterdam/Philadelphia : John Benjamins , 1993 . (with Nancy Niedzielski) *Folk Linguistics* . Berlin : de Gruyter , 2000 .

Preston has reinvigorated the idea that we should pay attention to what people *think* about language, not just how they say things differently. In particular, he has asked people where “ correct ” English is most likely to be found in America, and where the English in America is most “ pleasant. ” The answers are quite different! And Preston has found that people have very different ideas about where regional dialects can be found, even if many people do name the same general areas (like the “ South ”).

Zelinsky , Wilbur . 1992 . *The Cultural Geography of the United States: A Revised Edition* . Englewood Cliffs, New Jersey : Prentice Hall .

First published in 1973, Zelinsky ’ s classic brief textbook of cultural geography both outlines the field and comments on American culture. Part Three contains Zelinsky ’ s rethinking after twenty years of many of his original ideas, with some generally pessimistic comments on developments in American culture. Readers may or may not agree with the later comments, but will find no clearer presentation of the structures and patterns of American culture.

Videos: A number of video productions attempt to explore American English, among them *Do You Speak American?* (narrated by Robert MacNeil. New York: WNET, 2005) and *American Tongues* (Center for New American Media, 1988). YouTube also offers numerous short videos about American English. As a journalist, MacNeil sometimes prefers good TV to accurate reporting, as in the segment in which he looks for – and finds! – Shakespeare ’ s English in America.

2

Emergence



In This Chapter

The new science of complex systems explains why Zelinsky ' s cube is a good model of culture. It works well with economic markets – and also language in use. We can see the evidence that a complex system has operated in American English by looking at evidence from the Linguistic Atlas Project. Linguistic variants all show the same patterns of distribution, both overall in a population and in subset populations. These frequency profiles provide a challenge to traditional ways of thinking about language with grammars and dictionaries.

When we begin to make slices of Zelinsky ' s cube in order to investigate American English in all of its different spatial (geographical) and subcultural (social) aspects over time, we need to have a scientific model that supports such work. The best available model is called **complexity science** , or **complex systems** . The word “ complexity ” does not just mean ‘ complicated ’ but instead refers to the emergence of stable patterns out of the interactions of a great many different participants. Complexity science is still “ science, ” on a par with what most of us think of as science, but it works in a different domain from what many physical and natural scientists study. Aristotle gave us the basic idea of what science should be, when he advocated regular, systematic observation of the world around us. The most familiar domain of science today is **Newtonian Mechanics** . In this mode of analysis, the scientist looks for cause and effect relationships as individual elements interact with each other. You can think of planets at the large scale, and billiard balls at a smaller scale. The trick when you play pool is to strike the cue ball in such a way that it hits another ball and makes it move how you want it to, say into the corner pocket. In the modern physical and biological sciences, this emphasis on cause and effect has been carried further to what is known as **reductionism** . That is, scientists in the reductionist domain look for smaller and smaller constituents, under the idea that if you understand things at the lowest level of scale, you will better understand all the levels of scale. Complexity science, on the other hand, does not try just to reduce anything to basic principles but instead asks the scientist to observe every part of the whole for its own characteristics. Complex systems analysis can reach every slice of Zelinsky ' s cube, whether the cube as a whole or any small cultural segment. The status of different scales is not necessarily produced by one root cause. From the point of view of complexity science, we need to observe slices and scales individually instead of assuming that they all share essentially the same characteristics.

Complex Systems

Complexity science is a different domain for systematic observation and analysis. When we consider many interacting elements, not just one thing acting upon another thing, you might think that it would be possible to predict the behavior of the system by measuring what each of the individual parts does. The classic formulation of this problem is measuring the position, mass, and velocity of objects, in order to predict what they will do in relation to each other. Unfortunately, this analysis will not work. Henri Poincaré proved in the late nineteenth century that there is an infinite number of solutions even for the **three-body problem** , just three interacting objects. This means that we cannot use cause and effect to predict the behavior of a collection of many interacting parts – we know that individual interactions have causes and effects but we just cannot use that knowledge to predict what the system as a whole will do or even what any

individual element will do. This also means that we cannot use reductionism, because our measurement of the position, mass, and velocity of a single element cannot tell us what the whole set of elements will do. We cannot look for the smallest parts of a system and use them to understand the whole.

You might think again of a pool table for an example. The first shot of a game of pool is the “break,” that is, directing the cue ball against a triangular configuration of the other balls (see [Figure 2.1](#)). Most of us will strike the cue ball hard against the first ball in the triangle, and we cannot predict where all the balls will go – we hope one goes in a pocket so that we can keep our turn, and one often does, but we just do not know if that will happen.

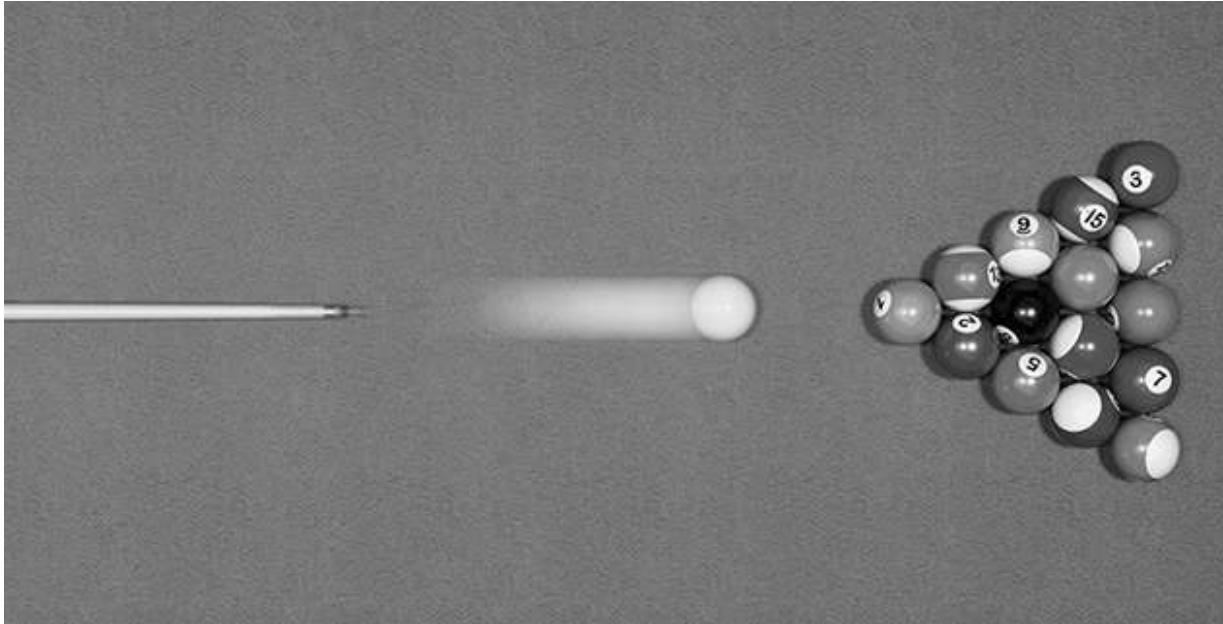


Figure 2.1 The break in pool.

Source: mevans/Getty Images.

Professional pool players have strategies for the break, say, trying for the smallest possible dispersion of the balls so that their opponent will have a more difficult shot. They do this by putting as little energy into the break as possible, but even then, the professionals cannot calculate where all the balls will actually end up. The break, therefore, is a good example of a complex physical system, one in which the behavior of each of many interacting elements is just not predictable. In biological and human systems, all of the balls, all of the elements in the complex system, are in constant motion affecting each other. We are all cue balls, making our own breaks.

The beginning of thinking about complex systems can be traced to Glasgow and to Adam Smith, who wrote about the famous **invisible hand**. In 1776 he wrote that a man of business

intends only his own gain, and he is in this, as in many other cases, led by an invisible hand to promote an end which was no part of his intention. Nor is it always the worse for the society that it was not part of it. By pursuing his own interest he frequently promotes that of the society more effectually than when he really intends to promote it.

Adam Smith was talking about the emergence of economic markets that satisfy the needs of society, not by the design (intelligent or otherwise) of some creator, but through the invisible hand of **self-organization** of activities that were motivated by self-interest, not society's interest. The fact that Smith spoke of some sort of “hand” showed that he believed the world to be a causal place, where an effect, like a market, must have a cause. Today, however, we should focus not on the hand but on his word “invisible,” because self-organization requires no causal hand. Complex systems have no simple causes for the effects that emerge from them. Rather, a complex system works through a process of interaction among a large number of components, as the process must cope with the contingencies of the environment in which the individual components are interacting. Cause and effect as in Newtonian Mechanics is a good explanation

for many aspects of the world around us, just not for everything. For circumstances that have many interacting components, like buyers and sellers or billiard balls in a game of pool, we need to let go of our assumptions about cause and effect and replace them with the idea of self-organization that leads to the emergence of patterns. Language is one of those circumstances.

First let us consider what happens in a complex system for it to produce self-organized results like an economic market. For any complex system to operate, we must have the random interaction of a large number of **components**. This interaction constitutes **activity**, which is essential to the operation of the system, for a complex system dies if the activity stops. So, for example, there is no longer any American market for domestic chestnuts because all of the trees died out and nobody can buy and sell the nuts. As the interactions continue the components affect each other in what might be called an **exchange** of information, which leads to **reinforcement** of behaviors among the components, and thus to the **emergence** of stable patterns in the complex system, all without any central control. That is, as people buy and sell products, the prices they pay are affected by their knowledge of what other people are paying, and over time a stable market price emerges where not everybody is paying the same price but prices in general are predictable. All of these things happen in relation to **contingency**, to local circumstances, so that complex systems are able to react to circumstances, to change over time as they need to. In Adam Smith's economic market the components are the things being bought and sold: bread, beer, pins, cloth, and everything else we use and trade. People are **agents**, in that they facilitate the process of the complex system, in economic markets by doing the buying and selling.

Let us think about a particular example of a complex system in action, say the market in apples, where the components are apples in all their different varieties. The activity is all the sales of quantities of apples, and for each sale there is information, such as the source and the size and the variety of the apples and the price they sold for. As the agents exchange this information, they reinforce their buying and selling behavior by setting prices. Some apples are plentiful in the market (like Delicious apples in America, or Cox apples in Britain) and the price may emerge at a low level; some apples may be the current favorite variety (like Honeycrisp apples in the United States, a relatively new variety) and a higher price may emerge for them. Over time, the prices will be relatively stable but will change according to contingency: if there was late freezing weather in Michigan, where many Honeycrisp apples are grown, the price will emerge at a higher level because the supply is lower. Indeed, the price of Honeycrisp apples will go up as soon as the agents hear about the freezing weather because they expect the supply will be lower at harvest: information is more than just the facts available at the moment.

This was a feature of a famous Wall Street movie starring Eddie Murphy and Dan Aykroyd called *Trading Places* (1983), where Murphy and Aykroyd manipulated the market for orange juice by getting advance information about a crop forecast. Thus we can have futures markets and all sorts of other specialty markets in which human agents buy and sell, and in so doing create a market for different commodities or services.

Let us think now about language as a complex system. This is not how we have all been taught to think about language. All through primary and secondary school, our teachers always told us about the grammar of our language, rules that we should follow and violate only at our peril. Sometimes our teachers told us about dictionaries, and many of us supplemented that teaching by playing the game *Scrabble*, where we used letter tiles to make words and where the dictionary was the authority that told us the legal words in the language. Grammatical rules and lists of words in the dictionary provided structure for our language. And that is how all of us think of it, language as a structured entity, where we can decide what is grammatical or not according to the **syntagmatic structure** of the language, and where we know where to find the list of legal words, the **paradigmatic structure** of the language (you can see more about these structures in [Appendix 2](#)).

These structures are not the place to start when we think about language as a complex system. Instead, let us consider that people just use whatever experience they have in order to talk with each other. People are talkers. A person is not the same thing as a language: some people can use their experience to talk in two or more languages. Indeed, all of us do that even if we do not realize it: we all use somewhat different language in all of the different language interactions that we have, spoken or written. Our conversations with family members have different words and different grammar than the conversations we have at work. Conversations we have with children have different words and grammar than conversations we have with doctors, lawyers, and other professionals, and we all know what to do to talk with children, if not always with professionals. The words and grammar are not entirely different in these various conversations and situations for writing; it is just more or less likely that the talker or writer would use particular features in a particular situation. We probably would not talk about "syntagmatic structure" and "paradigmatic structure" in a family setting, but they occur in the previous paragraph for the very good reason that readers of this book can be expected to be comfortable with those words – if only after a look at [Appendix 2](#)! Each of us speaks a somewhat different language in all of the settings for speech and writing that we encounter, based on our

experiences with such settings. We may not name these differences in our language by the same names we use for national differences, like American English or British English (or English as opposed to Spanish or Chinese), but nonetheless we can recognize the differences.

All of that happens because of the complex system of language. We speakers and writers are agents, not the same as any language but users of language, in the same way that buyers and sellers are agents, not money themselves but users of money. The components in the complex system are all of the possible variant realizations of linguistic features, different word and grammar choices we use for children and professionals, for engineers and linguists. The activity in the system consists of all of our conversations, and as a more limited case, all of our writing. The exchange of information is not the same as sharing the meaningful content of what we say and write (which is information in a different sense), but instead the implicit comparison of the use of different linguistic variants, different ways of articulating the same meaning, by different agents in different situations. We listen to *how* people say things, and see *how* they write things, not just understand what they mean. **Feedback** from exchange of information leads to reinforcement, so speakers and writers are more likely to use particular variants in future occurrences of particular circumstances for speech. Human agents can think about and choose what linguistic variants to use, but that does not change the fact that we make choices in relation to the system, usually without thinking too much about them. Emergence, the order that emerges in speech, consists of the configuration of components, whether words, pronunciations, or grammatical constructions, that come to occur in any of the circumstances in which we actually communicate. As for other complex systems, all of these are conditioned by contingency and so emergent patterns can change over time. The process operating in complex systems just explains better what we already knew: we tend to talk like the people nearby, either spatially or socially near, and we tend to use the same linguistic tools that others do when we are writing or saying the same kind of thing.

How we use the information from our emergent patterns to manage our talk is not precise and rule-based, or based on categories. Our brains are composed of neurons, and all they can do is fire or not fire. We do not have linguistic categories in our minds, as early notions of cognitive linguistics had it. Instead, we just have firing patterns of all the interconnected neurons that come to correspond to our experience, this because the neurons can become habituated to repeated situations (see [Chapter 11](#)). John Miller illustrates the inexactness of the process in the paragraph below (Miller [2015](#) : 23), after he has told us that letters on a page “ emerge ” in our perception from numerous small printed dots:

the letters, when placed near one another, take on new properties and meaning, and ultimately result in the emergence of words.

Such emergence is so strong that it persists even if we scramble the letter between each word ' s start and end, that is, such ecregmnece is so stnorg that it pessitrs eevn if we sabcmrlre the lltteres betewen ecah word ' s satrt and end.

We do not see the dots, we see letters. We still see words even if they are not spelled exactly right – and when you think about it, how else could we proofread anything. Our minds are not like computers that rely on exact matches of text strings in searching and sorting data. We know, and computers do not know except for the limited case of spell checkers, what word was meant when it appears with an odd spelling – and we all get frustrated with some of the spelling changes our cell phones make when we are writing texts! We have some latitude in how we put stimuli together to make language, whether when we see letter shapes and word spellings, or when we hear pronunciations and understand words from those. As users of language, we are always reaching for the best fit of what we hear or see. Sometimes we do fail to put things together in the same way that our conversational partner has meant them, and these situations are often memorable for us, often quite funny because of the unanticipated broken expectations.

Evidence of Emergence

Let us look at an example of how complex systems affect what words we say. Here is a list of the top ten different names that people used, in a mid-twentieth-century survey of 1,162 people from the American Eastern States, for the insect with two sets of wings that flies in damp areas and eats mosquitos ([Figure 2.2](#)) – what many people today might call a *dragonfly* (see [Table 2.1](#)). All of this data, and much more like it, is freely available at www.lap.uga.edu ([Appendix 3](#) explains how to use it).



Figure 2.2 A dragonfly.

Source: Ernst Himmelsbach/500px/Getty Images.

Table 2.1 Top ten names for *dragonfly*

Name	Number of uses
snake doctor	536
snake feeder	413
mosquito hawk	360
darning needle	294
dragonfly	196
skeeter hawk	175
devil ' s darning needle	158
spindle	23
snake waiter	19
devil ' s horse	13

The people in the survey used lots of different words, and they did not use one word most of the time with some rare creative names. It may be surprising that the word many people think of first, *dragonfly* , was only in fifth place in the list of ten words, when we arrange the list by how often the 1162 people said it. *Snake doctor* was first for this survey, followed by *snake feeder*, *mosquito hawk*, and *darning needle*. The survey shows the same results for all questionnaire items: there is always more variation in words than anybody might expect. Here below is the whole list of names for a dragonfly (see [Table 2.2](#) . Content warning: the table contains a taboo racial slur.

It will be distressing enough to readers that I have chosen not to spell it in full.). Some of the entries are simple plurals of other entries (like *snake doctors* as well as *snake doctor*). A few of the names might actually be for other kinds of insects, but we can trust the field workers for the survey to do a good job of putting the right name down in the right place. Still, we can see that there are far more than just ten names for a dragonfly.

Table 2.2 All the names for *dragonfly*

a

Name	Number of uses	Name	Number of uses
snake doctor	536	donnel feathers	2
snake feeder	413	dragon fly	2
mosquito hawk	360	drum hawk	2
darning needle	294	galley nipper	2
dragonfly	196	galli nippers	2
skeeter hawk	175	gally nippers	2
devil's darning needle	158	gnat bug	2
mosquito hawks	89	gnat catchers	2
snake doctors	77	jar fly	2
dragonflies	42	johnny crowhorse	2
snake feeders	35	knit needle	2
darning needles	28	needles	2
spindle	23	partridge	2
snake waiter	19	praying mantis	2
skeeter hawks	17	saltpeter fly	2
devil's darning needles	14	snake bugs	2
devil's horse	13	snake charmer	2
mosquito	12	snake cure	2
devil's riding horse	8	snake doctor fly	2
mosquitoes	8	snake eaters	2
devil horse	6	snake feed	2
devil's needle	6	snake fly	2
snake servant	6	snake leaders	2
skeeters	5	snake peters	2
gnat hawk	4	snake skeeter	2
gnats	4	snake weeder	2
June bug	4	snake worm	2
mosquitos	4	stinging bee	2
needle	4	bedbug	1
snake flies	4	big mosquito	1
snake guarder	4	big mosquitoes	1
snake master	4	bull bats	1
snake spindle	4	bull haver	1
galli nipper	3	chulabama	1
girl nipper	3	covered up her ears	1
skeeter	3	dobson fly	1
bottlefly	2	dragon flies	1
busy bug	2	flea	1
darning bug	2	flies	1
darning fly	2	gadfly	1
devil riding horse	2	gally nipper	1
devil's bug	2	girlie nipper	1
devils' horse	2	girlie nippers	1
devil's horses	2	granddaddies	1
devil's knitting needle	2	guinea fowl	1
devil's needles	2	harmony birds	1
humming bird	1	schlange heeder	1

[Table 2.2 long description.](#)

b

Name	Number of uses	Name	Number of uses
humming birds	1	sew up your ears	1
July flies	1	sew up your eyes	1
July fly	1	shite poke	1
June bugs	1	sing-gaily	1
Katydid	1	snake tender	1
locust	1	snake tenders	1
mosquito hood	1	snake waiters	1
n*****s	1	spider	1
n*****s call them	1	spidle	1
quail	1	spinners	1
sand flies	1	they catch skeeter	1
sand fly gnat	1	yard flies	1
schlange geeder	1		

[Table 2.2b long description.](#)

Besides the common terms at the top of the list, we see that there are lots of names that only occur once (forty-five of them) or twice (thirty-eight of them). There are, in fact, 119 different entries in the list! If we take out the thirty plural forms, we still have seventy-nine different names. If we take out some entries that we think might be names of other insects or otherwise inappropriate answers, call it fifteen more entries, we still have sixty-four different names. This number is wildly higher than anybody might have thought from their own personal experience.

If we chart all the different names, sorted by frequency, the survey always shows us the same picture (see [Figure 2.3](#)).

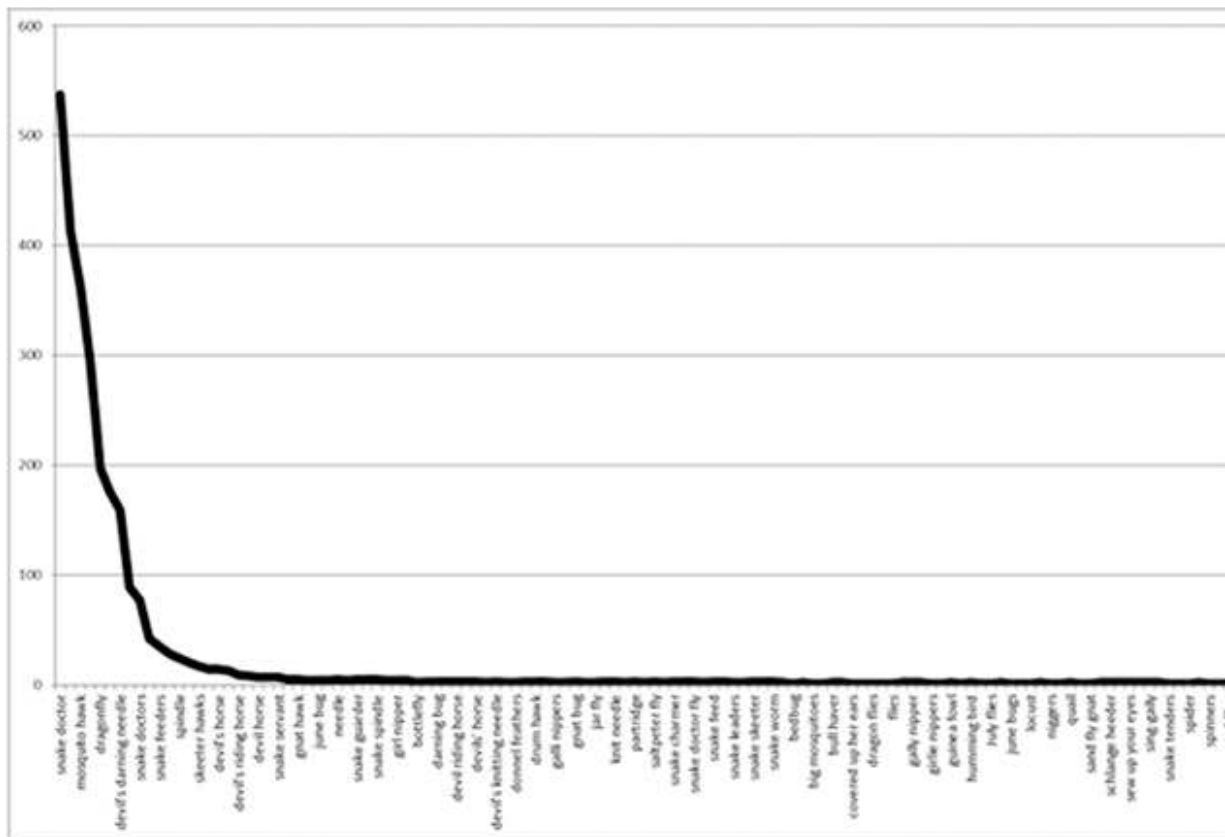


Figure 2.3 A-curve for *dragonfly* variants.

The curve always looks about the same for all the items in the survey, with a few forms at the left that occur frequently, a few more forms at the bend of the curve that occur fairly often, and a great many forms in the long tail of the curve that rarely occur. The technical name for this kind of curve is an asymptotic hyperbolic curve, but we will use a shorter name than that, **A-curve**. What about the list of forms after we take out the plurals and inappropriate responses? It looks pretty much the same ([Figure 2.4](#)):

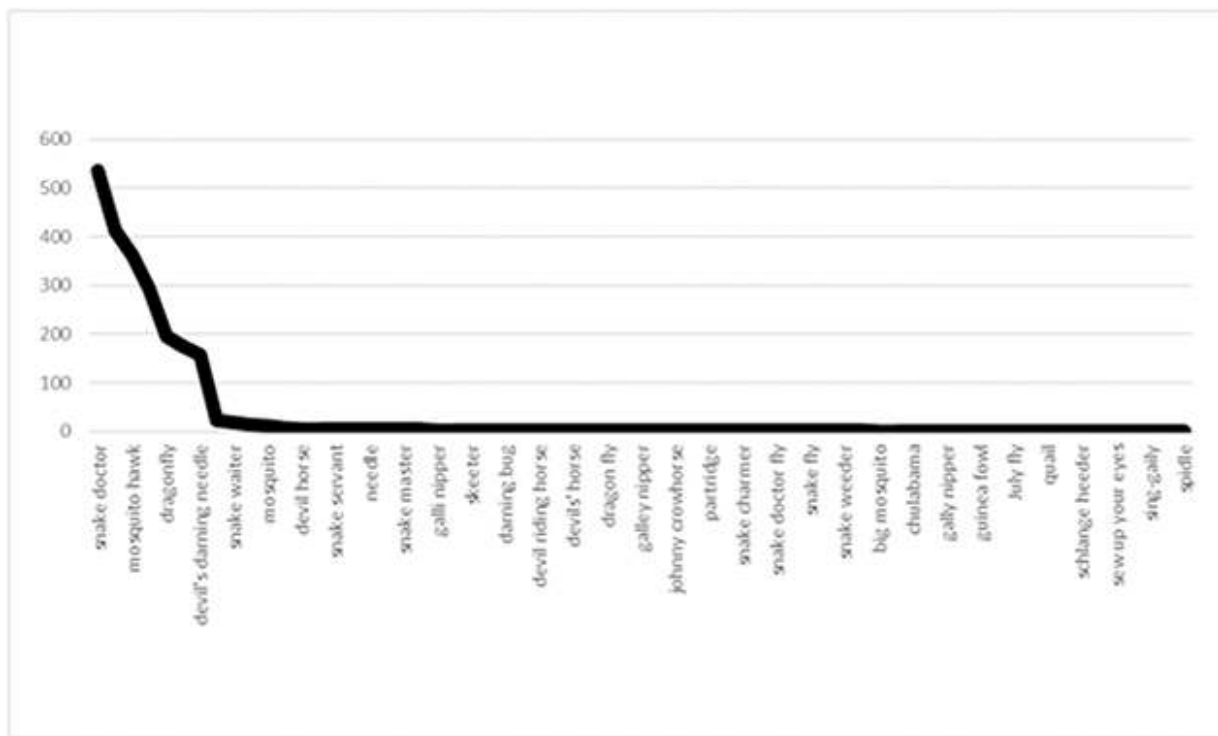


Figure 2.4 A-curve for *dragonfly* variants, after removing plurals and inappropriate responses.

The A-curve for the reduced set of sixty-four entries also has a few entries that occur frequently, some that occur fairly often, and a great many that hardly ever occur. The **frequency profile** of the different names for a dragonfly, or the variation observed for other items in the survey, is thus very robust since you can leave out numerous questionable entries and still see the same picture.

The frequency profile, shaped as an A-curve, is evidence of what has happened after the operation of the complex system of speech, after feedback has led to reinforcement of speakers' choices. The components are all the different words for "dragonfly." The activity in the system is people talking to each other in conversations that include dragonflies, and as they do so they use the different terms for the insect. It is easy for people to introduce a new term for a dragonfly, and people do that all the time. However, people do use some terms much more often than others in their conversations, and these are the terms in the top ranks of the A-curve. Is there some reason that *snake doctor* is a better term for "dragonfly" than *mosquito hawk*, or than *dragonfly* itself? No, it just emerged that people used *snake doctor* more often, as a result of feedback as people heard what other people said, which reinforced the frequency of the term. Sometimes we use the same term (for a dragonfly or for any other object) that other people use. Sometimes we use our own term. All of the activity and feedback in the complex system always produces an A-curve, whether for different terms for something, or in different pronunciations of a word, or in different ways of putting words together. While it is not predictable *which* term for an object will emerge as the one most often used in a population of speakers, we know that the frequency profile of all the terms that people used will be shaped like an A-curve.

What's more, the same picture appears when we look at different subgroups in the survey data. To be clear, in [Figure 2.5](#) we are looking at exactly the same data as we saw in the listing for all speakers, now just broken up into subgroups. Here we see the top ten different forms and the frequency profile for the whole list of forms for just the men in the survey, and for just the women in the survey.

Men (803; 81 different entries)

snake doctor	355
snake feeder	317
darning needle	210
mosquito hawk	203
devil's darning needle	118
dragonfly	116
skeeter hawk	112
spindle	23
snake waiter	18
devil's horse	8

Women (359; 47 different entries)

snake doctor	181
mosquito hawk	157
snake feeder	96
darning needle	84
dragonfly	80
skeeter hawk	63
devil's darning needle	40
mosquito	6
devil's riding horse	6
devil's horse	5

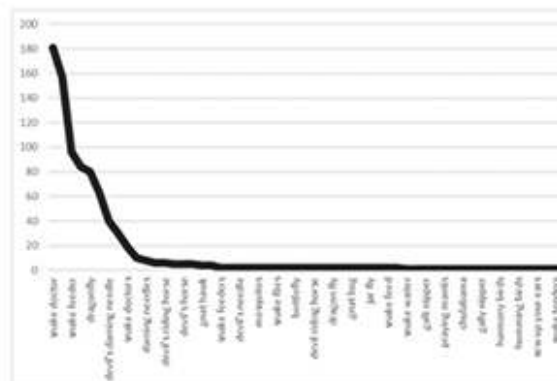
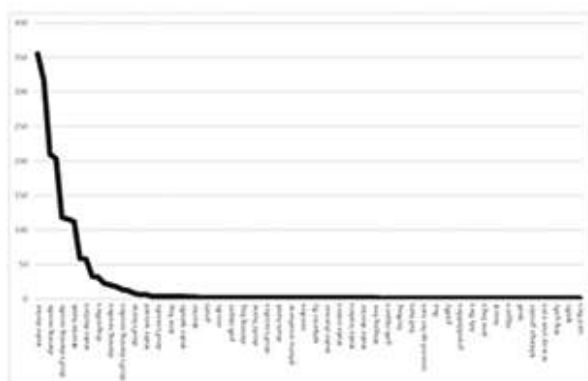


Figure 2.5 *dragonfly* variants just for men, and just for women.

There were 803 men in the survey and only 359 women, and we see that the men had eighty-one different entries for *dragonfly* and the women had only forty-seven different entries, yet the A-curve appears for both groups. Moreover, we see that, while most of the top ten different names are the same, the men have *spindle* and *snake waiter* that the women do not have, and the women have *mosquito* and *devil's riding horse* that the men do not have. In fact, people of both sexes used these forms, just not in the top ten. The forms that men and women both have in the top ten occur in a different order. *Snake doctor* is the most common form for both, but women use *mosquito hawk* more than the men and they use *devil's darning needle* less. This difference in order in the frequency profiles is what can make us think that men and women talk differently. They do so, however, within the same frequency framework, always an A-curve.

We see the same thing if we compare subgroups for three different regional groupings of speakers: New York, New Jersey, and Pennsylvania in the North; West Virginia, Maryland, Delaware, the District of Columbia, and Virginia in the middle; and North Carolina, South Carolina, Georgia, and Florida in the South (Figure 2.6). The A-curve is apparent below each list. Again, we see that most of the entries in the top ten lists overlap, and that the order of the entries is different. Six entries are on all of the lists – *darning needle*, *snake feeder*, *devil's darning needle*, *dragonfly*, *snake doctor*, and *mosquito hawk* – but in a different order each time. The other entries, like

skeeter hawk or *spindle* , would be found further down on all the lists if not in the top ten. Again, the order of the lists, how often speakers in the group use each name even though all the groups use it, is what allows us to think that speech is different in each of these areas.

<u>North</u>		<u>Middle</u>		<u>South</u>	
darning needle	288	snake doctor	321	mosquito hawk	276
snake feeder	170	snake feeder	164	skeeter hawk	131
devil's darning	118	mosquito hawk	76	snake doctor	124
needle		skeeter hawk	42	snake feeder	79
dragonfly	112	devil's darning	36	dragonfly	60
snake doctor	91	needle		mosquito	12
spindle	23	dragonfly	24	devil's horse	11
mosquito hawk	8	snake waiter	17	devil horse	6
snake servant	6	devil's riding	8	darning needle	4
devil's needle	4	horse		devil's darning	4
needle	4	gnat hawk	4	needle	
		darning needle	2		

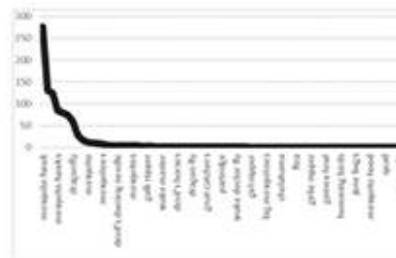
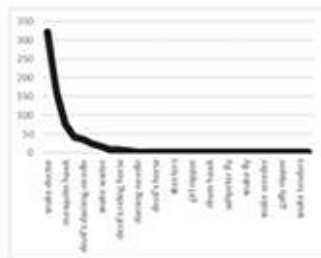
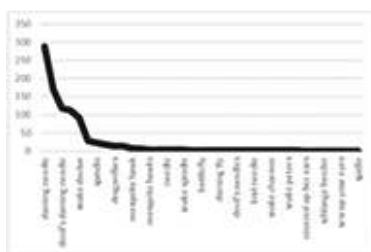


Figure 2.6 *dragonfly* variants for regional groups of speakers.

Let us look at one more set of subgroups, this time by age ([Figure 2.7](#)). The youngest group of speakers includes people up to forty-nine years old. The second group includes speakers between fifty and seventy-nine years of age. The last group has people between eighty and one hundred years old.

<u>Youngest (up to 49)</u>		<u>Middle (50-79)</u>		<u>Oldest (80-100)</u>	
snake doctor	126	snake doctor	339	snake doctor	71
snake feeder	114	mosquito hawk	241	snake feeder	70
mosquito hawk	71	snake feeder	229	darning needle	66
darning needle	50	darning needle	178	mosquito hawk	48
dragonfly	50	dragonfly	120	skeeter hawk	34
skeeter hawk	26	skeeter hawk	115	devil's darning	34
devil's darning	24	devil's darning	100	needle	
needle		needle		dragonfly	24
snake waiter	8	spindle	13	spindle	8
spindle	2	devil's horse	11	mosquito	7
mosquito	2	devil's riding horse	8	snake waiter	6

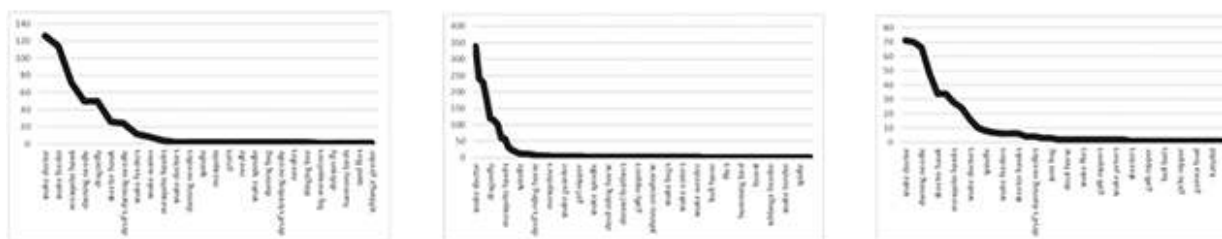


Figure 2.7 *dragonfly* variants for groups of speakers by age.

Again, the A-curve appears every time. For these groups, *snake doctor* is always the most common form, but after that the shared forms are in different orders in the frequency profiles. The same basic pattern occurs in the tallies for each group, whether overall or the smaller groups: there are a few words at the top that are very common, but the numbers pretty quickly decline to much smaller numbers. The constant presence of the A-curve pattern shows the characteristic **scaling** behavior (also known as **scale-free** behavior, in the same strange way that *flammable* and *inflammable* mean the same thing) that occurs in complex systems, where the A-curve pattern is repeated over and over in every subgroup of the data as well as in the data set overall. The A-curve and scaling properties that we see in speech match what is known in mathematics as a pattern with **self-similarity**. Fractal mathematics with self-similarity was named by mathematician Benoit Mandelbrot (e.g. 1982), and it works better than the mathematics we are usually taught (whether calculus or statistics) for many aspects of the natural world, including language. As the Fractal Foundation says,

A **fractal** is a never-ending pattern. Fractals are infinitely complex patterns that are self-similar across different scales. They are created by repeating a simple process over and over in an ongoing feedback loop Geometrically, they exist in between our familiar dimensions. Fractal patterns are extremely familiar, since nature is full of fractals. For instance: trees, rivers, coastlines, mountains, clouds, seashells, hurricanes, etc.

(<https://fractalfoundation.org/resources/what-are-fractals/>, viewed January 7, 2025).

The A-curve and the scaling properties of language are the best signs that language is self-similar as it arises from a complex system of interactions.

We can illustrate the notion of scale in economics. We all know that there are different markets at different levels of scale. In your neighborhood you can buy essential items (in America often at a “ convenience store ”), but you can also go a bit further away and participate in the town market to buy things at a large grocery store, or at a general-purpose “ big box store ” (e.g., Walmart in America) or one that may specialize in electronics or products for pets. Prices in the bigger stores are likely to be lower. If what you need is more specialized or exotic than what you can get in town (like your favorite imported mustard or a specialized repair service), you may have to go to the big city, which supports markets in exotic foods and special services. Thus markets organize themselves, everywhere, into different levels of scale. So it is, too, for language in use. It is possible to document characteristic uses of language by very small groups who are interested in the same activity, each known as a **community of practice** (that is, a group of people who “ share a concern or a passion for something they do and learn how to do it better as they interact regularly, ” as described in Wenger-Trayner (2015); see [Chapter 10](#)), and by larger groups of speakers who live in the same town or interact in the same social group, up through the national level of scale at which we can distinguish American English from British and other world varieties of English.

The idea of scale thus solves the problem of how we can have a national language variety at the same time that we can recognize regional and social varieties in the same population. It cannot be the case that speakers, or buyers, are uniquely associated with their smallest level of interaction. If you could only talk like your associates in a community of practice, how could you make yourself understood in wider communities or nationally? Speakers, and buyers, naturally participate at different levels of scale, as well as in different regional and social groups, by manipulating their choices among the same sets of variants for linguistic features. As for regions, a Southern American consumer can buy “ grits ” (a cornmeal product enjoyed for breakfast) at every level of scale, one or two kinds in the convenience store, additional kinds in the town grocery store, and fancy coarse-ground grits only in the big-city or online in the national marketplace. If the Southerner leaves her region, say to go to the North, she may find no grits at all in convenience stores, perhaps one or two kinds in a local grocery store, and more kinds in the big city, and she would have to go online to get her favorite coarse-ground variety. It goes without saying that the same is true for language in different regions. Regions and social groups, Zelinsky ’ s cultural slices, are relatively different between themselves, as well as being different within themselves by levels of scale. Speakers of a language can recognize and must negotiate levels of scale as well as differences they perceive between regional and social groups in language use.

Consequences of Emergence

There is always much more variation than we might have thought in a population of speakers, but usually we get things right because the ever-present A-curve in the frequency profiles of the variants offers us a huge perceptual advantage for what people usually say ([Figure 2.8](#)). Top-ranked words for a particular situation, the things that people normally say, are massively more likely than all the other possible things. Language is *flexible* because we can accommodate a great many possibilities in the long tail of the curve when we choose to use them, but language is *understandable* because we usually do not take advantage of the flexibility.

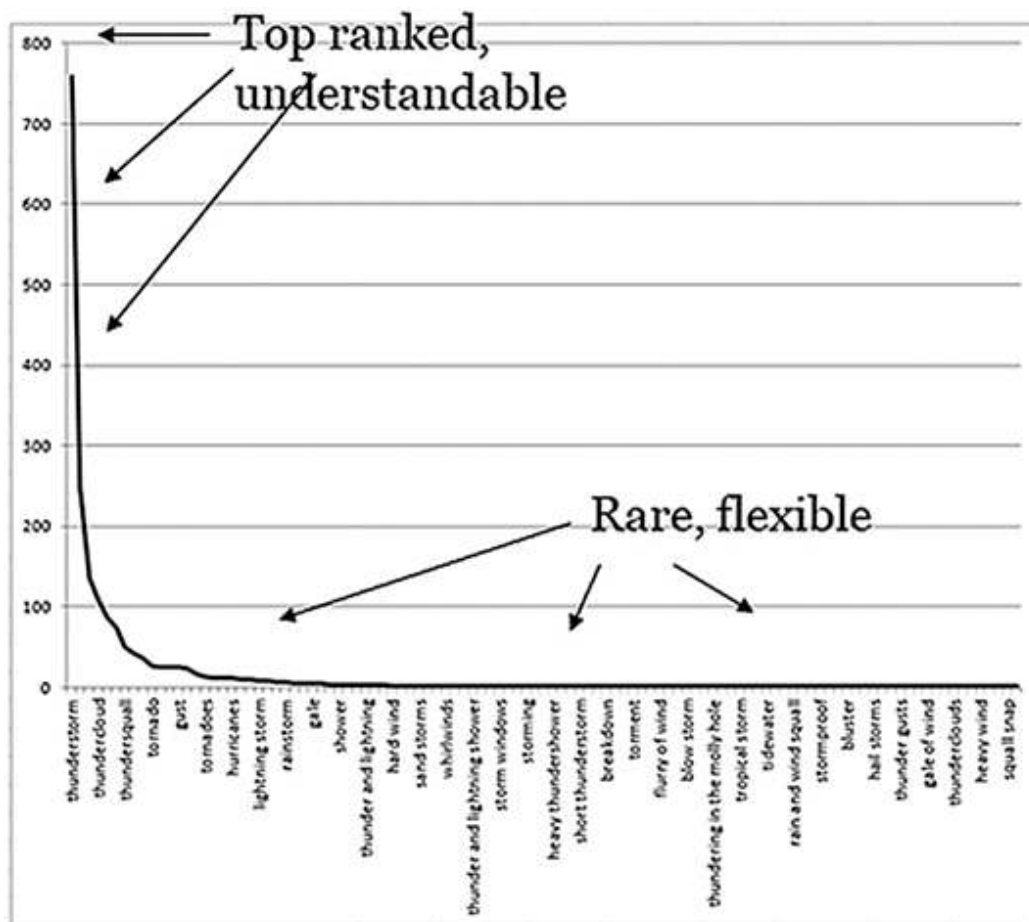


Figure 2.8 Flexible and understandable.

[Figure 2.8 long description.](#)

The A-curve frequency profile is thus not only a curious effect of a complex system but something functional, something that makes language work for us in every population of speakers. Wide variation in the components of speech, as processed in the activity of speakers with feedback and reinforcement, lets us understand each other and also express our individuality in American English – and in every other human language.

Perhaps the first person ever to notice this nonlinear frequency profile in speech was George Zipf, a mid-twentieth-century Harvard professor. **Zipf's Law**, so-called, says that if you count the frequency of words in any large text and then put the frequencies in descending order, there is an inverse relationship between each frequency and its rank in the order, roughly $P = 1/r$ where P is the frequency and r is the rank (see Kretzschmar 2009 : 190 – 198 for more information on Zipf's Law). So, in concrete terms, the second-ranked variant in a list will be half as common as the first one ($P = 1/2$), and the third-ranked variant will be one third as common as the first ($P = 1/3$), and so on. This formula yields a nonlinear plot of frequency and rank, what we have talked about in this chapter as the A-curve. **Nonlinear** just means 'curved,' like the A-curve, rather than straight. An A-curve, however, is not just any old curve: as it happens, if both axes of an A-curve chart use logarithms instead of simple counts of the data, the chart produces a straight line rather than the sharp curve. This is the special property of an A-curve, what makes the term *nonlinear* especially interesting for our study of language. Zipf's Law, however, is not a "law" in the same way that physics has natural laws. Zipf's formula produces a curve that follows the **80/20 Rule**, also called the Pareto Principle after an Italian economist who had noticed that 80 percent of the land in Italy was owned by 20 percent of the people. In speech, the 80/20 Rule predicts that 80 percent of the **tokens** (that is, the terms or other linguistic features that people actually say) come from 20 percent of the **types** (that is, the list of all the terms or features that people could say). However, when we count tokens and types in speech, we get a range of proportions, sometimes 90/10, sometimes 70/30. In every case there is a big quantitative difference between the one or a few terms/features at the top of the A-curve and the many terms/features that do not occur

very often in what is called the long tail (or fat tail) of the curve. Zipf ' s curve, then, is less a precise formula for a law and more like a guideline. Thus the A-curve: it avoids unnecessary implications of formulas and laws from Zipf while showing the characteristic quantitative difference in the frequency of terms/features as a nonlinear curve.

The complex system of language may actually work in a way that is not precise and rule-based but, ironically, the A-curve also creates our universal perception that language is structured. Grammar is a perceptual consequence of the complex system of speech, not a description of it. It is highly likely that the A-curve distributional pattern gave rise to the idea of grammar in the first place, because speakers of any language perceive that, for any question about how to put words together, there will be one or a few constructions that occur a great majority of the time, at the top of the A-curve. The idea that there is a fixed objective language hierarchy, a linguistic system, originates as an **observational artifact** , something that we just *perceive* to be there because we usually do one of just a few things. The problem with traditional grammar is the assumption that there is only one grammar for a language. Instead, we should think of grammar as derived from what we say and write, and think that there is a somewhat different grammar for every situation in which we say or write something.

The existence of complex systems in our cultural interactions allows us to be diverse, and at the same time allows us still to show ourselves through our behavioral choices to be members of our regions and groups at every level. Complexity science thus describes the process by which we perceive our language behavior to be associated with our communities and practices; it is the underlying process for the creation of what we call language varieties or dialects. Complex systems, therefore, offers a model that can explain the multidimensional layering of cultural regions and groups described by Zelinsky. The complex systems approach accommodates the decisions that speakers make about their language in every kind of conversation and situation for writing. Complex systems allow us to recognize and honor the linguistic and cultural decisions that every individual has to make, and at the same time to understand how such decisions result in local and larger cultural patterns.

Summary

Complexity science provides an effective scientific model for how economic markets work and also for how language varieties work. Speakers of a language have frequency profiles for the variants they can use for any feature, like names for *dragonfly* . Every group of speakers has an A-curve in the frequency of variants, and different groups have different orders for the variants on their A-curves. This previously unsuspected frequency characteristic of language accounts for why we perceive grammar in language.

Key Terms

80/20 Rule

A-curve

activity

agents

community of practice

complex systems

complexity science

components

contingency

emergence

exchange

feedback

fractal
frequency profile
invisible hand
Newtonian mechanics
nonlinear
observational artifact
paradigmatic structure
reductionism
reinforcement
scale-free
scaling
self-organization
self-similarity
syntagmatic structure
three body problem
tokens
types
Zipf ' s Law

Audio Samples

These audio samples (available at www.cambridge.org/williamakretzschmar) all come from American speakers from the Southern states. When you listen to them, imagine that you are hearing their words and pronunciations according to the model of a complex system: they can all use the same variants, but use them at different rates. They are all talking about their families.

a2.1 Speaker from Tennessee (LAGS 025)

a2.2 Speaker from Alabama (LAGS 387)

a2.3 Speaker from Texas (LAGS 847)

Exercises

1. How many different words do *you* know for a dragonfly? These days, you may be more familiar with different names for soft drinks, or for athletic shoes, or for sandwiches the come in long buns. Choose three different items, and list the variants you have heard (you can ask friends what they know, too).
2. People say that men talk differently from women, but can you name any specific differences? Perhaps how many colors they know? Are such differences associated with particular settings for conversations (like locker rooms or kitchens)? Do you think men and women mostly know the same words, but use some of them at different frequencies?

3. How does the principle of understandable high-frequency words vs. flexible low-frequency words play out in communities of practice? What about health-related words that doctors use as opposed to words their patients use? What about game-related words that people who play video games use that might be used much less by people who do not play? Can you think of other communities of practice who use some words at higher frequencies than people outside the community of practice do?

Computer Exercises

Exercise App3.2 in [Appendix 3](#) goes well with this chapter. It asks users to tally and chart the number of occurrences of each response type from three different items, in order to test the hypothesis that all of the charts will show an A-curve.

Further Reading

Mandelbrot, Benoit. [1977](#) . *Fractals: Form, Chance, and Dimension* , and [1982](#) . *The Fractal Geometry of Nature*. San Francisco: Freeman. These are the foundational books for the idea of fractals. There is lots of mathematics in them – nonlinear mathematics, at that – but the graphic designs are fascinating. The American public TV program called *Nova* produced a program on fractals called “ Fractals: The Hidden Dimension, ” available on YouTube. It has interviews with Mandelbrot.

Mitchell , Melanie . 2009 . *Complexity: A Guided Tour* . Oxford : Oxford University Press .

This book provides a thorough introduction to complexity theory, including its history and its application to the physical sciences. Mitchell illustrates her examples, making more detailed points about complex systems accessible.

Kretzschmar , William A. , Jr. 2009 . *The Linguistics of Speech* . Cambridge : Cambridge University Press , and 2015 . *Language and Complex Systems* . Cambridge : Cambridge University Press .

Burkette , Allison , and William A . Kretzschmar , Jr. 2018 . *Exploring Linguistic Science* . Cambridge : Cambridge University Press .

These books provide the foundational information about A-curves and the Linguistic Atlas Project. They can be challenging – especially [Chapter 6](#) in the 2009 book, which introduces complexity and dimensionality. The 2015 book applies complexity science to many subfields within linguistics. The 2018 book is an introductory textbook, both for complexity science and for linguistics. Kretzschmar, William A., Jr., Virginia McDavid, Theodore Lerud, and Ellen Johnson. [1993](#) . *The Handbook of the Linguistic Atlas of the Middle and South Atlantic States* . Chicago: University of Chicago Press.

The *Handbook* gives all the information you need about how the Linguistic Atlas of the Middle and South Atlantic States survey was conducted and who its speakers are.

Zipf , George . 1949 . *Human Behavior and the Principle of Least Effort* . Cambridge, MA : Addison Wesley . While Zipf was brilliant he was also a difficult person. He applied a principle of “ least effort ” based on his law to many things in society, and a number of these connections were more imaginative than substantial. As Bernard Mandelbrot wrote of Zipf ’ s [1949](#) book (Mandelbrot [1982](#) : 403),

It is one of those books ... in which flashes of genius, projected in many directions, are nearly overwhelmed by a gangue of wild notions and extravagance. On the one hand, it deals with the shape of sexual organs and justifies the Anschluss of Austria into Germany because it improved the fit of a mathematical formula. On the other hand, it is filled with figures and tables that hammer away ceaselessly at the empirical law that, in social science statistics, the best combination of mathematical convenience and empirical fit is often given by a scaling probability distribution.

3

Old World Origins for American English



In This Chapter

American English is part of a historical process. Within its own time, American English can be divided into periods that correspond to important stages in its development. Before that time, we begin with the ancient history of language and then move on to the beginnings of English. The chapter ends as American English begins, in the first years of the seventeenth century.

Timeline

449

Hengest and Horsa come to Britain: English begins.

1066

Norman invasion of Britain.

1400

Death of Chaucer.

1492

Columbus lands on several Caribbean islands.

1540

De Soto explores the South as far as the Mississippi River (1543).

1579

Drake claims New Albion (continent north of Mexico, at the Pacific).

1585

Roanoke colony founded.

1609

Hudson discovers Hudson River.

1616

Death of Shakespeare.

American English did not suddenly appear on July 4, 1776, as a new and fully developed variety of the language. It belongs to a process of change in the language that began over a millennium earlier and continues to this day. Still, American English could not exist before settlement of the New World, and so any account of the development of American English must mark a beginning at the time of the first permanent English settlements in North America. After that time different American voices began to take their own direction, which was different from the direction of linguistic change for English speakers in England and other places. The next chapters will trace the development of American English voices. First, in this chapter, we need to know about English before American settlement: where English came from, what it was like until the point that American voices began to branch off, and what circumstances influenced the branching process. In each of the following four chapters, we will consider one of the four major divisions in the development of American voices: the **Colonial Period** (beginnings to 1800), the **National Period** (1800 – 1865), the **Gilded Age to World War II** (1866 – 1945), and the **Information Age** (1945 – present). These periods are to some extent arbitrary divisions in the continuous history of the English language in America, and yet they do correspond to important cultural developments. The Colonial Period corresponds to the time when new North American settlements by English speakers retained their political and social focus on the British Isles, and therefore ends with the separation of political and social affairs in the American colonies from reliance on Old World culture. The National Period focuses on the creation of an American national culture, characterized by westward expansion across the eastern half of the continent and the creation along the way of regional cultural patterns. Regional differences culminated in the Civil War (1860 – 1865). The driving of the Golden Spike in 1869 marks the beginning of a new period, the Gilded Age. When the Union Pacific and Central Pacific railroads were joined, it also marked the connection between the West and the East (and other regions as well) that truly made the United States one nation. At the same time, the fact that the connection was made by an emerging industrial technology in transportation – railroads – marks the time when the American nation grew to become a world power, as shown by its involvement in World War II. The final division, the Information Age, builds on the foundations laid down in the earlier periods but is itself culturally distinct, characterized by new social and cultural patterns as new technologies like radio, TV, and computing accelerated the pace of communication across the country. These periods do not march towards some definite conclusion for the English language, whether in America or worldwide – it would be pretty conceited of us now to think that hundreds of years of American voices existed solely to produce our contemporary version of American English. To mark different periods in the history of American voices, including our own time, just helps to organize the facts of continuous change in the language into more manageable portions.

Ancient History

The English language is historically related to a family of languages called **Indo-European**. Nobody knows exactly where or when the actual people lived who spoke the first form of Indo-European, perhaps 6000 years ago, now reconstructed (there are no written records from that far back) as Proto-Indo-European. Written records from the Indo-European family go back as far as about 2000 BC, by which time the earlier Indo-European language had already begun to branch into what have become its main constituent language groups: Indian, Iranian, Armenian, Hellenic, Albanian, Italic, Balto-Slavic, Germanic, Celtic, Hittite, and Tocharian. Many of these groups in turn branched and rebranched into languages familiar in the modern era; some, Hittite and Tocharian, became dead languages when they no longer had living communities of speakers. To consider an example of what happens as groups continue to grow and change, the Italic group includes Latin (now no longer spoken by any living community but still taught as a historical language), which in turn developed into Romance languages such as Italian, French, Spanish, and others. Indo-European was not itself the first or only language spoken in early human cultures. Our earliest records of a written language, Sumerian, survive from about 3000 BC, for example, and Sumerian is not a member of the Indo-European family.

The next branch towards English from Indo-European is the **Germanic** languages, which arose in the northwestern part of the Indo-European area. The beginnings of the Germanic languages are still too old for there to be any written records. The various branches of the Indo-European language family, including Germanic, emerged and became distinct as a result of differential language change as people moved to settle new areas. That is, when groups of Indo-Europeans moved away from their original homeland, the members within each group would talk more to each other than they could talk to members of other groups. As the complex systems model predicts, such interaction allowed the emergence of different habits of speech in each of the groups. The central fact of language change is that new speech habits are always emerging, sometimes consciously but most times not through any deliberate intention; it happened for the Indo-Europeans and their descendants, and it is still happening today. These emerging habits tend to follow the residential and other cultural

groups to which people belong, then and now. The Germanic branch of Indo-European developed in just this way as the generations passed among the ethnically Indo-European people who settled the northwest. The same thing happened to Indo-Europeans who settled in other areas. The language habits of the Indo-European people who lived south of the Germanic group became Celtic, again with the passage of great stretches of time, and the language habits of the Indo-European people who lived east of the Germanic group in time became Balto-Slavic. As we saw in [Chapter 2](#), the regularities emerge from the operation of the complex system of language, in which there is room for a great many choices for words and sounds and in which, at the same time, speakers do tend to make similar choices.

The detective work in dictionaries and grammars that we call historical Indo-European linguistics had its great age of discovery only in the nineteenth century, and work continues today to unravel what must have happened to create the range of language branches and language habits existing today in the Indo-European region – and in all of the places to which Indo-European languages have been carried around the world. Most of this work attempts to explain the *differences* between language groups and languages, to make the branches of the Indo-European tree appear more separate and distinct, because people perceive that modern languages are separate and distinct (as discussed in [Chapters 1](#) and [2](#)).

Germanic is at the lower left of [Figure 3.1](#). Can you find English? It is important to keep in mind, however, that all of these groups and languages are still historically related to Indo-European and to each other. The language habits of the Germanic group are not entirely different from those of the Celtic group or the Balto-Slavic group. If they were, nobody could tell that these language groups were historically related to each other. The same is true for modern languages. There are systematic differences between them, to be sure, but there are also many similarities that testify to the connections between languages within branches and to the connections between branches within the Indo-European family. Consideration of the *similarities* and *connectedness* (as opposed to differences) focuses attention on the **linguistic continuum** within the Indo-European territory. Both then and now, people who live near to each other tend to be able to understand each other, as they must in order to carry on their daily affairs with each other. National boundaries even today most often do not prevent neighbors from talking to each other, and talking more like each other than might be predicted from their respective national languages as taught in schools or printed in books. For example, people who live in Alsace (today all in France) are part of a linguistic continuum which has, at different times, belonged to France or belonged to Germany. The line in [Figure 3.2](#) through the middle of Alsace shows where the German border was at the turn of the twentieth century. The historical development of the Indo-European languages was no different: near neighbors talked to each other, and the differences between particular daughter languages, and by extension the major Indo-European language branches, can be observed to emerge by historical linguists only as a function of the distance between the people who spoke them – we see the branches more clearly when we consider languages as they are spoken in their heartlands or capitals, not along the borders of the territories or countries in which they are spoken.



Source: Kretzschmar, William A. Jr. 2018. *The Emergence and Development of English* . Cambridge: Cambridge University Press.

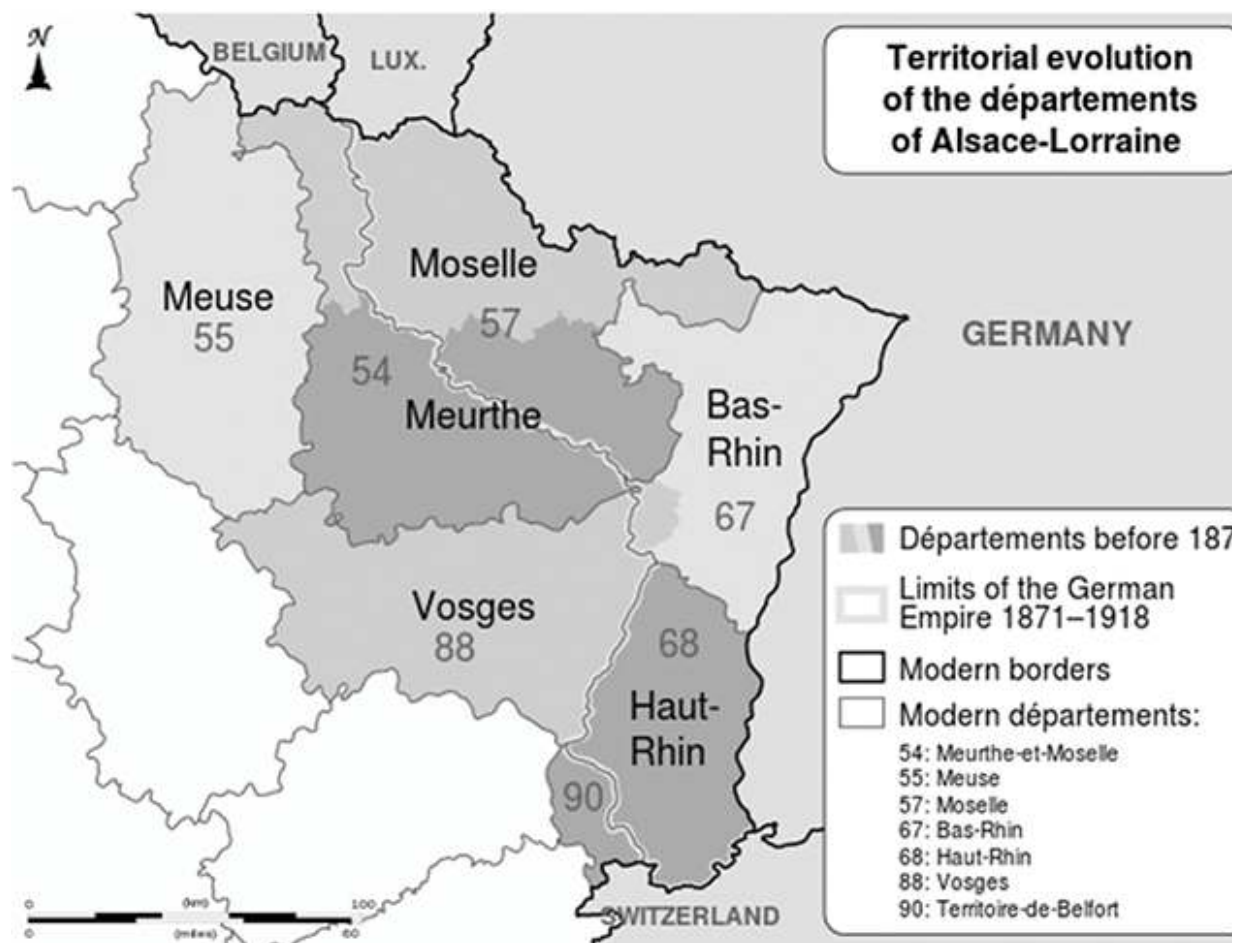


Figure 3.2 Alsace and Germany.

[Figure 3.2 long description.](#)

Source: Owen Blacker. 2011. 'Alsace Lorraine departments evolution map-en.svg'. Wikimedia Commons.

The idea of the linguistic continuum is a great match for the A-curve introduced in [Chapter 2](#), because the differences between heartlands and borders can be tracked in the frequency profiles: features that were rare in one place can become high frequency in another. So, for example, in Alsace we could count how often people said *Mann* or *Frau* (close to modern German) as opposed to *homme* or *femme* (close to modern French) for 'man, woman,' as a way to follow the continuum from central Germany towards central France. While it is sometimes useful to make binary distinctions, that a language is the same or different as in the Indo-European tree of languages, complexity science can explain the continuum of speech across time and territory that we always see when we observe more closely what people have actually said or written. Knowledge of the existence of a linguistic continuum is important for English because, historically, people who spoke the daughter languages that emerged from Germanic could often communicate with each other better, especially at the edges of their territories, than might be implied by the separate branches that historical linguists often draw for the Germanic family.

Origins of English

Unlike most other languages, English can date its origins with fair precision to about 449 AD. No written records of the language from that time still exist; the earliest written records of English come from about 700 AD. Still, between the **internal history** of the language (reconstruction of regularities in the features of a language, as for Indo-European and Germanic) and its **external history** (the historical record of cultural circumstances that affected the speakers of a language, and thus the conditions for change in the language), modern

observers can build a decent picture of what must have been happening before written records are available as evidence. The history of English is conventionally divided into three periods:

- Old English** 449 AD to 1150 AD
- Middle English** 1150 AD to 1500 AD
- Modern English** 1500 AD to the present

Thus, while the governor of the American state of Georgia once claimed that mountain people in his state spoke “ Old English, ” he was not using the term as we do in this book. These three periods are really just rough divisions in the history of English. Change in the language is continuous, both within the periods and across them. More specific references of the condition of the language often apply the labels “ early ” or “ late ” to the period name, and so Shakespeare ’ s stage of the language is often called **Early Modern English** (usually considered as coming from 1500 AD to 1700 AD). The earliest form of Old English is often called Prehistoric Old English (usually considered as coming from 450 AD to 700 AD). Periods in the history of English do give us specific boundaries in time to talk about, so long as we realize that, like the boundaries for periods in American English, they are arbitrary divisions.

Before the origin of English, the island of Britain was populated by a prehistoric culture that was displaced when members of the Celtic-speaking branch of the Indo-Europeans came to settle there. Much later, Julius Caesar invaded Celtic Britain in 55 BC, and Emperor Claudius conquered the island and made it part of the Roman Empire in 43 AD. Britain thus had roads and cities like the Romans, a literate culture, and new forms of religion (eventually including Christianity). The Romans created defensive walls and garrisons to protect the Romanized citizens from uncivilized Celts (the Welsh in the West, and later the Gaels, in Latin called *Scoti*, in the North) and Picts. Rome fell for the first time in 412 AD, and the disruption caused the Romans to withdraw their garrisons so that the Romanized British were no longer protected from the unRomanized Celts and Picts. The leaders of the British attempted to use the same mercenaries that the Romans had hired for defense, members of Germanic groups from across the North Sea on the continent. Hengest and Horsa were the leaders of these Germanic people, and they settled in Britain in 449 AD on their own isolated territory, the Isle of Thanet in the southeast. They did repel the Picts and Gaels, but then they began their own invasion of all Britain. It took the Germanic invaders nearly two centuries to complete their occupation of Britain, lacking only Scotland, Wales, and Cornwall, where some of the Romanized British sought haven with their ethnic relatives. It used to be thought that the British population was slaughtered by the Germanic invaders, but now there is evidence that many British people remained in England as second-class citizens, without the same rights or value as Germanic residents, as some early Germano-British legal codes show. Unfortunately for the victorious English people, by the end of the eighth century the **Vikings** , North Germanic raiders, had attacked the monastery at Lindisfarne and then the monastery at Monkwearmouth and Jarrow, and continued to attack other parts of Britain and Ireland for centuries. A new Germanic group thus threatened the people of Britain. But as before with the first wave of Germanic invaders, the Vikings eventually came to settle in Britain by about 900 AD, not just raid there, especially in the northeastern part of the island.

The English language is what has developed from the speech of the Germanic mercenaries, so we can say that the date of their arrival, 449 AD, is also the beginning of the English language. The Germanic mercenaries were members of a number of West Germanic groups, Angles, Saxons, Jutes, and Frisians, each certainly with their own speech habits but each able to understand speakers from the other groups. The names *England* and *English* come from the name of one of these groups, the Angles, but actually the Angles were historically no more important than the other groups. English grew more identifiable as something in itself, as something distinct from other West Germanic branches, over time as the various members of the Germanic groups settled most of the island of Britain. The Vikings, too, contributed to the English language, as they interacted from their own settlements in the Northeast of Britain with other Germanic groups.

The **Anglo-Saxon Chronicle** , prepared beginning in the ninth century and maintained for a long time afterwards in some locations, documents the volatile shifts in political power during this time. Here is what it says in the Anglo-Saxon Chronicle for the year 449:

449: Her Martianus 7 Ualentinus onfengon rice. 7 rixadon .vii. winter. 7 on þeora dagum gelaðode Wyrhtgeorn Angel cin hider. 7 hi þa coman on þrim ceolum hider to Brytene. on þam stede Heopwines fleot. Se cyning Wyrhtgeorn gef heom land on suðan eastan ðissum lande. wiððan þe hi sceolon feohton wið Pyhtas. Heo þa fuhton wið Pyhtas. 7 heofdon sige swa hwer swa heo common. Hy ða sendon to Angle, heton sendon mara fultum. 7 heton heom secgan Brytwalana nahtscipe. 7 þes lands cysta. He ða sona sendon hider mare weored þam oðrum to fultume. Pa comon þa men of þrim megðum Germanie. Of Ald Seaxum. of Anglum. of Iotum.

[Here Martianus and Valentinus seized the kingdom, and reigned seven winters. And in their days Vortigern invited the Angles here. And they came here to Britain in three ships, in the harbor called Heopwinesfleet. King Vortigern gave them land in the south-east of this country, on condition that they should fight against the Picts. Then they fought against the Picts, and had the victory wherever they came. They then sent to the Angles, ordered them to send more help, and had them told of the worthlessness of the Britons, and the virtues of the land. Then they soon sent here a larger army as help for the others. Then came men from three tribes in Germany, from the Old Saxons, from the Angles, from the Jutes.]

This passage describes events succinctly, but still includes the political statement that the Angles did fight and win against the Picts and that the British people were worthless. The Anglo-Saxon Chronicle says that the Jutes settled in Kent and Wessex, that the Old Saxons settled in Essex (between Mercia and Kent), Sussex (between Kent and Wessex), and Wessex, and that the Angles settled in Mercia and Northumbria ([Figure 3.3](#)).



Figure 3.3 Early regions in Britain (showing the modern borders for Scotland and Wales).

Source: Kretzschmar, William A., Jr. 2018. *The Emergence and Development of English*. Cambridge: Cambridge University Press.

We know, however, that a mixture of Germanic peoples lived in all of these areas, and that other Germanic groups such as the Frisians also participated in settlement, so that it is not possible to connect any of the four kingdoms exclusively with any Germanic group. Somewhat different varieties of Old English were spoken in these regions, however, owing to the emergence of somewhat different habits among speakers interacting with their neighbors in each one (again as the complex systems model predicts). Most surviving Old English texts, however, come from Wessex, the seat of King Ælfred and the place where manuscripts had a higher chance of survival. As for the language of the passage, it is quite different from Modern English at first glance. The passage has some letters that we no longer use (þ and ð, both used where we would use “ th, ” and 7, a symbol meaning ‘ and ’). But a closer look shows many similar words, like “ winter

” and “ lande, ” or like the verbs “ send ” and “ come ” though these have unfamiliar endings. This is not what the governor of Georgia thought his neighbors in the mountains were speaking! Old English does, however, create the foundations for English as we know it. You can listen to the sound of Old English online (a3.1, with transcripts in a separate file), in other passages from the Anglo-Saxon Chronicle.

When William the Conqueror took the English throne in 1066, it changed the course of emergence for English. William was the Duke of Normandy – of course “ Normandy ” means ‘ land of the North Men, ’ the same Vikings who had settled that region of France about the same time they were settling north-eastern Britain – and thus William had his Norse heritage in common with many Englishmen. But change did come because William, as a conqueror and not merely a successor, exchanged the nobility of the English state, and thus put speakers of Norman French into positions of authority all across Britain. While the common people in England continued to speak English, they now had to contend with an aristocracy who did not speak their language, and the consequence is a massive influx of French words into English. The Middle English period also saw the formation of English sentence patterns much more similar to Modern English. The most familiar Middle English author is from the end of the fourteenth century, Geoffrey **Chaucer** , who died in 1400. Here is the beginning of the General Prologue to *Canterbury Tales* , Chaucer ’ s most famous work.

Whan that Aprille with his shoures soote [
,
gentle, sweet
,
]

The droghte of March hath perced to the roote,
And bathed every veyne in swich licour
Of which vertu engendred is the flour;

...

Thanne longen folk to goon on pilgrimages,

And palmeres [
,
pilgrims
,
] for to seken straunge strondes

To ferne halwes, kowthe [
,
known
,
] in sondry londes;

And specially from every shires ende

Of Engelond to Caunterbury they wende [
,
go
,

]

The holy blisful martir for to seke,
That hem hath holpen whan that they were seeke.

A few of the words need to be provided with glosses; others may be spelled differently, or take a moment to recognize, like “ halwes ” ‘ hallowes, shrines. ’ Some French loan words are used with meanings we may no longer recognize, like “ licour ” ‘ liquid ’ when Americans use the word mainly for alcoholic drinks. And yet Chaucer ’ s English is not so different from Modern English that we cannot understand it after a little practice. You can listen to the sound of Chaucer ’ s Middle English online (a3.2, with transcripts in a separate file).

The Early Modern period from 1500 to 1700 saw the transition from English as a language of the common people to English as a language for all purposes. In order for this to happen, English acquired words from French and Latin: instead of using the words as parts of French or Latin sentences, these words became part of English sentences. So, for example, whereas law cases in England were conducted in French until 1362, pleadings after that were supposed to be carried out in English. French words became used as English words in legal situations: *justice, equity, jury, judge, plaintiff, defendant, attorney, larceny, torts, bail, parole*, and many others. **Loanwords** , or **borrowings** , are words used in one language, like English, that replicate words used in another language, like French. Of course, French lost nothing when English borrowed its words, and English will not be paying French back: the idea of a loan or of borrowing is a metaphor that describes what people do with features in languages. At the end of the sixteenth century **Shakespeare** made fun of those who mixed up Latin with their English in *Love ’ s Labor ’ s Lost* (V.i). The pedant Holofernes converses with the curate Nathaniel:

Holofernes :

Satis quid sufficit. [Enough is as good as a feast]

Nathaniel :

I praise God for you, sir. Your reasons [discourse] at dinner have been sharp and sententious [meaningful], witty without affection [affectation], audacious without impudency, learned without opinion [dogmatic view], and strange without heresy. I did converse this quondam [former] day with a companion of the king ’ s, who is intituled, nominated, or called, Don Adriano de Armado.

Holofernes :

Novi hominem tanquam te [I know the man as well as I know you]. His humor is lofty, his discourse peremptory [decisive], his tongue filed [polished], his eye ambitious, his gait majestical, and his general behavior vain, ridiculous, and thrasonical [boastful]. He is too picked [refined], too spruce, too affected, too odd, as it were, too peregrinate [foreign in manner], as I may call it.

Nathaniel :

A most singular and choice epithet.

While Nathaniel thinks that Holofernes has used a choice bit of description, another character, Moth, a serving boy, thinks that “ They have been at a great feast of languages, and stol ’ n the scraps. ” Holofernes and Nathaniel are “ book-men ” and mix their languages, mainly Latin with English, and Shakespeare pillories them throughout the play by having common people comment on their speech, as Moth here, or elsewhere Dull, a constable.

Words also entered English from other languages, and that often happened because the Early Modern period is when England and its navy began to engage with the rest of the world. In perhaps the most notable engagement of the period, the English defeated the Spanish Armada in 1588 and, besides repelling a Spanish invasion, signaled that England would be a player on the high seas. A decade earlier Sir Francis Drake had sailed all the way around the world, an expedition that was supposed to attack Spanish possessions in the New World, and had claimed New Albion, the North American continent north of Mexico. Henry Hudson found the Hudson River in 1609. Of course Christopher Columbus had traveled to the Americas in 1492, and the Spanish had explored much of Central America and southern North America in the early sixteenth century. The English were not the first to get to North America, but they eventually established long-lasting colonies there, as we shall see in the [next chapter](#) .

Great Vowel Shift

Perhaps the greatest change in the history of English occurred in the Early Modern Period in English pronunciation, the **Great Vowel Shift** (**GVS**) (see [Figure 3.4](#)), which made the vowels of English differ from those of continental European languages. Between 1400 and 1700, the **long vowels** ([i:, e:, ε:, æ:, a:] in the front, and [ɔ:, o:, u:] in the back; the long [e] and long [o] are now diphthongized to [eɪ, oʊ] ; see [Appendix 1](#) for discussion of vowel symbols, diphthongs) were raised in a process of **vowel rotation** . **Raising** just means that a vowel was pronounced at a higher articulatory position than it had been before. The term “ vowel rotation ” suggests that the individual acts of raising tend to raise vowels until they get to the highest position, and then vowels fall along a more centralized track.

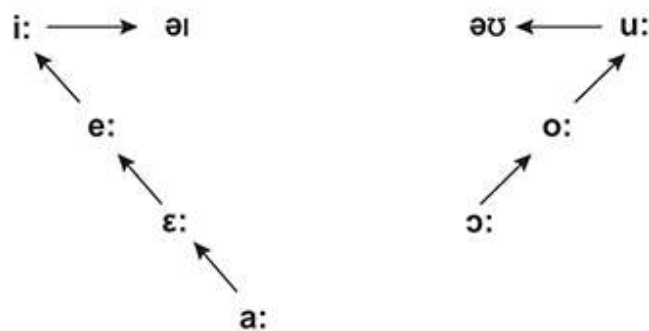


Figure 3.4 Phase 1 of the Great Vowel Shift.

The first step is that the highest long vowels, [i:] in the front and [u:] in the back, both become diphthongs [əɪ , əʊ] with the addition of the central vowel [ə]. To use words as examples, the word *bite* was pronounced [bi:t] in Middle English, but after the first step of the GVS the word was pronounced [b əɪ t]. The word *cow* in Middle English was pronounced [ku:], but after the first step of the GVS the word was pronounced [k əʊ]. Then the next highest vowels in front and back, [e:] and [o:], rise so that they are pronounced [i:] and [u:]. Again in words, in Middle English the word *see* was pronounced [se:], but after this step of the GVS it was pronounced [si:]. And Middle English *food* , pronounced [fo:d], was then pronounced [fu:d] after this step of the GVS. Then the vowels below those: in words, Middle English *meat* [m ε :t] became [me:t], and Middle English *boat* [b ɔ :t] became [bo:t]. Finally, Middle English *mate* [ma:t] became [mæ:t]. These changes were complete by about 1600. Next, there was a second phase of the GVS between 1600 and 1700 (see [Figure 3.5](#)).

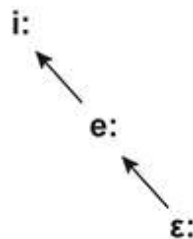


Figure 3.5 Phase 2 of the Great Vowel Shift.

Words that had previously been raised one step, like *meat* and *mate* , were raised one more step in a process called **second raising** , so that *meat* was now pronounced [mi:t], rhyming with *meet* , and *mate* was now pronounced [me:t]. A few words did not change, however: *great* , *break* , *steak* still retain their first phase pronunciations as [gre:t, bre:k, ste:k], rather than the pronunciations we might have predicted from second raising [gri:t, bri:k, sti:k]. Later, the original [i:] vowels, like *bite* that had changed to [b əɪ t], and the original [u:] vowels, like *cow* that had changed to [k əʊ], underwent a small further change to [baɪ t] and [kau] as many speakers would say them today. The remaining words with the [e:] vowel also changed slightly to be pronounced [eɪ], so *mate* [meɪ t] and *great* [greɪ t].

However, the sound change in real life was just not as neat and regular as this. The way that the complex system of speech works, with the emergence of particular habits of pronunciation or word usage in local and regional communities throughout the English-speaking

world, means that these changes occurred at different times – or sometimes not at all – among different regional groups in the British Isles. Indeed, modern dialect survey evidence shows that it is possible to find speakers somewhere in Britain whose pronunciation of particular words today still matches every stage of the GVS. There are longstanding dialect areas in Britain, from Scotland in the North to Land 's End in the Southwest. Top-level generalizations (that is, at the top level of scale in the complex system) like the GVS are still useful so long as we know that they are broad abstractions, and that we can expect linguistic life to be much messier on the ground among actual speech communities. As [Chapter 2](#) has shown us, the top-level frequency profile has other frequency profiles below it at every level of scale, so that regions or cities or even individuals will have their own frequency profiles that are unlikely to match the one at the top level.

One practical consequence of the GVS was its effect on English spelling. The fact that *meet* and *meat* now sound the same but are spelled differently was caused by the second raising step of the GVS. The same is true of *see* and *sea*. *Been* and *bean* sound the same for many speakers in Britain, but not for speakers in America. The pronunciation of English words also differs from the pronunciation of cognate words in European languages because of the GVS: an English *table* [teɪbəl] sounds different from a French *table* [tɑblə]. This is one reason for the many complaints by learners of English about spelling and pronunciation.

We cannot leave this chapter without one more look at Shakespeare (died 1616). Many modern readers have been exposed to his plays or poetry, perhaps to Sonnet 18 (you can listen to this passage online, a3.3):

Shall I compare thee to a summer
,
s day?

Thou art more lovely and more temperate:
Rough winds do shake the darling buds of May,

And summer
,
s lease hath all too short a date:

Sometime too hot the eye of heaven shines
And often is his gold complexion dimmed;
And every fair from fair sometimes declines,

By chance or nature
,
s changing course untrimmed;

But thy eternal summer shall not fade,

Nor lose possession of that fair thou ow
,
st;

Nor shall death brag thou wander
,
st in his shade,

When in eternal lines to time thou grow
,
st.

So long as men can breathe, or eyes can see,
So long lives this, and this gives life to thee.

The language is no longer difficult to understand, and perhaps the worst problem is that spelling disguises the fact that the GVS was not yet complete and Shakespeare's pronunciation is not the same as ours today. There are a few other differences, like the use of *thee/thou* (older forms of the *you* pronoun we use today), and ' *st* endings that we no longer use on verbs. These archaic forms may be familiar to some, however, from Sunday church services. The King James Bible was prepared at this time and also has these forms, and it is still in use in many churches (i.e., at a lower level of scale in the complex system than we expect in national use). More subtle differences in the meanings of words, not the same for Shakespeare as they are for us even though the words are spelled the same, may trip up the incautious reader. C. S. Lewis, in particular, has written wisely about such semantic change over time (1967).

The Old World origins of English, from 449 AD until Shakespeare, provide the source material for American English. We should not expect that one variety of English could cross the Atlantic unchanged to create American English, because there were many varieties of English in the British Isles in Shakespeare's day, as there had been at all times since Old English. This is just what the complex system of language predicts, the scaling property of varieties. So, we can expect that English speakers migrating to the New World – from Scotland or Land's End and all parts in between – will bring a broad collection of words, pronunciations, and grammatical habits with them. Out of those, the new English settlers would create American English as a consequence of their interactions with their neighbors in the new land.

Summary

The English language is part of a long process of development that began with the Indo-Europeans. It emerged from the speech of different Germanic groups who invaded Britain, and continued to emerge somewhat differently in different parts of the island. Borrowings from Latin and Norse began to occur in the Old English period. The Norman Conquest changed the circumstances for linguistic interaction, and English acquired many borrowings from French, as well as more from Latin and Norse. The Great Vowel Shift was a major change in pronunciation. All of these happenings set the stage for the emergence of American English.

Key Terms

Anglo-Saxon Chronicle

borrowing

Chaucer

Colonial Period

C. S. Lewis

Early Modern English

external history

Germanic

Gilded Age to World War II

Great Vowel Shift (GVS)

Indo-European
Information Age
internal history
linguistic continuum
loanword
long vowels
Middle English
Modern English
National Period
Old English
raising
second raising
Shakespeare
Vikings
vowel rotation

Audio Samples

Available at www.cambridge.org/williamakretzschmar.

a3.1 Anglo-Saxon Chronicle (Old English)

a3.2 Chaucer, General Prologue, Canterbury Tales (Middle English)

a3.3 Shakespeare, Sonnet 18 (Early Modern English)

Exercises

1. Listen to the audio samples of Old English (a3.1) (available at www.cambridge.org/williamakretzschmar), and while you do so, write down words that you recognize as still belonging to Modern English. You will find the task much easier if you look at the transcripts of the passages, also online.
2. In the passage from Shakespeare's *Love's Labour's Lost*, many words are glossed. Look up each of those words in the *Oxford English Dictionary* (or another dictionary that gives etymologies) and write down what language they came from. You can skip the Latin passage in the first line – that's not English and will not have any etymology.
3. In the past when you had to read Shakespeare, you may have thought of it as "old English." Now you know it is not – Early Modern English! Sometimes the differences between Shakespeare's English and Modern English sound "poetic," and sometimes that just makes Shakespeare hard to follow. When you read Sonnet 18, which usages do you think are "poetic," and which ones are just hard to follow? There is no correct answer here: do the best you can to talk about particular features of Shakespeare's language and how you interpret them (or find it hard to interpret them) today.

Computer Exercise

[Exercise App3.3 in Appendix 3](#) explores differences by age, to try to observe language change. The apparent time hypothesis from sociolinguistics (see [Chapter 10](#)) suggests that speakers from different age groups will show different stages of a linguistic change.

Further Reading

The ancient history of languages has fascinated many an imagination. See, among many other scholarly offerings, Derek Bickerton, *Language and Species* (Chicago : University of Chicago Press, 1990) ; Mark Kaiser and V. Shevoroshkin, "Nostratic," *Annual Review of Anthropology* 17 (1988), 309 – 329 ; Carl Darling Buck, *A Dictionary of Selected Synonyms in the Principal Indo-European Languages: A Contribution to the History of Ideas* (Chicago : University of Chicago Press, 1949) . Among literary treatments of the subject, notable is William Golding, *The Inheritors* (1963) .

There are numerous editions of the Anglo-Saxon Chronicle, which still exists in nine manuscripts, each one different. The translation prepared by Dorothy Whitelock (*The Anglo-Saxon Chronicle*, ed. and trans. Dorothy Whitelock, David Douglas, and Susie Tucker, New Brunswick, New Jersey : Rutgers University Press, 1961) aligns translations of several of the manuscripts. A recent translation is Michael Swanton, *The Anglo-Saxon Chronicle*, London : Routledge, 1998 .

Malcolm Parkes, *Pause and Effect: Punctuation in the West*, Berkeley : University of California Press, 1993 . This engaging book describes the history of punctuation, something we no longer notice – unless we get it wrong.

Peter Hunter Blair, *An Introduction to Anglo-Saxon England*, 3rd ed., Cambridge : Cambridge University Press, 2003 . The classic account of Anglo-Saxon culture. A compendious resource, over 600 pages and 700 articles, is the *Wiley-Blackwell Encyclopedia of Anglo-Saxon England*, 2nd ed. (Oxford : Wiley-Blackwell, 2013) , edited by Michael Lapidge, John Blair, Simon Keynes, and Donald Scragg.

Peter Baker, *Introduction to Old English*, 3rd ed., Oxford : Blackwell, 2012 ; Bruce Mitchell and Fred Robinson, *A Guide to Old English*, 8th ed., Oxford : Blackwell, 2011 ; Alastair Campbell, *Old English Grammar*, Oxford : Clarendon Press, 1959 . The first two books are popular introductions to Old English, both in advanced editions. Campbell is still the standard Old English reference grammar. A fine new Old English reader, with an introductory chapter on Old English, is Richard Marsden, *The Cambridge Old English Reader*, 2nd ed. (Cambridge : Cambridge University Press, 2015) .

The Riverside Chaucer, ed. by Larry Benson and F. N. Robinson, 3rd ed., New York : Houghton Mifflin, 1987 . A long-running popular collection of Chaucer's works. Besides *Canterbury Tales*, modern readers will still enjoy *Troilus and Criseyde*, perhaps the best love story ever written in English.

Hilary Mantel, *Wolf Hall*, London : Holt, 2009 ; *Bring Up the Bodies*, London : Holt, 2012 ; *The Mirror and the Light*. London : Holt, 2020 . Hilary Mantel's descriptions of England and court life in the sixteenth century are deservedly popular. The second book describes the relationship of Anne Boleyn and Henry VIII in great detail. The books have also been made into a BBC TV series. Can you imagine these TV programs presented with Early Modern pronunciations?

C. S. Lewis, *Studies in Words*, 2nd ed., Cambridge : Cambridge University Press, 1967 . Lewis talks about a number of keywords like *nature* and *world* as well as *free*, and along the way paints a picture of the kind of cultural humanism studied at Oxford and Cambridge in the mid-twentieth century.

For general coverage of the history of the English language, see William A. Kretzschmar Jr., 2018, *The Emergence and Development of English*, Cambridge : Cambridge University Press .

4

The Colonial Period (1600 – 1800)



In This Chapter

The beginnings of American English come from the way that Europeans settled in North America. The circumstances of early immigration were different from the circumstances of life in the Old Country, and the interactions of speakers in the new setting shaped local habits. Crèvecoeur reports a typical experience of an immigrant coming to America. Early formation of American English does follow Schneider's model for colonial Englishes, if we understand it from the point of view of complex systems.

Timeline

1607

Jamestown founded.

1619

Black slavery introduced in Virginia.

1620

Plymouth founded.

1625

Dutch establish New Amsterdam.

1636

Harvard University established.

1650

Population 51,700.

1670

Population 114,500; Charleston founded.

1682

William Penn settles Pennsylvania, Philadelphia founded

1690

Population 213,500.

1701

Detroit founded; Yale University founded.

1710

Population 375,500.

1730

Population 654,950.

1746

College of New Jersey founded, now Princeton University.

1750

Population 1,207,000.

1751

Philadelphia Academy founded, now University of Pennsylvania.

1754

French and Indian War (1754 – 1760).

1770

Population 2,205,000; Boston Massacre (riot put down by British soldiers).

1773

Boston Tea Party (protest against Tea Tax).

1775

Revolutionary War (1775 – 1783).

1776

Declaration of Independence.

1780

Population 2,781,000.

1782

Hector St. Jean de Crèvecoeur, *Letters from an American Farmer*.

1783

Noah Webster, *Grammatical Institute*, *American Spelling Book*.

1790

Population 3,929,214; Washington DC founded.

American English offers a good example of the general question of how new varieties of a language emerge, and what then happens to them over time. For America, this is the process by which particular linguistic features emerged with high frequencies in the English of

the colonies, and by which different features could become more common in different areas. American English and its varieties are the product of random interactions in a complex system, beginning in the first generation, between speakers who brought with them their use of different varieties of British English. The findings of this approach are not in conflict with Edgar Schneider's popular book about the general process of variety formation, *Postcolonial English* (2007). We can never answer the question "why" American English is as it is – there is never a good answer to the "why" question in the history of a language – but it is now possible to address more adequately the question "how" it came to be as it is.

Demographics

Let us begin with the facts of immigration and settlement. North American settlement by English speakers began in the seventeenth century, amounting at that time to about 150,000 migrants from all parts of Britain (Bailyn 1986). These English speakers and their descendants accounted for a majority of the colonial population of 275,000 people by 1700 ("new" immigrants seldom amounted to more than 10 percent of any local population at any one time). Two characteristics of European settlement – introduction of disease and violence towards the survivors – created a pattern of replacement of the native population rather than integration with it, a pattern that would continue long thereafter. Up to 90 percent of the Eastern **Native American** population was lost (see Dobyns 1983, Smith 1994), beginning with sixteenth-century Spanish explorers and the diseases they brought. The settlers themselves were not immune to disease. The earliest English settlements to survive at all after Sir Walter Raleigh's initial Roanoke colony (1585) disappeared without trace, Jamestown (1607) and Plymouth (1620), suffered mortality rates of 50 percent or more in their first years, and child mortality was up to 50 percent before the age of twenty (Bailyn 1986: 100). So, the population of English settlers, too, was subject to rapid and continuing replacement. This created mixed populations of English speakers in every settlement from different British regions.

This fact stands in contrast to more romantic views, such as historian David Fischer's book, *Albion's Seed* (1989). Fischer gives the impression that British regional culture was transplanted whole to North America, with section titles like "East Anglia to Massachusetts" and "The South of England to Virginia." He is simply wrong to write that "On Smith and Tangier islands ... immigrants from the far southwest of Britain founded a culture which still preserves the dialect of seventeenth century Cornwall and Devon" (1989: 784). Nobody today preserves in its entirety Shakespeare's English, or any other regional British variety from the seventeenth century, because no living language fails to change over time. Even settlements like Plymouth that are often supposed to be regionally homogenous were actually quite mixed, as we know from the Mayflower passenger list – half of the passengers were not Pilgrims – and from complaints by the Pilgrims about their non-Pilgrim neighbors (you can listen to Plymouth Records online, a4.1, with transcripts in a separate file). Moreover, many English settlers had already migrated to London before taking ship for America. Keene reports that "Most adult Londoners were born outside the city: in the eighteenth century the outsiders may have been as many as two-thirds of the total" (Keene 2000: 109). North American emigration accounted for as much as 70 percent of English population increase during the seventeenth century, and a majority of those people came to North America through London (Bailyn 1986: 40). So, early immigration from London did not constitute a population of "standard" speakers, but a pre-mixed blend of regional voices. The effect of early general replacement of the native population by English settlers, and of the continuous change in the immigrant population owing to mortality and new migrants, was to create a new complex system out of the interactions of the settlers.

To return to North America in the seventeenth century, complexity science tells about the process by which order, here a new American variety of English, emerged from the mixture of regional British characteristics among the settlers in every locality. We know that there were massive numbers of exchanges of linguistic features – whether words or pronunciation or grammar – deployed by human agents, the speakers thrown together in America. In the early American environment, the immigrants all contributed their own resources of speech as they tried to talk to their neighbors. Given the preponderance of early English settlement, it is no surprise that English features came to constitute the majority of the language in the new order that emerged. There were, of course, some contributions from Native American languages or other European languages in the seventeenth century; for example, New Amsterdam (later New York City) was founded by the Dutch in 1625. However, in every colony a variety of English emerged as the everyday language of the founding population of settlers (see McDavid 1958: 483, Zelinsky 1992 and Mufwene 2001a: Chapter 2 and 3, for the influence of original settlement populations, the **Doctrine of First Effective Settlement**, and the **Founder Principle** respectively). In Zelinsky's words, "the specific characteristics of the first group able to effect a viable, self-perpetuating society are of crucial significance for the later social and

cultural geography of the area, no matter how tiny the initial band of settlers may have been " ([1992](#) : 13 – 14). And after such a start, given that speech is a complex system, the variants available in the population of speakers for any and every linguistic feature began to be distributed according to the A-curve pattern simultaneously at every level of scale. Right from the beginning, somewhat different sets of variants, whether words or pronunciations or ways to put words together, would emerge as top-ranked elements in different localities. Also right from the beginning, a particular set of variants emerged as top-ranked elements at the highest level of scale, American English. The order that emerged at the national level of scale was not exactly the same as what emerged in any single locality or colony and yet, owing to the scaling property of complex systems, neither was it just an abstraction that avoided the special characteristics of any individual colony, nor was it just a kind of average of speech from lower levels of scale. The term **colonial leveling** is sometimes used to suggest that American English had avoided or leveled the differences between regional British varieties, and thereby simplified the language. The term **koinéization** is similarly sometimes used to imply that American English had created a simplified mixture of language features. Neither of these impressions is right. There was no particular avoidance of differences or simplification in the mixture of features; self-organization in the complex system of language simply allowed some features to emerge as most common, whether in American English overall or in the varieties of many different smaller populations of speakers. Massive numbers of interactions between speakers as agents in the complex system caused the emergence of noticeable differences, both between American regions and between American and British English – not simple causes like Fischer ' s idea of wholesale cultural transference.

Despite the high mortality rates, English settlers continued to flood to the colonies in the eighteenth century. And other Europeans came, too, including large numbers of Germans from the Palatinate (*Pfalz* in German, in the southwestern part of modern Germany) starting in 1709. Thousands of African people were brought involuntarily to the colonies after 1680 (the first African slaves arrived as early as 1619) to work on plantations in Southern colonies, many of them from Caribbean islands where plantation agriculture was also common. These non-English groups contributed to an even more mixed population of speakers. Thus, it is also no surprise that substantial numbers of features, whether words or pronunciation or grammatical influences, also emerged in the complex system from non-English sources (see the [next chapter](#) for contributions from various languages to American English, particularly the lexicon). By 1790, of the total colonial population of nearly 4 million, over 2.5 million came from the United Kingdom (including nearly 500,000 from Scotland and Northern Ireland), about 250,000 from Germany, and 100,000 from the Netherlands. About 750,000 African people had been imported as slaves, the largest group after settlers from the United Kingdom. Even though a new variety of English was established in the original colonies, the continuing operation of the complex system in every colony allowed new variants to be introduced, and sometimes to be preferred, owing to the continuing massive interaction of elements.

Pattern of Settlement

European village life was never recapitulated in the English-speaking New World, and so the demographics for the production of language varieties were never alike in the Old World and in the New. As Raven McDavid wrote ([1975/1980](#) : 114 – 115),

the European village has been and still is a viable organic entity ... for village life has always depended on a cooperative tradition, a tradition of a balance of shared rights and responsibilities.

McDavid ' s version of the American village that did share something of the European cooperative pattern was his picture of the Southern mill town that emerged later as a part of cotton culture, where the textile company owned the local store and by its extension of credit came to own the lives of its workers. Apparent similarities elsewhere, he said, were superficial ([1975/1980](#) : 115):

Even when a village – or “ township, ” as it is sometimes called – sought to emulate the European pattern, as in parts of New England or in some of the transplanted New England settlements in Upstate New York and [later] the Middle West, it rarely emulated the European model by being a place where people lived, who made their livelihood by cultivating the surrounding farmland. Rather, it was set up as a miniature city – with banks and shops and ambitions to become something different and bigger ...

The city, it seems, was always the American model, and according to McDavid this was one of the “ centripetal ” forces that worked “ toward a greater degree of uniformity in American speech ” ([1980](#) : 120). Charleston was founded in 1670, Philadelphia in

1682. Some cities further west were also founded early in the period, like Detroit in 1701 by the French explorer Cadillac. Again McDavid ([1975/1980](#) : 119),

Even by 1700 it was clear that the colonies had a new pattern of living. Instead of the society of villages, with urban clusterings, there was a string of cities in the wilderness, generally seaports which mediated directly between the mother country and the frontier.

The American alternative to the village was the city, a more impersonal, commercial entity and a gateway to other colonies and to the world.

McDavid ' s contrast between village and city needs a little further explanation. The historical European demographic pattern had residential villages as the norm, with a larger market town within a day ' s round-trip travel, and still larger population centers with expanded services at wider intervals (e.g., Russell [1972](#) : 29 – 37).

[Figure 4.1](#) shows that the larger “ city ” (population below 1000) of Leicester in the Middle Ages was surrounded by smaller towns, each of them surrounded by villages and hamlets. Linguistic habits emerged within the village according to the complex system of interactions of the residents, and differentiation of linguistic habits emerged between villages because people lived their lives in small, stable, intensely local groups. Village life was characterized by what Lesley and James Milroy would call **strong ties** (more about these in [Chapter 9](#) and [Chapter 10](#)), a network of close relationships between people in a community which allowed for the maintenance of linguistic norms within the group (cf. [1987](#) , [1992](#) , where the Milroys describe not villages proper, but rather their work in the separate neighborhoods of Belfast). Differences with nearby villages were small because of interaction at market towns, according to the scaling principle of the complex system of speech, and greater distances allowed for greater differences to emerge. The result was a classic linguistic continuum, as described in [Chapter 3](#) .

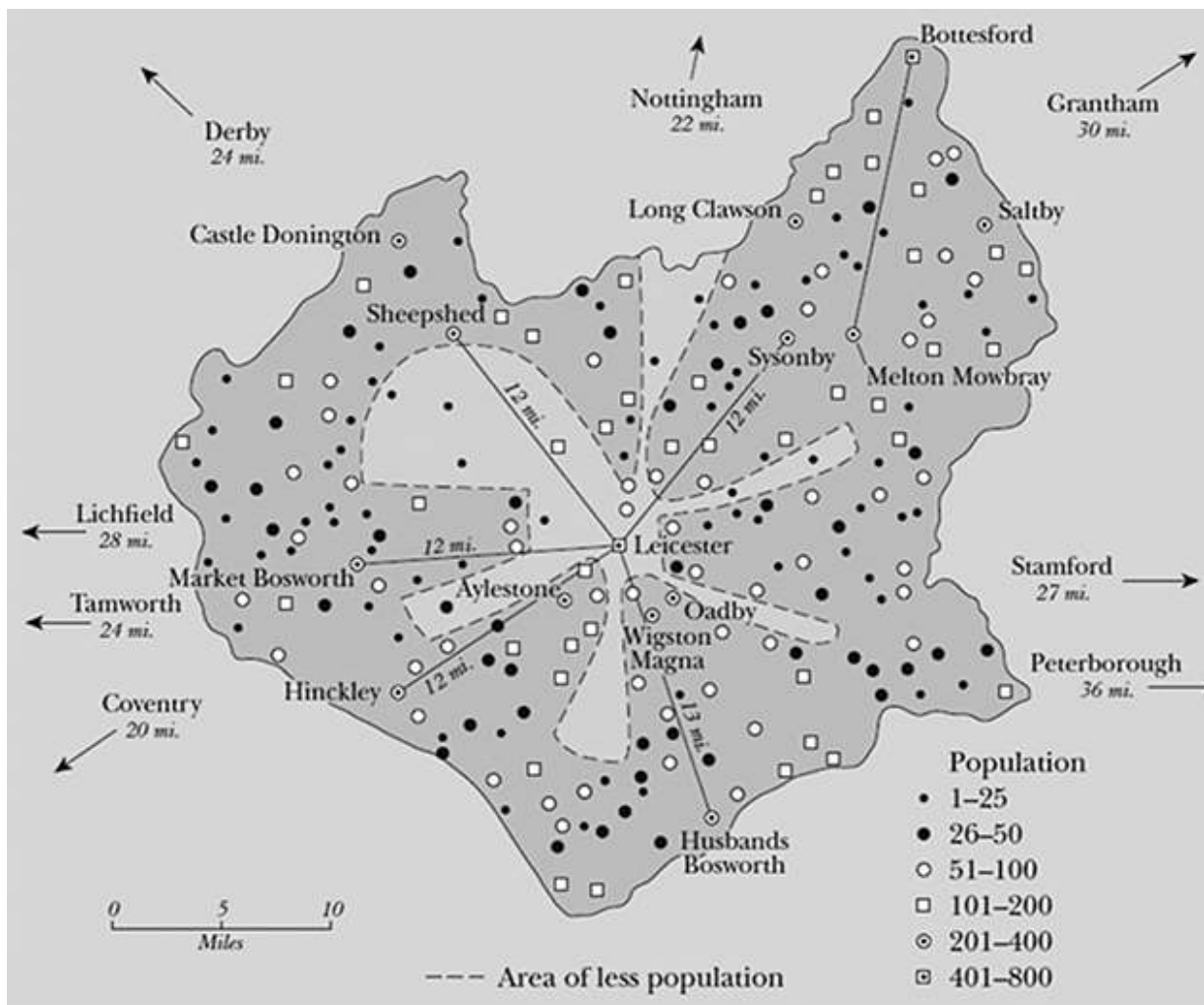


Figure 4.1 European settlement pattern near Leicester (England) in the Middle Ages.

[Figure 4.1 long description.](#)

Source: Kretzschmar, William A., Jr. 2010. Language Variation and Complex Systems. *American Speech* 85: 263 – 286.

The colonial American city, McDavida argued, did not have a supporting structure of feeder villages, but instead mediated linguistic habits for a fairly large number of people living under relatively isolated conditions on separate farms or other homesteads. Still, new American settlers did interact and cooperate with their neighbors, so local variation could emerge, and that variation could further emerge into patterns related to a city. Characteristic local variations in speech thus could and did develop in the more densely populated colonial cities, particularly among the local wealthy elite that ran commercial enterprises. Thus, American habits of settlement and communication created somewhat different possibilities for maintenance of linguistic norms than had existed in the Old World, although the same complex system of interactions worked in both places.

The main American port cities in the colonial period were Boston, New York City, Philadelphia, and Charleston. Early settlement in Virginia, beginning with Jamestown, was different in that it did not have a central port city; the port city of Norfolk only developed after 1750, and the capital Richmond was only incorporated in 1742. Each of the main port cities, and Virginia along Chesapeake Bay, developed its own culture region. Settlers who came through Boston eventually populated New England, as far north as Maine and as far west as the Berkshire Mountains, a part of the Appalachian Mountain chain that stretches from the Canadian border south to Alabama. The New York City culture region extended up the Hudson River. The Philadelphia region ran to the west of the city. Early settlement from Charleston in South Carolina occupied the lowland area north and south along the coast. The same is true of early settlement in Virginia,

which extended along the coast from the northern part of what is now North Carolina to the southern part of what is now Maryland. During the early period of settlement, the only way to get between these areas was by sea.

By 1800 ([Figure 4.2](#)), however, a road system was established near the coast, with western extensions to principal places like Pittsburgh at the headwaters of the Ohio River, founded in 1758, Charlotte in North Carolina, founded in 1768 at the intersection of two trading routes, and Augusta in Georgia, founded in 1736 at the fall line for the Savannah River (the place with a sharp drop in elevation causing waterfalls and rapids, so navigation upstream was interrupted). River travel was very important in this period with few roadways.

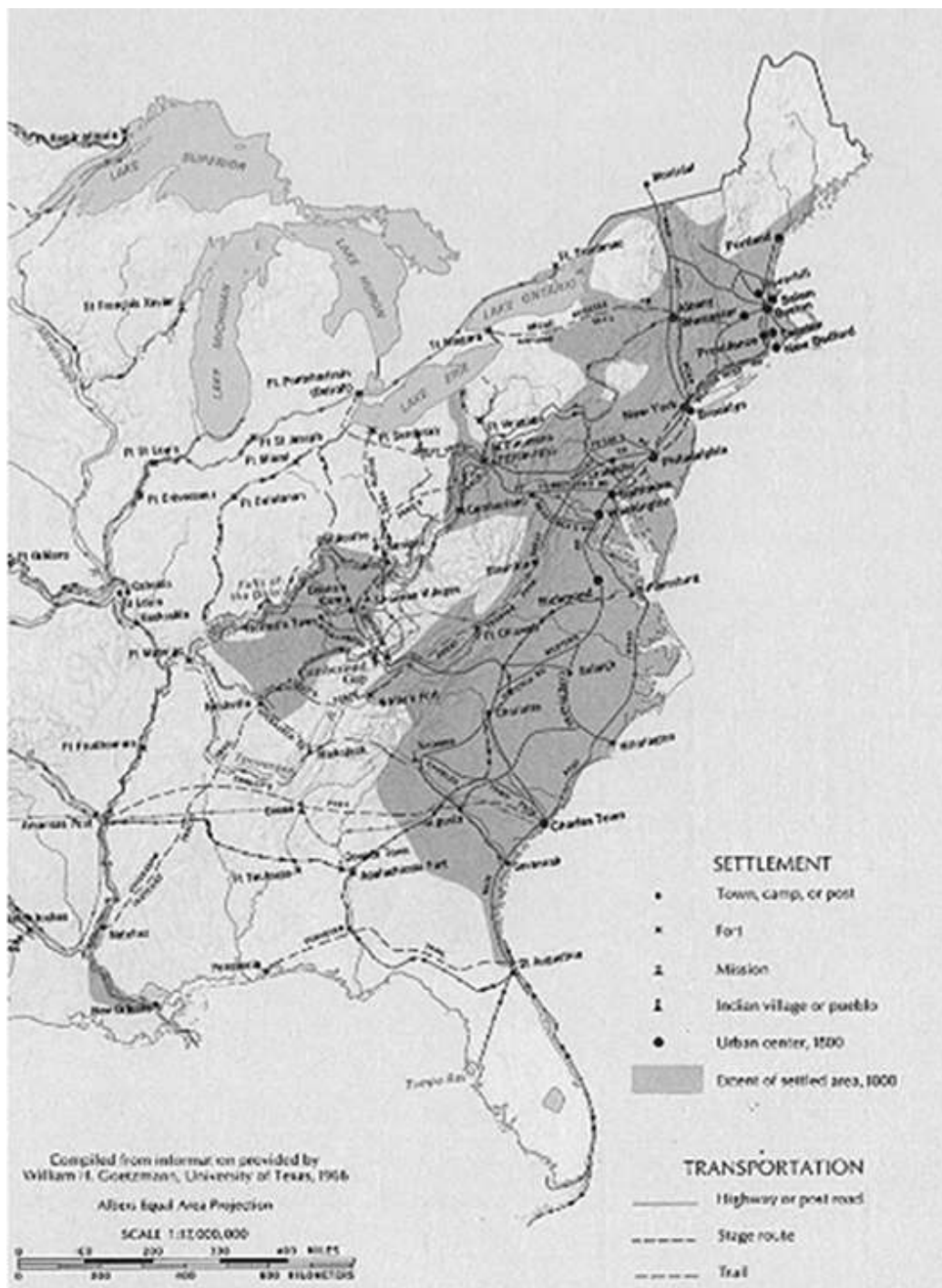


Figure 4.2 Settlement and transportation by 1800.

[Figure 4.2 long description.](#)

Source: *The National Atlas of the United States of America*. Arch C. Gerlach, editor. Washington, D.C.: U.S. Dept. of the Interior, Geological Survey, 1970, viewed at <https://legacy.lib.utexas.edu/maps/histus.html>.

Eighteenth-Century Immigration

Immigration in the eighteenth century proceeded according to a different pattern. In the seventeenth century new settlers stayed close to the coast, but in the following century what had been coastal frontier outposts developed into port cities, and new settlers, and children of colonial families whose lands could no longer support the youngest generation, passed through the coastal ports of entry and headed inland. As Bailyn has written, “ after the initial phase of settlement, the major stimuli to population recruitment and settlement were, first, the continuing need for labor, and, second, land speculation ” ([1986](#) : 60). For the labor market, in addition to single, male indentured servants, mainly from London, who had supplied the demand in the seventeenth century, about 50,000 English criminals were sent to North America (largely guilty of being poor, since dangerous criminals were typically executed at the time), large numbers of “ redemptioners ” came from Germany, and many thousands of Africans came as slaves. Because slaves took over many manual jobs from southern plantations north to Baltimore, indentured Europeans were often recruited for skilled jobs, especially in the building trades (Bailyn [1986](#) : 61 – 64). While the labor market served mainly the coastal cities and developed areas, inland settlement was often accomplished by families, whose pathways west were established by land speculators based in the port cities. Bailyn says that “ Boston was a nursery, Philadelphia a human warehouse, and New York was a staging center for the distribution of immigrants into the far northern frontier ” ([1986](#) : 53). The speculators ranged from large operators down to individual investors, like the author Crèvecoeur (see ‘ Crèvecoeur and the American Experience ’ below), who bought a small farm on the frontier as an eventual home for his daughter ([1782/1981](#) : 92); in the words of Charles Grant, “ the humblest pioneers were apparently speculating their heads off ” (cited in Bailyn, [1986](#) : 67). Boston was a nursery for inland settlement because it received little immigration, and its outlying territories were settled by its own excess population. Philadelphia and New York City, on the other hand, were major ports of entry, and new immigrants often spent considerable time there before leaving for the interior. The delay was not always good for them: unsanitary and crowded conditions led to high mortality rates. Bailyn notes that Philadelphia hosted a large number of German immigrants, while New York City hosted more Scots and Scotch-Irish, yet overall he reports that

The population that spread inland from coastal nodes to form new communities was a composite of ethnic and religious groups – Germans, French, Swiss, Scotch, Scotch-Irish, English, Caribbean islanders, Africans, Afro-Americans – carrying with them different cultural baggage ... And as these many groups spread through the backcountry and settled in growing inland communities and on farms and plantations scattered over millions of acres, complex regional configurations developed, which became in turn settings for later arrivals who filled in the interstices, thereby further complicating the emerging society. There was no single “ American ” pattern of family and community organization. There were many patterns, reflecting the variety of human sources from which the population had been recruited and the swiftly changing, fluid situations in which the people lived.

([1986](#) : 59 – 60)

More uniform large settlements like the Pennsylvania German (often called Pennsylvania Dutch) religious settlements were the exception that proved the rule. Most settlers found themselves in smaller groups or fending for themselves as individuals, and they had to make things up as they went along.

While large numbers of immigrants went inland, American institutions began to form in coastal cities. Higher education, for example, was supported by the foundation of numerous universities. Harvard was founded as early as 1636. Other schools followed in the eighteenth century: Yale in 1701, the College of New Jersey (later Princeton) in 1746, and the Philadelphia Academy (later the University of Pennsylvania) in 1751. The commercial and cultural opportunities of the cities supported inland migration, and also fostered political activity such as, in Boston, the Boston Massacre (1770, a confrontation between citizens and British soldiers, later publicized by revolutionary politicians) and the Boston Tea Party (1773, a protest against the Tea Tax). The Declaration of Independence and later the Constitution were discussed and approved in Independence Hall in Philadelphia. Washington DC was not founded as the capital until 1790, and the first session of Congress held there was in 1800.

Crèvecoeur and the American Experience

We can learn more about new American settlement patterns from a colonial witness, the *Letters from an American Farmer*, by Hector St. Jean de Crèvecoeur. Crèvecoeur was a Frenchman who had served in the British army in Canada, cultivated a 370-acre farm in New York State, and after the American Revolution became the French Consul in New York City. His *Letters* were published in London in 1782, with a French translation appearing in 1784. Crèvecoeur in the early letters idealized the American experience. He supplied a basic pattern for what somebody typically did to become an American:

If he is wise, he thus spends two or three years, in which time he acquires knowledge, the use of tools, the modes of working lands, felling trees, etc. [After acquiring friends, a good reputation, and a little money, he can use his acquisitions to buy land on credit.] He is now possessed of the deed, conveying to him and his posterity the fee simple and absolute property of two hundred acres of land, situated on such a river. What an epocha in this man's life! He is become a freeholder, from perhaps a German boor. He is now an American ...

([1782/1981](#) : 82 – 83)

The new immigrant began his new life in association with more established citizens, often but not exclusively with relatives or fellow countrymen, but as soon as possible abandoned their company for his own property on the frontier. Crèvecoeur's description of himself, though it leaves out his literary pretensions, probably did accord with his self-image before the Revolution:

I am but a feller of trees, a cultivator of lands, the most honourable title an American can have. I have no exploits, no discoveries, no inventions to boast of; I have cleared about 370 acres of land, some for the plough, some for the scythe, and this has occupied many years of my life.

([1782/1981](#) : 212)

Rather than live in villages, Americans lived on the land, and rather than share village rights and responsibilities, they owned their own land and made their own lives. There is an American tradition, also described by Crèvecoeur, of neighbors helping neighbors but these are people who lived at some distance down the road, not a few yards away.

A typical case of the speculative development and sale of land is described by Crèvecoeur ([1782/1981](#) : 90 – 105). He writes that “Andrew the Hebridean” – according to Bailyn, 40 percent of English settlement in the eighteenth century was Scots or Scotch-Irish ([1986](#) : 60) – arrived in Philadelphia with a group of Scots who had arranged a land deal with an agent; he himself however had no such arrangement, and Crèvecoeur picked him up on the docks and soon placed him with a local farmer and arranged a different job for his wife and teenage son. Andrew earned capital but he also learned the skills that he needed for successful homesteading, beginning with the use of the axe, which he had never had occasion to use in his treeless home country. After a couple of years, Crèvecoeur arranged for Andrew to be settled on uncleared land on the edge of the frontier, and Andrew was allowed to live there rent-free for seven years as he made progress in clearing the land. Thereafter for the rest of the thirty-year lease Andrew had to pay rent. Crèvecoeur concluded with an accounting of the money and possessions that Andrew was able to amass through his own efforts in the four years since his immigration, to a value of \$640 – when he had arrived with only about \$35 after selling all that he had acquired in a lifetime in Scotland. Crèvecoeur's account illustrates the hot labor market, the use of free labor to add value to wild land acquired for speculation, and eventual income to be derived from the property – and the same process is described in some detail by Bailyn ([1986](#) : 82). While some speculative deals did import a large number of Europeans directly for work on a particular parcel of land, the grand schemes of speculators often dissolved into mixed settlements or collapsed completely, so that individual initiative like Andrew's remained the rule. America had cities but its way of life was marked by the individuality of its new citizens on their own separate properties. It was not only the physical habits of settlement that affected the genesis of American English and its varieties, but the psychological preference for individuality that encouraged such settlement.

At the same time, Crèvecoeur insisted that the product of this individuality was a distinct American character:

Europe contains hardly any other distinctions but lords and tenants; this fair country alone is settled by freeholders, the possessors of the soil they cultivate, members of the government they obey, and the framers of their own laws, by means of their representatives.

([1782/1981](#) : 80)

This American character thus was a consequence of shared individual experience, not residence together in the same physical place. And with the exception of a few groups, like the Anabaptists who colonized land together and not singly as in the Pennsylvania German area, the American experience had the power to break down religious and national distinctions. Again Crèvecoeur:

Thus all sects are mixed, as well as all nations; thus religious indifference [i.e. lack of prejudice] is imperceptibly disseminated from one end of the continent to the other, which is at present one of the strongest characteristics of the Americans.

([1782/1981](#) : 76)

Of course this was the ideal. Crèvecoeur was scandalized by the treatment of slaves in Charleston. He was also confused during the Revolution, when his Tory sympathies made him the object of attack by his neighbors. We need not share his confusion, however, because we can see that even Crèvecoeur painted the American character in opposition to Europe: when American culture had torn down European social modes and replaced them with American ones, the American character could hardly be expected to tolerate attachments to the Old World once the Old World came to be perceived as a threat. Even as Crèvecoeur depicted it, the American character in the colonial period required political isolation. What Crèvecoeur gives us is a portrait of the new American social psychology.

To return to American English, it is clear that Americans' shared individual experiences did allow for the emergence of local variation, but not at first sharply delineated varieties in American English to parallel the historical regions in Britain. Learning to participate in the new American experience, according to Crèvecoeur, typically required some period of residence among longer-settled Americans, which would provide the opportunity for the future individualist to acquire some linguistic norms as well as capital and specialized skills for husbandry. The goal of new immigrants was to leave the place and people that they originally found and for whom they worked in order to settle on the frontier – not the wilderness, but the somewhat tamed and already marked areas made available for farming by legendary American “frontiersmen” like Daniel Boone. Thus, the new immigrants' desire to participate in the American experience included, to a greater or lesser degree, the motive and opportunity to sound like an American, but the circumstances for immigration weighed against the strong ties that would be expected in order for immigrants to maintain sharply distinctive local norms.

When, as Crèvecoeur suggested, new immigrants found employment for a time to learn American ways and to build resources before they went to homestead on the frontier, part of what they learned in the longer-settled areas was the local flavor of American speech. Some habits of speech from each port of entry would then be carried along settlement pathways throughout its focal area; the greater density of contact between speakers from the same port of entry than between those from different ports promoted the emergence of regional patterns as described in [Chapter 5](#). However, while distinctive local standards could be developed by city dwellers through their more frequent interactions, and local lexical and other linguistic norms were disseminated within typical settlement channels, still the variation stems largely from the somewhat different selection of features within the set of English features generally available in the colonies at the time. The American pattern matches the prediction of the A-curve from the complex system. Thus American social psychology and the demographics of settlement allowed simultaneously for the development of a relatively consistent American English both within and across the different regions of primary and secondary settlement, while they prevented the emergence of a marked national standard.

Schneider ' s Postcolonial English

Let us now consider how Edgar Schneider ' s [2007](#) book *Postcolonial English* discusses the emergence of new varieties of English in former colonies worldwide. His description of the histories of English in a number of places, including the United States, shows that the emergence of these postcolonial varieties does seem to follow a similar trajectory. His **Dynamic Model** suggests five phases in the evolution of such varieties: foundation of the colony, stabilization around the outside norm, nativization, formation of an internal norm, and diversification. American English began to form by self-organization out of the complex system of linguistic interactions in the new colonies. “Stabilization around the outside norm” represents the fact that, in America, English was imported as a language because of replacement of the indigenous population. “Nativization” began immediately in one sense, as settlers in every locality had to adopt words to describe local flora, fauna, and places. These were often terms taken from Native Americans, as recorded, for example, in

Thomas Harriot's *Briefe and True Report of the New Found Land of Virginia* (1588, cited in Bailey [2004](#) : 4 – 5), which was based on the failed Roanoke colony. The perception of nativization began in the eighteenth century, as British and American writers noted differences between the English of the Old and New World. John Witherspoon, for instance, commented in 1781 that (cited in Mathews [1931](#) : 16)

the vulgar in America speak much better than the vulgar in Great-Britain, for a very obvious reason, viz. that being much more unsettled, and moving frequently from place to place, they are not so liable to local peculiarities either in accent or phraseology. There is a greater difference in dialect between one county and another in Britain, than there is between one state and another in America.

Schneider cites no fewer than four other eighteenth-century writers who comment on the uniformity of American English ([2007](#) : 269 – 270). However, the period comments do more to distinguish American English from British English than they testify to any actual koinéization. The strongly marked regional dialects of Britain were certainly not maintained in America (no matter what Fischer said) owing to population mixture, noted here by Witherspoon. However, the complex system of speech did not create a uniform koiné; instead, somewhat different patterns of pronunciation, lexicon, and grammar emerged at different scales from locality to locality and from state to state, up to the national level of scale.

It was certainly possible then, as it is now, to describe the characteristics of an overall American variety, one clearly different from Britain as all the commentators tell us, even though the national description, then as now, was not an exact fit for any local variety. Schneider's " diversification " was already underway, if not yet strongly marked. Witherspoon also noted verbal differences between different regions, such as the word *chunks* for ' firewood ' in the middle colonies, and *tote* for ' carry ' in the Southern states (words still around today). Some other features that we associate still today with American regions were present then, such as r-lessness (when America was settled the change in Britain not to use the -r sound after vowels, so called **postvocalic -r** , was incomplete so some British immigrants had -r after vowels and others did not; for further discussion, see [Chapter 5](#)) and other matters of pronunciation, and grammatical choices like *hadn't ought*. This diversification of speech in the original colonies completes Schneider's picture of the initial emergence of American English, although we can say that diversification began to occur from the very beginning and just became more noticeable as the last stage. The stages of Schneider's Dynamic Model thus accord well with the process of the complex system of speech.

By the end of the eighteenth century, the eastern American seaboard had achieved a more settled status. Coastal port cities received new immigrants, who later moved inland to occupy their own land. The American population increased by a million people in the first half of the eighteenth century, and more than tripled by the end of it. Population growth in this century occurred within an existing matrix of English communities, and so English remained the dominant language of the colonies.

As for American English, at the end of the colonial period Noah Webster published his *A Grammatical Institute, of The English Language, Comprising, an Easy, Concise, and Systematic Method of Education, Designed for the Use of English Schools in America* ([1783](#)). Webster will be treated in more detail in the [next chapter](#) , but suffice it to say here that he was a promoter extraordinaire of American nationalism. While the *Grammatical Institute* as a whole may not have been universally adopted for schools in America, part of it, *The American Spelling Book* , certainly was, and it became one of the most popular textbooks of all time.

Examples of Colonial American English

Formal American discourse during the Colonial Period advances from the language of Shakespeare, and so it sounds quite modern to us today. The following passage from the " Sinners in the Hands of an Angry God " (1741) by fire-and-brimstone preacher Jonathan Edwards (1703 – 1758) can serve as an example (you can listen to the passage online, a4.2). Edwards was born in Connecticut, and was educated at Yale University. He participated in religious revivals, which serve as evidence that Americans were not uniformly pious.

The use of this awful subject may be for awakening unconverted persons in this congregation. This that you have heard is the case of every one of you that are out of Christ. – That world of misery, that lake of burning brimstone, is extended abroad under you. There is the dreadful pit of the glowing flames of the wrath of God; there is hell's wide gaping mouth open; and you have nothing to stand upon, nor any thing to take hold of; there is nothing between you and hell but the air; it is only the power and mere pleasure of God that holds you up. You probably are not sensible of this; you find you are kept out of hell, but do not see the hand of God in

it; but look at other things, as the good state of your bodily constitution, your care of your own life, and the means you use for your own preservation. But indeed these things are nothing; if God should withdraw his hand, they would avail no more to keep you from falling, than the thin air to hold up a person that is suspended in it.

Gone are the features of Shakespeare that can give pause to modern readers, like unfamiliar pronouns and verb forms. Still, the language is not quite what someone would use today, even in a sermon. “Unconverted persons” in the first line, and “this that you have heard” in the second line, are not uninterpretable by modern readers but may strike us as odd turns of phrase. The spelling of “any thing” at the end of the first paragraph as two words, not one, is not how we spell it now. Edwards wrote that “you probably are not sensible of this” in paragraph two, but today we might use the word “aware” instead of “sensible.” Finally, Edwards uses the semi-colon more than people today might use it. These are relatively subtle differences in comparison with Shakespeare a century before. It is worth noting that Edwards himself was not always as fire-and-brimstone as he appears here. He was very interested in natural history and the emerging sciences of his time, such as the work of Isaac Newton. Freedom of religion was a hallmark of the new American experience, but that did not mean that every citizen lived religious lives all the time.

We can observe a more colloquial version of the English at the end of the period in the diary of Amos Farsworth, a soldier in the Revolutionary Army (you can listen to the passage online, a4.3):

Saturday May ye 27 (1775). went on hog island And Brought of Six hoses, twentyseven hornd Cattel And fore hundred And Eleven Sheep. about the midel of the afternoon went From hog island to Noddles island and sot one Hous and Barn on fiar, kild Some hoses and Cattel Brought of two or thre Cows one horse. I with five men got of the horse And Before we got from Noddles island to hog island we was fird upon by a Privateear Schooner But we Crost the river and about fifteen of us Squated Down in a Ditch on the mash and Stood our ground. And thare Came A Company of Regulars on the marsh on the other side of the river And the Schooner: And we had A hot fiar untill the Regulars retreated. But not withstanding the Bulets flue very thitch yet thare was not A Man of us kild. Suerly God has A faver towards us: And He can Save in one Place as well as Another. we left the island about Sun-Set and Came to Chelsea: And on Saturday about ten At night Marchd to Winnisimit ferry where thare was a Schooner and Sloop Afiring with grate fury on us thare. But thanks be unto god that gave vs the Victry at this time for throu his Providence the Schooner that Plad upon us the day before ran Aground and we Sot fiar to hur And Consumed hur thare And the Ssloop received much damage. in this ingagement we had not A man kild: but fore wounded but we hope all will Recover. one of the fore was A tounsing man belonging to our Company the bullet went throu his mouth from one Cheek to the other. thanks be unto God that so little hurt was Done us when the Bauls Sung like Bees Round our heds.

Here we see many differences in capitalization and spelling from usage today. The use of “ye” in the date just means ‘the,’ since the *y* in “ye” is a replacement for the *þ* letter, pronounced as a *th* sound, that we saw in the [last chapter](#) in use in Old English. Some of these differences tell us about Farsworth’s pronunciation: when he wrote “Six hoses” in the first line, surely he was talking about horses, a sign that he did not pronounce *-r* after vowels as many people in Boston still do not today. In other places he wrote “horse,” not “hose,” so he knew that the word could be spelled with an *r* in it, he just did not do so consistently. The same thing happened for the word “marsh,” sometimes spelled with a *r* and sometimes without. In the third line he wrote “sot” as the past tense of *set*, a nonstandard verb form still heard today. Another nonstandard usage occurs in “we was fird upon,” which used the singular “was” where we might expect the plural “were.” There is an example of what is known as a *prefixing* near the end of the passage, “Afiring,” today a form still in vernacular use. A difference in usage occurs in the phrase “we had A hot fiar,” meaning ‘we had a hot battle.’ Still, we have less trouble with Farsworth’s language than with Shakespeare’s, so long as we allow for informal spelling and usage. Farsworth shows us about common speech in the period, whereas Jonathan Edwards showed us high style.

By the end of the Colonial Period, America consisted of the thirteen states that were party to the original Articles of Confederation, plus three others who joined the Union in the 1790s following ratification of the Constitution (Vermont, Kentucky, Tennessee). The population had reached 5 million people. Important port cities like Philadelphia (the largest), Boston, New York City, and Charleston served as focal areas for interior settlement. Plantation Virginia, too, though without a major city (Richmond was its most urban center), was an original colonial focal area from which settlers headed west. The east coast had its own culture, a little different in each region, that included higher education institutions and cultivated citizens as well as yeoman farmers in the interior. And in each region American English was firmly established, a little bit different in each region as the complex system of language would have us expect.

Summary

Colonial settlement of the American east coast came predominantly from Britain, which established the cultural matrix into which settlers from other places fit themselves. America did not have the European village plan, but instead coastal cities with people ranging into the frontier. Crèvecoeur described the American colonial experience, which possessed both formal (Edwards) and less formal (Farsworth) ways of speaking.

Key Terms

colonial leveling

Crèvecoeur

Doctrine of First Effective Settlement

Dynamic Model

Founder Principle

koinéization

Native Americans

postvocalic -r

strong ties

Audio Samples

Available at www.cambridge.org/williamakretzschmar .

a4.1 Plymouth Records (seventeenth to eighteenth century)

a4.2 Jonathan Edwards (late eighteenth century)

a4.3 Amos Farsworth (late eighteenth century)

Exercises

1. Go online (Wikipedia is fine) to look up the history of a state on the American east coast, any of them from Georgia north to Maine. Who were the first settlers? Did they stay and remain active? Was there a mixture of settlers from different countries?
2. Crèvecoeur wrote that “ Europe contains hardly any other distinctions but lords and tenants; this fair country alone is settled by freeholders, the possessors of the soil they cultivate, members of the government they obey, and the framers of their own laws, by means of their representatives. ” Is this a fair contrast for him to make? Is it all about the aristocracy who owned the land and tenants who worked it in seventeenth- and eighteenth-century Europe?
3. Look up the process of change for the English pronouns *thee/thou* and *you* . How did *thee/thou* disappear (and did it go out of use for everybody at once)? The pronoun *you* is supposed to be both singular and plural: has it always been that way? Are there any other forms of the *you* plural in use today?

Computer Exercise

[Exercise App3.4 in Appendix 3](#) explores how communities can have multiple terms for the same thing at different frequencies, following the idea of mixed speech communities discussed in this chapter.

Further Reading

Bernard Bailyn , *The Peopling of British North America* , New York : Vintage , 1986 . Bailyn ' s account of the early colonization of North America replaces earlier, more romantic views with a more modern history.

Richard Bailey , *Speaking American: A History of English in the United States* , New York : Oxford University Press , 2012 . Bailey ' s entertaining book selects a different place for every fifty-year period in American history for its chapters, from Chesapeake Bay before 1650 up to Los Angeles for 1950 – 2000, and provides a wealth of detail about the language in its place and time. The earlier chapters – Chesapeake Bay, Boston, Charleston, Philadelphia, New Orleans, and New York – touch on American places that had their own cultural regions during the settlement period, as mentioned earlier in this chapter.

Edgar Schneider , *Postcolonial English* , Cambridge : Cambridge University Press , 2007 . Schneider ' s Dynamic Model is the best current description of the common points of development for colonial varieties. He has also published a short textbook on the subject, *English Around the World* (Cambridge : Cambridge University Press , 2011) .

5

The National Period (up to the Civil War, 1800 - 1865)



In This Chapter

“ Go west young man, go west and grow up with the country ” (a famous quotation attributed to Horace Greely) tells the story of this chapter. Americans left the east coast to populate the territory as far as the Mississippi River and some parts beyond it. As immigration grew so did the effects it had on American English, though not always as scholars have thought about it. This chapter also describes the beginnings of Standard American English through the influence of Noah Webster.

Timeline

1800

Population 5,308,438

1803

Louisiana Purchase (828,000 square miles)

1804

Lewis and Clark Expedition (1804 - 1806)

1808

Importation of slaves prohibited

1810

Population 7,239,881

1812

War of 1812 (1812 - 1815)

1819

Florida Purchase

1820

Population 9,638,543

1821

Santa Fe Trail (Missouri to New Mexico)

1823

Monroe Doctrine (no new European colonies in the Americas)

1828

Webster, *American Dictionary*

1830

Population 12,866,020

1836

Lone Star Republic (1836 – 1845); Oregon Trail (Missouri to Oregon)

1838

Underground Railroad established (escape routes for African Americans)

1840

Population 17,069,453

1845

Texas annexed

1846

Mexican War (1846 – 1848)

1847

Mormons in Utah

1849

California Gold Rush

1850

Population 23,191,876

1852

Harriet Beecher Stowe, *Uncle Tom 's Cabin*

1860

Population 31,443,321

1860

The Civil War (1860 – 1865)

1863

Battle of Gettysburg; Emancipation Proclamation

1865

Lee 's surrender at Appomattox; Lincoln assassinated; 13th Amendment outlaws slavery

The situation for American English after its initial emergence as settlement proceeded inland in the nineteenth century is somewhat different from the Colonial Period. The complex systems of speech in inland American localities were established, again, by mixed populations of speakers, including some people who had been resident in the original colonies, some speakers who had arrived at ports of entry and stayed some time there (a frequent occurrence), and some speakers who proceeded more directly to the frontier. Some Native Americans were present in the northern parts of the American East. There were still not many nearer the coast because of the spread of epidemics originated by Spanish explorers, but settlers met more Native Americans as they went west to areas not struck by disease. In the Southeast the Native American population had had a longer time to rebound after the epidemics had run their course but the survivors were displaced. In the state of Georgia in the nineteenth century the state militia forced Native Americans out, and new settlers participated in land lotteries to acquire 200-acre sections for homesteading. Under these conditions of the time, the largest proportion of the speakers who settled in any one locality was certainly formed by those who had lived further to the east along the settlement route that allowed new settlers to get to the frontier. The remaining Native Americans and people who came more immediately to available homesteading areas contributed linguistic variants which could become common in a locality, but which had to compete with variants that were already in frequent use in established complex systems of speech further east.

Settlement Patterns

There was some contact between regions in the colonial period because coastal cities were transportation centers, but the difficulty of such long-distance transportation tended to create focal areas that extended out from the cities. In the nineteenth century, settlers streamed inland from the coastal cities as the terrain allowed them to. As settlement proceeded inland from the coastal outposts, the speech habits of the coastal communities were carried to the interior by residents of the established colonies who wanted new opportunities, and by new immigrants who landed at the coast and acquired speech habits as they made their way to the frontier (which for some immigrants took years).

Settlement proceeded generally westward in three large geographical bands as far as the Mississippi River, corresponding to what is now the **Northern** tier of states, a **Midland** region, and the **Southern** region (see the arrows in [Figure 5.1](#)). In the North the stream of settlement in Upstate New York had to go around the southeast part of the state inland from New York City (originally Dutch in settlement), and followed the Hudson River (also river systems through Connecticut) far enough north to reach unsettled territory. In the early nineteenth century the Erie Canal, completed in 1825, was built to connect the Hudson River at Albany with Lake Erie at Buffalo. The waterway promoted westward settlement along the Great Lakes as far as Northern Illinois, Wisconsin, and Minnesota, a region we can call the **Inland North** . This region was separated from **New England** by the Appalachian mountains, and so settlers coming to New England through the port of Boston occupied New Hampshire, Vermont, and Maine to the east of the mountains. Thus the Northern region had two separate settlement areas, New England and the Inland North.

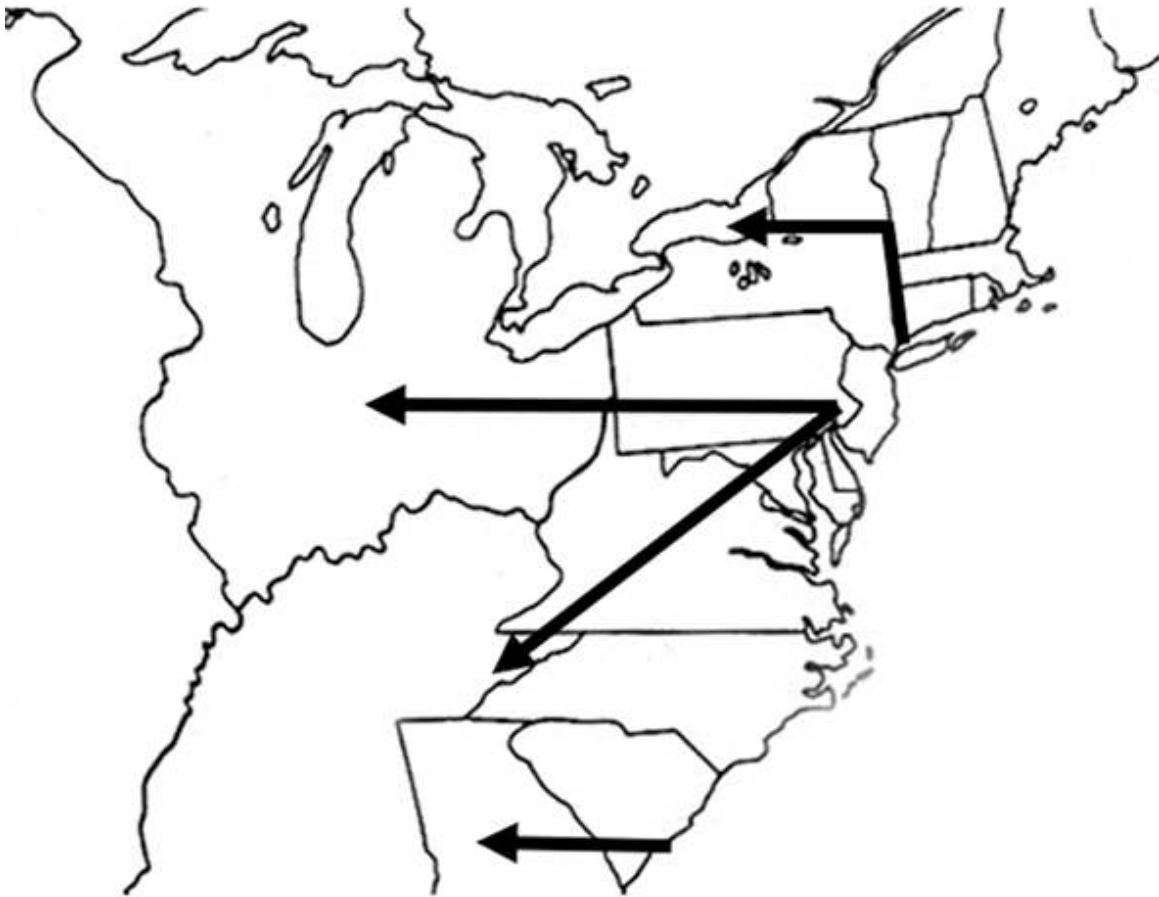


Figure 5.1 Settlement pathways from the American East Coast.

The South had no convenient waterway to facilitate travel to the interior, and the varied topography of the land – mountains, the piney woods, wiregrass – was not all well suited to the pattern of plantation agriculture that dominated the colonial economies of Virginia and the Carolinas. Southern settlement thus proceeded more slowly, in a patchwork of communities across Georgia and Alabama until settlers reached plantation lands in the plains and Mississippi Basin areas of Tennessee, Mississippi, Louisiana, and East Texas. The Florida Purchase of 1819 established American control from its former Spanish owners, but Florida only became a state in 1845. Development of plantations there was hampered by battles with the Seminole tribe of Native Americans, which ended only in 1858.

Philadelphia was the cultural center for the stream of settlement in the Midland region, which proceeded west in two different directions. The National Road was built to run due west from Philadelphia through Pennsylvania, eventually as far as central Illinois, close to the present-day route of Interstate 80 in southern Pennsylvania. Settlement took place along the road, and settlers could also reach the Ohio River valley at Pittsburgh and then use the waterway to settle farther inland. Because river travel was much easier than road travel, this meant that settlement often occurred sooner along the Ohio River than it did on land further from the river. This **North Midland** settlement pathway is often merged with the Northern region by those who would create just two American regions, North and South. The more southerly stream of Midland settlement, sometimes merged with the South by those who want just two regions, followed the course of the Shenandoah River southwest through Virginia towards the Cumberland Gap in Tennessee. Most of the **South Midland** settlers were subsistence farmers, and they occupied whatever land could support them throughout the Appalachian Mountain region and, eventually, the uplands as far west as Arkansas, and also in the lowlands of the Southern states where the land was not suitable for plantations. These historical patterns of settlement – North, Midland, and South – created the basic framework of regional American speech that we can still hear today (see [Chapter 8](#) for discussion of regional dialects).

Beyond the Mississippi, the Louisiana Purchase in 1803 greatly expanded territory nominally under American control (most of it was occupied by Native Americans) by over 2 million square kilometers. Thomas Jefferson commissioned the Lewis and Clark Expedition to explore the new territory, and the explorers reached the Pacific Ocean at the Columbia River (the present-day border between Oregon

and Washington) in late 1805. Beginning in 1823, the Monroe Doctrine recognized existing European colonies but declared that no further colonies could be created or states be controlled by Europeans. South of the Louisiana Purchase, settlers began to follow the Santa Fe Trail in 1821. The Lone Star Republic declared independence from Mexico in 1836, and Texas became a state in 1845 (its annexation was confirmed by the Mexican War from 1846 to 1848). Also in 1845 settlers began to take wagon trains across the Oregon Trail. Mormons settled in Utah beginning in 1847. The California Gold Rush began in 1849, and California became a state in 1850. Oregon became a state in 1859. [Figure 5.2](#) indicates the extent of American settlement and the trails west as they were in 1850.

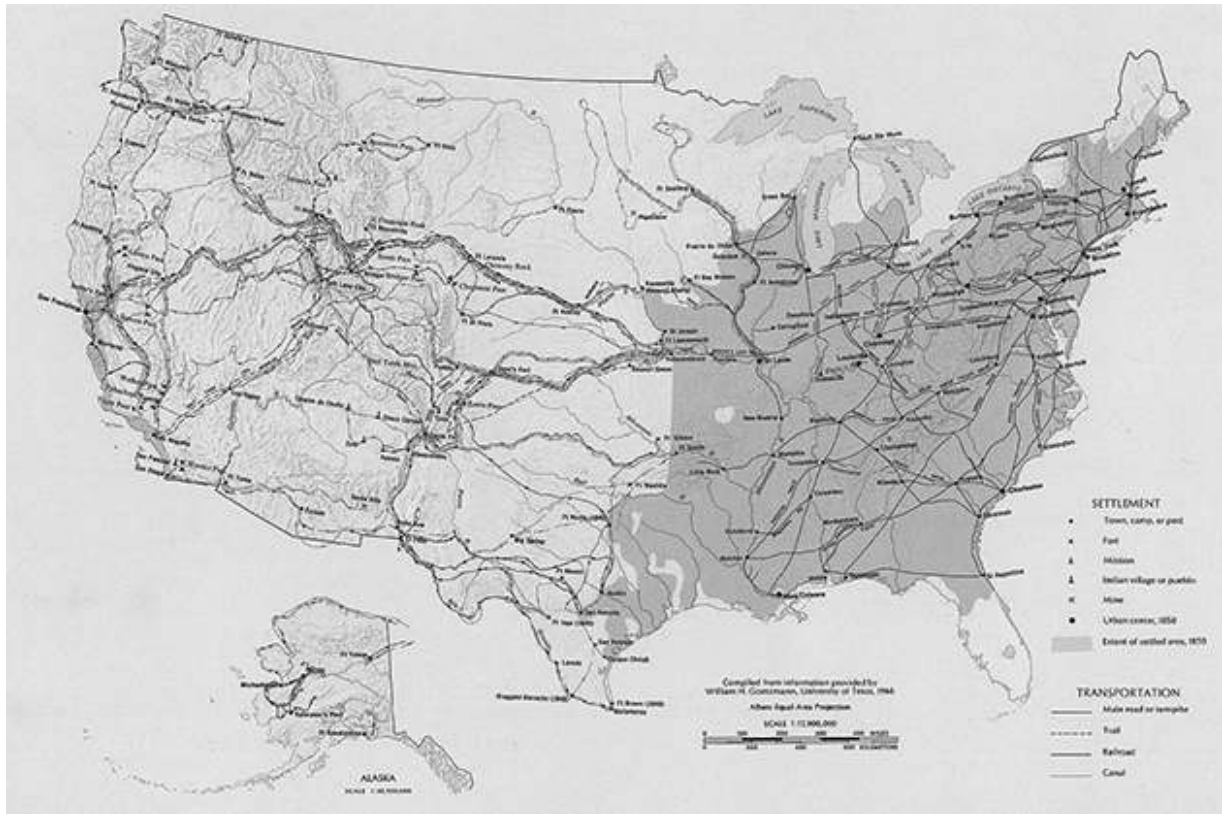


Figure 5.2 American Settlement by 1850.

[Figure 5.2 long description.](#)

Source: *The National Atlas of the United States of America*. Arch C. Gerlach, editor. Washington, D.C.: U.S. Dept. of the Interior, Geological Survey, 1970, viewed at <https://legacy.lib.utexas.edu/maps/histus.html>.

Differences in language between these regions were already in evidence by the early nineteenth century. For example, emergent regionalisms appear in the writing of Anne Royall, a travel and society writer. She wrote in 1831 (cited in Mathews [1931](#): 95):

I saw a piece in the papers not long since, which went to satirize the Tennessee dialect. I would advise such people to look at home. Those who live in glass houses, ought not to throw stones. Let us compare this with the dialect of Virginia ... ' you know da is heap of baw [bear] on da Kenhawa; so [we] are all goin to Kenhawa to hunt baw - Kenhawa mighty far - so we walk - we walk - last we come to da Kenhawa - Kenhawa b-i-g river, for true - Tell you what, it skears me - well, I goes out into de woods - I hear noise - I look up tree, and see a baw! ...' Now for the Pennsylvania dialect: ' Jim, where are you and Sam; why but ye 's pit [put] you cow in the pester [pasture]; ' am sure a towled ye 's the mornin. - Ye 's cruel bad children - and there a fine job ye 's done to leave you gears out by. ' The Yankee: ' Flora you want [ought] to wash them clothes right away. You hadn 't ought to left ' em so. ' ' What say? '

We see in this report that by the early nineteenth century there was common knowledge of dialect variation between the states. Further, we see that some features that we associate with those regions still today were present then, such as loss of postvocalic -r and other matters of pronunciation (represented with nonstandard spellings), lexical choices still at issue like *hadn 't ought* or the second-person pronoun *ye*, and also grammatical choices like “ what say, ” “ for true, ” or “ am sure a towled ye ' s the mornin. ”

An Experiment in the Spread of Dialect Words

In order to measure the spread of dialect words, we first need to know how words are typically distributed across the land. [Figure 5.3](#) shows a map based on the distribution of the word *cloudburst* in the Linguistic Atlas of the Middle and South Atlantic States (LAMSAS) survey (page 6, line 1 of the questionnaire).

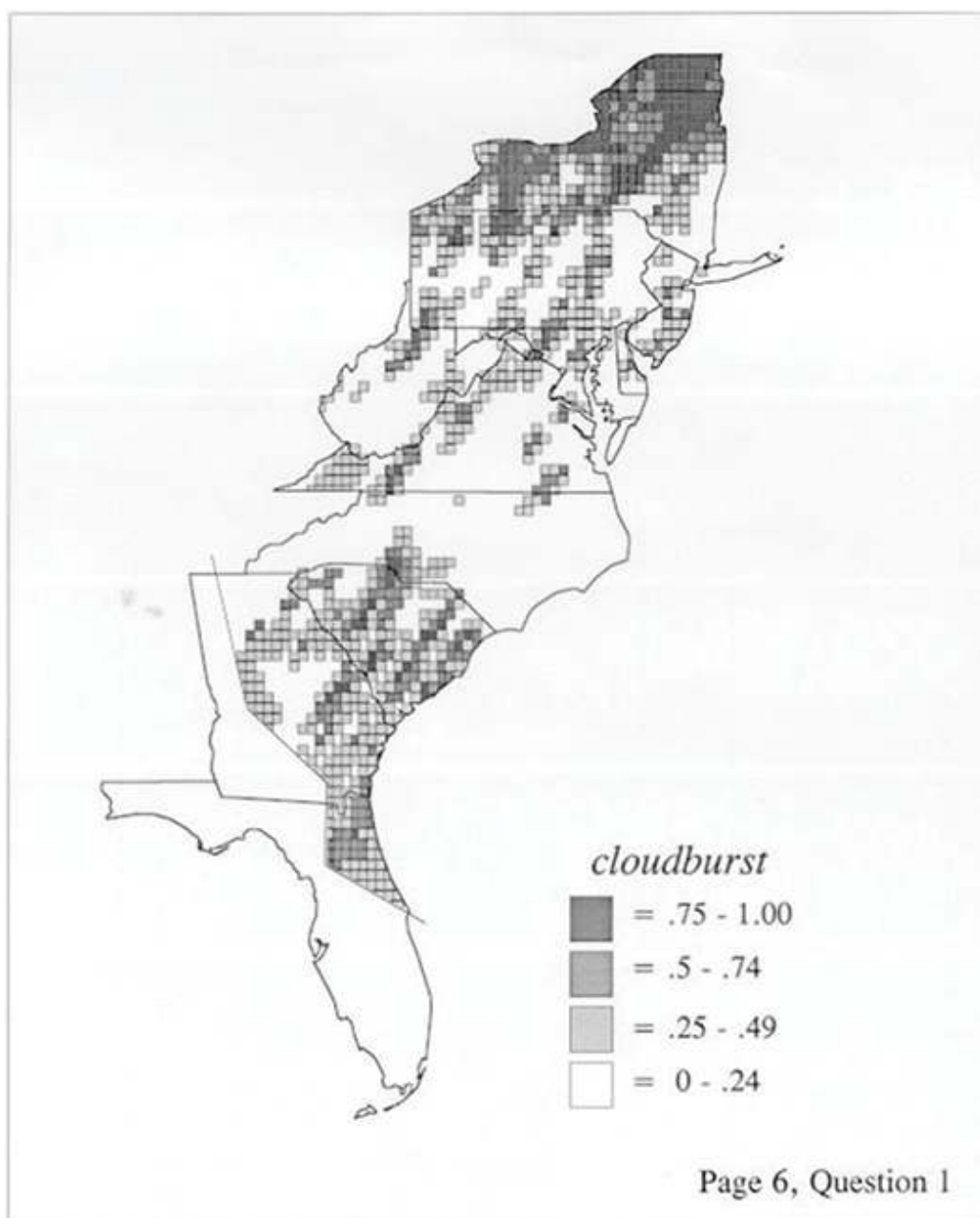


Figure 5.3 *cloudburst* in LAMSAS (density estimation).

The map shows a small square, in four degrees of shading from dark to light, for each 0.2 degree of longitude and latitude throughout the LAMSAS survey region (about 3,000 squares); the angular cutoff in Georgia and Florida separates the western and southern parts of those states that were not part of the survey area. Using a **density estimation** statistic to estimate the status of all the squares from the available data points (by looking at the nearest neighbors that do have data for the squares that do not contain an informant), the darkest squares show the highest probability of finding *cloudburst* (75 percent to 100 percent), with two lighter shadings to indicate lower probabilities; parts of the survey area without shading have a 0 percent to 25 percent probability of finding *cloudburst*. The main benefit of these probability maps is that each map gives a comprehensive analysis of the word whose distribution it illustrates. The set of maps (available online at emergence.libs.uga.edu) provides comprehensive coverage of 115 words processed in this way, each one a word that occurred at least fifty times in the LAMSAS survey. The general impression one gets from the whole set of maps is that words do not just exist in neat regions. The pattern for *cloudburst* is the most common, patchy distributions across the map. Some words have

dense, dark coverage throughout almost the entire survey area, such as *dry spell* or *wardrobe* ; others are widely scattered like *drought* ' dry spell, ' or strongly localized like *chifforobe* ' wardrobe. ' The overall statistical finding from this data is that all of the items show clustering (as opposed to data at random locations or evenly separated locations; see Kretzschmar 1996a).

In order to find out about the influence of settlement, we can check the probability of occurrence of each of the 115 words in each of twenty cities (as first reported in Kretzschmar 1996b): New York City and Rochester (NY); Philadelphia, Harrisburg, and Pittsburgh (PA); Baltimore (MD); Washington (DC); Charleston (WV); Richmond, Norfolk, and Roanoke (VA); Wilmington, Raleigh, and Charlotte (NC); Charleston, Columbia, and Greenville (SC); and Savannah, Augusta, and Atlanta (GA). In accordance with the shading on the maps, for each variant we can assign a value of 0 (no shading), 1 (light shading), 2 (moderate shading), or 3 (dark shading) to each city for each word.

Table 5.1 shows the number of words from the list that were strongly associated with each of the cities (i.e., when a word had the highest probability, 3, of being found there). There are not very many words that are never strongly associated with a city (7/115; *going down* , *thundersquall* , *back stick* , *chifforobe* , *week from Sunday* , *rich pine* , and *white frost*), and there are also not that many that are strongly associated with all the cities (14/115; *night* , *bureau* , *drizzle* , *sofa* , *closet* , *feet* , *frost* , *clear* , *half past* , *wardrobe* , *attic* , *thunderstorm* , *blew* , *three years old*). There are only six words strongly associated with a single city, so that it is not the case that we see what some people might have expected, that each city would have its own set of words not shared with other cities. On average, any given word was likely to be found in nine or ten cities. Again, on average, the typical probability of occurrence for a word in a city was level 2 (50 percent to 75 percent). Instead of each city having its own words, the distribution of words belongs to the realm of probability as we expect in the complex system of speech, a distribution of more and less rather than all or none. In these probabilistic terms, we can say that most variants tended to be widely distributed across American cities, especially if we consider that words often have a weaker association with a place than what Table 5.1 tabulated.

Table 5.1 Distribution of words by number of cities

Number of cities	Number of words
0	7
1	6
2	6
3	6
4	13
5	7
6	6
7	4
8	5
9	3
10	2
11	5
12	3
13	3
14	5

Number of cities	Number of words
15	3
16	6
17	2
18	4
19	5
20	14

[Table 5.2](#) shows a breakdown by city of the number of words with some probability of occurrence (those in levels 1, 2, or 3).

Table 5.2 Distribution of variants by city

City	Number of words
Greenville (SC)	74
Charleston (SC)	69
Roanoke (VA)	66
Augusta (GA)	63
Charlotte (NC)	62
Columbia (SC)	59
Richmond (VA)	56
Raleigh (NC)	56
Wilmington (NC)	54
Atlanta (GA)	54
Savannah (GA)	52
Baltimore (MD)	51
Norfolk (VA)	51
New York City	50
Charleston (WV)	48
Philadelphia (PA)	48
Washington (DC)	47
Pittsburgh (PA)	47
Rochester (NY)	47

City	Number of words
Harrisburg (PA)	42

The order of the cities suggests that the American South has a broader vocabulary than the North (as Metcalf [1997](#) first reported). The first eleven cities in the list are Southern, the first thirteen if we consider Baltimore, where slaves were common, to be Southern. The number of variants from each city ranges from 74/115 (64 percent) to 42/115 (37 percent), with an average of 55 (48 percent). Still, rather than having an exclusive set of words, each city participates in the pool of available words. While variation is not evenly distributed in American English, it is widespread and normal. One reason that Southern cities have more variants is a technical aspect of the LAMSAS survey: Raven McDavid, the main fieldworker in the South, collected more variants than other fieldworkers did. On the other hand, it is also possible that the complex social structure of the South, with plantations and slavery and yeoman farmers all playing a role, tended to preserve more variants than the relatively simpler farming culture of the North.

As for evidence from the settlement patterns of the National Period, we can look at four pairs of cities, each pair consisting of one of the coastal focal cities from the Colonial Period and a city further inland: New York City and Rochester (NY), Philadelphia and Pittsburgh (PA), Richmond and Roanoke (VA), and Charleston and Greenville (SC). When we look at the words with the highest probabilities (level 3) that are most closely associated with the cities, in every case the inland city shares more of these words with the coastal focal city than with other cities. In one case, Rochester, the inland city shares the same number of words with Philadelphia and Pittsburgh (from the neighboring pair just to the south) as it does with New York City. Rochester is not “inland” of New York City in quite the same way as for the other pairs, but even so New York City is one of its closest relatives. Amidst all the variability in vocabulary between all of the cities, these pairs still regularly show the effect of the settlement pathways: language followed the people moving west.

Immigration and Language

The American population increased rapidly during the National Period. From about 5 million people in 1800, the overall population grew to more than 30 million by 1860. In the first few decades of the nineteenth century foreign immigration was relatively limited, in part from the disturbance of the War of 1812 (1812 – 1815), so population growth came mainly from the established citizens, but settlement by foreign immigrants accelerated, starting in the 1830s. The largest sources of immigrants were Ireland and Germany, followed by England and France. At the end of the period, a great number of Spanish speakers, former Mexicans and others in Texas, the Southwest, and California, became Americans. Besides these large groups, settlers arrived from all across Europe, indeed the world. The California Gold Rush attracted about 100,000 people, not only Americans from the eastern states but also foreign immigrants from Europe, Australia, and China. The importation of slaves from Africa was officially halted in 1808 but the population of African Americans continued to grow, to reach about 4 million slaves by the time of the Civil War, plus another half million “free” African Americans. While slaves were concentrated in the Southern states, all of the different contributing groups of the population were heavily mixed. Large groups like the Irish and Germans did establish significant ethnic clusters in cities, like the Irish in New York and Germans in many new Midwestern cities. Owing to the time when large numbers of Scots and Scots-Irish got to America, they formed a large part of the population in the Appalachian Mountain region. Over time, other ethnic groups formed clusters in other areas that were open to settlement at the time when a large number of them immigrated (see [Chapter 6](#)). These clusters, however, existed within a heavily mixed population overall and were still governed by the Principle of First Effective Settlement (see [Chapter 4](#)).

The process of complex systems offers an answer to the problem of scattered evidence for ethnic influences on American English. Michael Montgomery, a meticulous scholar, worked hard to connect Scots-Irish immigration with dialect features in Appalachia ([1989](#), [1991](#), [1997](#)), but he was only able to find small traces of Scots-Irish English in the Southern mountains. We know that large numbers of Scots and Scots-Irish came to the Appalachian region in the eighteenth century and thereafter, and we can certainly find cultural connections with the Scots and Scots-Irish in Appalachia, from housing and farming patterns to ballads and songs. Montgomery found that **plural verbal -s** (like *they works*) had been retained in Appalachian English as a low frequency feature, and so had the use of **multiple modal auxiliary verbs** (like *might could* and *may can*), but a great many other possibilities that Montgomery checked could not be connected in this way. The operation of the complex system tells us how such grammatical variants could be retained at low frequencies on the A-curve, in competition with top-ranked usages of verbal -s and auxiliaries. The complex system also explains why the *needs*

washed construction (as opposed to the more common *needs to be washed*), another variant with a Scots and Scots-Irish history, is *not* found in Appalachia but *is* found in western Pennsylvania. Owing to the random interactions of the system, some variants will become common in some places and not others. The presence of speakers from some pre-existing cultural group creates the opportunity for variants to be introduced to the system, but does not require that any particular variant will become common in the regional complex system. Indeed, given the extension of eastern complex systems to the west, we might expect, on the odds, to find just what we see: the retention at low levels of variants from significant cultural groups in the population, within an overall pattern dominated by variants carried west from the coastal areas.

We can see a parallel problem with the distribution of lack of postvocalic -r (whether the -r is pronounced in words like *car*, *barn*) in primary American settlement areas. One theory to account for the fact that postvocalic -r was historically often lost in New England, New York City, and the Coastal South, proposed by George Krapp (1925), is that such r-lessness in both Britain and America “ was a natural and early change in language which took place in popular speech unaffected by learned or standard influences ” (cited in Stephenson 1968: 64).

The most common causal explanation, as in Kurath (see Figure 5.4) and McDavid 1961, is that the areas that lost postvocalic -r stayed in closer contact with England than the places that did not lose postvocalic -r, notably Philadelphia, and thus lost their -r as the change expanded in England. This theory has its attractions: we know that the social elite of coastal cities did send some of their children to be educated in Britain, and that they looked back to Britain, specifically London society, as an important source of style and custom. We also know that the Quakers of Pennsylvania had the reputation of rejecting social flummery, as in their maintenance of *thee/thou* in rejection of the honorific use of *you* as a singular second-person pronoun. And, as Raven McDavid argued, the demographics of the Plantation South, in which a very small white elite managed an overwhelming African-American majority of slaves and fostered the spread of r-lessness in plantation areas, fit the notion of strong influence by a social elite (1948).

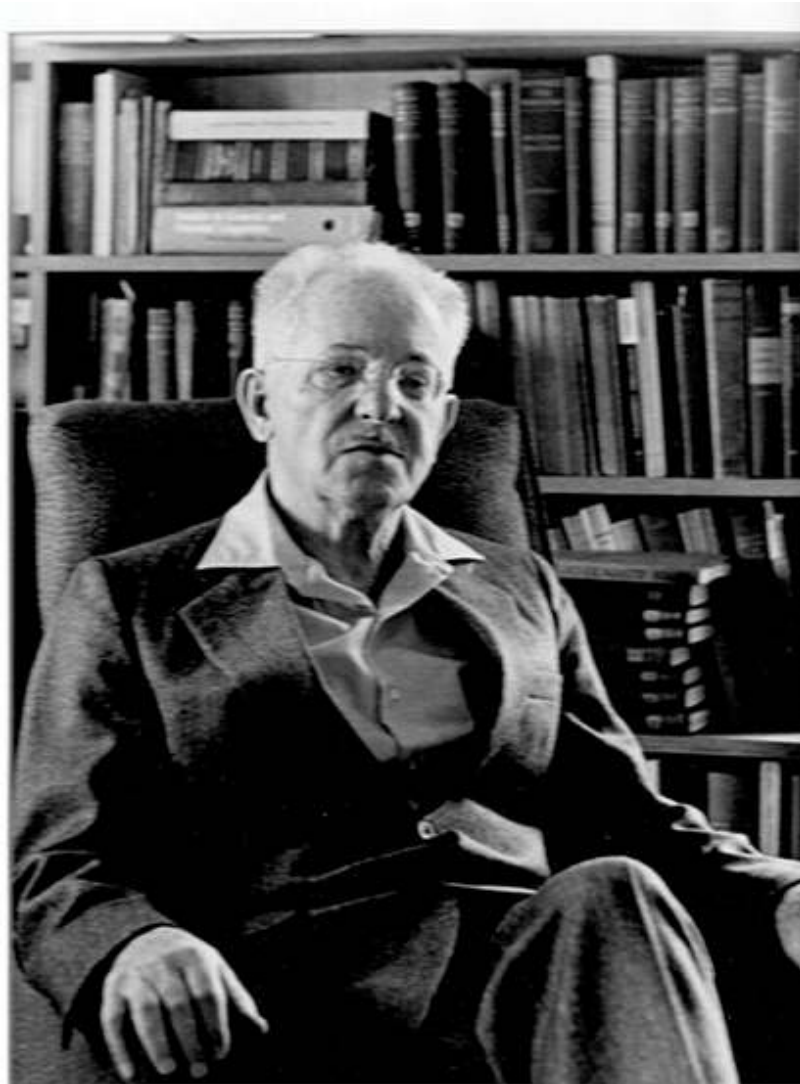


Figure 5.4 Hans Kurath.

As before, however, the facts of the case do not correspond to expectations, as demonstrated in a classic detailed study of North Carolina by Edward Stephenson (1968). An earlier article by Archibald Hill had shown that loss of postvocalic -r often occurred in Middle English in three environments: in unstressed syllables (like the final syllable in *father*, *brother*), through dissimilation in words with a second syllable with r (like *murder*), and in consonant clusters before non-labial, non-velar consonants like /s, t/ (like *first*, *burst*). Stephenson says that all areas of colonial America could thus be expected to have some kinds of r-lessness, and he finds examples in North Carolina. Still, Stephenson points out that more general r-lessness remains to be explained for the colonies. His careful study of variant spellings in eighteenth-century North Carolina documents indicates that, while Hill's r-lessness was present near the beginnings of settlement in North Carolina, the more general kind of r-lessness began to appear there only later in the eighteenth century. Further, the areas of general r-lessness in central North Carolina probably arose through settlement from Virginia, and general r-lessness is not present in areas of Eastern North Carolina that should have had it if either the theory of elite contact with Britain were true (as through the port of Wilmington) or if McDavid's theory of diffusion from South Carolina planters were valid (as in eastern North Carolina where settlements have come from South Carolina). Stephenson also points out that, even if general r-lessness entered Virginia from the social elite in Richmond, it was immediately a property observed in all social groups in North Carolina – which must cast doubt on the likelihood of any gradual melting of the feature through the population. We can share Stephenson's conclusion that “the causes of the loss of postvocalic /r/ in North Carolina are complex, and no simple version of either the Krapp theory or the Kurath-McDavid theory will suffice to account

for the development ” (1968: 70). As in the case of Scots-Irish influence in Appalachia, a better answer comes from the complex system of speech. Speakers could, but did not have to, drop their postvocalic -r, and as a result of feedback from interactions between speakers, the probability that they would do so emerged at different levels in different places. The loss of postvocalic -r does not require a particular cause, just the operation of the complex system with differing results in different places as we might expect.

Albert Marckwardt has provided us with lists of words that English-speaking Americans borrowed from groups speaking other languages (1958). Of course, borrowing here is not something that will be given back, just the term that linguists use for acquiring a word from a different language. From the opposite point of view, linguists also talk about loanwords, but of course these loans are not paid back any more than the borrowings are. Marckwardt ’ s point of reference was that these words existed in “ present-day American English ” (for him the 1950s), so he did not offer specific dates for the borrowings. Many of these could be looked up in the *Oxford English Dictionary* (online) or the *Dictionary of American English* (1936 – 1944). In this chapter, words from different groups are presented, but not all of the words were necessarily borrowed (or loaned) during the National Period.

Borrowings from Native Americans began as soon as Europeans arrived in North America, as mentioned in the [previous chapter](#) . Of course Native Americans did not all speak the same language; in fact, they spoke hundreds of different languages, such as those in the Algonquian and the Iroquoian (including Cherokee) language families in the North and Central regions, and the Muskoghean family in the South. Other Native American language families in the West become relevant later in the National Period (like the Siouan family) and thereafter. A great many place names came from Native Americans. Some Native American borrowings were their names for native trees or plants, like *hickory* , *pecan* , and *squash* . Others animals: *chipmunk* , *moose* , *possum* , *raccoon* , and *skunk* . Some came from items of food or culture: *hominy* , *succotash* ; *powwow* , *squaw* , *moccasin* , *tomahawk* . Many more words from Native American languages were borrowed into American English but would be less familiar to most English speakers (like *scuppernong* , a native grape). Many Native American words were used in a local area and never made it into general use in American English, and other words may have been in wider use at one time but now no longer. In the complex system of speech it is easy for individual speakers to use a word they may have heard, and perhaps their neighbors may begin to use it, too. The word may catch on in wider and wider populations. But it may not. A novel word may never get established even at the neighborhood or local level, much less nationally. And a word that has become common in a population may, without any particular reason, become uncommon again.

One aspect of Native American speech that became popularized in Hollywood films and television shows is Indian grammar. “ How, ” a chief might say when he meets a cowboy. A fluent English speaker might rather have said “ How are you? ” Tonto, the Indian friend of the Lone Ranger on radio and television in the 1950s (but not Tonto as played by Johnny Depp in the 2013 movie; you can see the original version on YouTube), used to say “ Me understand, kemosabe. ” While there is dispute about what *kemosabe* could mean (‘ trusty scout, ’ ‘ idiot, ’ ‘ white man ’), Tonto ’ s grammar was always a little different, such as his use of *me* instead of *I* as the subject of a sentence. When speakers of two different languages have to communicate with each other, say for trade purposes, it has often happened around the world that the speakers in a less-powerful position begin to use a limited form of the language from the more powerful group, a **pidgin** language. A pidgin is a language with simplified grammar, and with a limited vocabulary mainly drawn from the words of the more powerful group. The “ How ” is an example of a simplified greeting. Native American pidgin language has been discussed by scholars mainly with respect to speakers in the Pacific Northwest (a relatively late development), so Hollywood may have overgeneralized the contact situation between Native Americans and European Americans (see Meek 2006 for more about representations of Native American English). It is highly likely, however, that contact between English speakers and Native Americans did involve limited interactions when someone fluent in both languages was not available to translate. [Chapter 11](#) offers information about the current status of Native American languages and the “ Reservation Accent. ”

The German immigrant group came to America in several waves. The wave in the Colonial Period is responsible for the group usually called the Pennsylvania Dutch, with Anabaptist religious convictions. This inward-oriented group has to this day maintained German as the matrix language of their communities, though with many loans from English; members of these communities are bilingual in German and English, especially in localities where German is now only used in church. Subsequent waves of German immigrants starting in the 1830s did not have religion to hold their communities together, but they often did establish German-language church services and newspapers in urban areas, and the German language continued in family or local use for some time. In the author ’ s own family, the first German immigrants settled in Illinois in the mid-nineteenth century, and some of their children moved northeast to Michigan in search of cheaper land. The author ’ s grandfather, born near 1900 and living his life entirely in central Michigan, retained only a few words of German and trotted them out to annoy his grandchildren. Community use of German outside conservative religious

communities has survived the longest in Wisconsin and Texas, but even in these places it declined in the twentieth century in parallel with negative perceptions of German created by World War I and World War II.

Marckwardt reports a long list of food words coming to English from German, including *delicatessen*, *hamburger*, *lager beer*, *pretzel*, *pumpnickel*, and *sauerkraut*. Words in the field of education, a German strongpoint in the nineteenth century, include *festschrift*, *semester*, and *seminar*. *Christmas tree* is a German loan. A number of little colloquial words came from German: *bum*, *hex*, *loafer*, *nix*, *ouch*, and *phooey*. In areas with German populations one can hear borrowed grammatical constructions like “make the light out,” or “come by” to visit someone, or words perhaps less common in English like *liverwurst* or *schnitzel*. Some loanwords come from a related language, Yiddish, spoken by Jewish settlers. Yiddish as a language began in the Middle Ages, consisting of a German core with additions from Hebrew and Aramaic; it later spread to Eastern Europe, with further influences from Slavic languages there. In America, *kosher* and *kibitz* are the most familiar words, but in Jewish groups a great many more Yiddish words are common. In the mid-twentieth century many more such words were widely known, following the success of Jewish American comedians in the media.

Dutch settlement was first concentrated in downstate New York and northern New Jersey, inland from originally Dutch New York City. Later the Dutch settled in western Michigan, for example in the town of Holland, near Grand Rapids. Even though the numbers of settlers were smaller than the number from Germany, Dutch gave American English very common food terms like *cole slaw*, *cookie*, and *waffle*. Dutch *Santa Claus* is much more common than the German *Kris Kringle*. Other common words include *caboose*, *scow*, *sleigh*; *boss*, *Yankee*; *dope*, *dumb* (meaning ‘stupid’), *snoop*, and *spook*.

French loans into American English are complicated by the long history of the relationship between French and English owing to the Norman Conquest and its aftermath. The aristocracy in England was French-speaking for hundreds of years after the conquest, and even after that the kings of England laid claim to much of southern France for centuries further. England retained control of the mainland port of Calais until 1558. In North America the French were early settlers of Canada, and explorers in the Great Lakes region and the Mississippi River. American cities *Detroit*, *St. Louis*, and *New Orleans* were founded by the French. In the National Period, the French sold the United States their inland territories, largely unoccupied by Europeans, as the Louisiana Purchase. Some French loanwords to American English came from the North: *caribou*, *crappie* (a fish), *gopher*, *pumpkin*, *portage*, *prairie*, *toboggan*. Many more came from the Louisiana Delta and New Orleans: *bayou*, *jambalaya*, *levee*, *praline*. Words like *bureau*, *cent*, *depot*, *dime*, and *rotisserie* are not associated with a specific region.

Spanish borrowings in America are mostly associated with Texas and the West, although Spanish explorers first came to North America in Florida and explored through the (future) Southern states in the sixteenth century. They were responsible, by accident, for the introduction of smallpox and other European diseases with horrible effects upon the Native American population, resulting in the depopulation of large areas east of the Mississippi River (before the arrival of other Europeans). St. Augustine, Florida, is the longest continuously occupied European settlement in mainland North America, founded by the Spanish in 1565 (San Juan, Puerto Rico, was founded in 1521). The Spanish were also involved in New Orleans. Marckwardt lists no fewer than eighty-eight different Spanish loanwords in American English. Among plants and animals: *alfalfa*, *marijuana*, *bronco*, *cockroach*, *coyote*, and *mustang*. Spanish loans for food and drink make up staple fast foods in America today, like *chili*, *enchilada*, *taco*, *tortilla*. Western ranches provided many words: *corral*, *lariat*, *lasso*, *poncho*, *ranch*, *rodeo*, *sombrero*, and *stampede*. The words *canyon*, *fiesta*, *pronto*, and *tornado* are also very common.

African Americans did not come to the country as immigrants but instead were brought as slaves. Some came direct from Africa, others by way of the Caribbean islands such as Barbados (claimed by the English in 1625 and a center of the slave trade). Words such as *gumbo* and *voodoo* are said to be borrowed from African languages and many more words may have come from that source, but a relative lack of knowledge of African languages by European and American scholars has complicated the explanation of these word origins (but see Lorenzo Turner’s [1949](#) *Africanisms in the Gullah Dialect*). In later years a great deal of language associated with the African American community has become mainstream, such as the words *jazz*, *juke box*, and *hip hop* (see [Chapter 9](#) for more information).

Again, as mentioned above in connection with Scots-Irish borrowings, the presence of speakers from some pre-existing cultural group creates the opportunity for words and other linguistic features to be introduced to the complex system of speech in America, but that does not mean that any particular word or feature will become common. What we see, overall, is the retention of some words and features from significant cultural groups in the population, within an overall pattern dominated by English.

Webster and Standard American English

Standard American English is not a product of the same process that creates and continues to change American English. Regional and social varieties and the American variety as a whole emerge from all the linguistic interactions between members of regional and social groups, and, at the top level of scale, by all participants in American culture. Standard American English, on the other hand, is an institutional construct. It has no native speakers. It is, however, a fact of life for American speakers in formal settings, especially in the educational system (see [Chapter 12](#)).

The main push behind the idea of a standard variety of a language (like **Standard English**) occurred in the nineteenth century, not only in England but elsewhere in northern Europe (see Milroy [2000](#)). The development of notions of purism and a focus on educated speech in the nineteenth century led to the expectation that the standard language would be uniform in structure, and mainly treated the written language instead of the more highly variable use of language in speech. Standard languages, therefore, can be associated with the language of capital cities, not because the speech of the capital city provides a natural model for a national language, but because the political and social importance of the capital gives national status among the *literati* to written language originating in the capital. Standard English is not to be taken for granted as some sort of default form of the language, and neither should it be brushed aside as unreal. Standard English arises from particular historical circumstances and processes of thought, and it is now completely ingrained in the American educational system (and that of other countries as well).

Standard American English began with **Noah Webster** (see [Figure 5.5](#)). Webster had published his own *Grammatical Institute* ([1783](#)) soon after other grammars (e.g., by Robert Lowth in 1762) that launched the Standard English movement. He was interested in the creation of a specifically American variety of English, a national language for a new country:

The author wishes to promote the honor and prosperity of the confederated republics of America This country must in some future time be distinguished by the superiority of her literary improvements, as she is already by the liberality of her civil and ecclesiastical constitutions. Europe is grown old in folly, corruption and tyranny. For America in her infancy to adopt the maxims of the Old World would be to stamp the wrinkles of decrepit old age upon the bloom of youth, and to plant the seeds of decay in a vigorous constitution.

(written in 1783, cited in Commager [1958/1962](#) : 1)

As clearly expressed in this passage, and neatly characterized by Commager, “ The driving force in Webster, the compulsion that explains all particular expressions of his ambitions and his energies, was nationalism ” (Commager [1958/1962](#) : 5).



Figure 5.5 Noah Webster (1758 – 1843), American lexicographer.

Source: Bettmann/Getty Images.

Commager explains ([1958/1962](#) : 7):

But if nationalism was to work in the United States – and in 1800 that was still very much an open question – it would have to get along without the Monarchy, the Church, the Military, and the many other institutions that provided common denominators abroad, and work with more democratic ingredients and build on popular support. It would have to frustrate those class and religious and racial divisions which were potentially so dangerous; it would have to overcome differences not merely of accent but of language itself. The United States, dedicated to the unprecedented experiment of republicanism in a vast territory, a heterogeneous population, and a classless society, could not afford differences of accent or of language.

As we have seen in previous chapters, variation in language naturally self-organizes out of a radically mixed population in a complex system. Thus, regional and social varieties of English were inevitable developments in the United States. A uniform standard, however, was then and still remains a politically attractive idea. That there were fewer differences between the speech of American states than there were differences between British regions might well have been taken as evidence at the time that a standard language was actually developing in the speech of America. Such a notion is as much an example of wishful thinking now as it was then.

The development of Standard American English nonetheless took place, if not naturally in the complex system from which American regional varieties emerged, then by Webster ' s salesmanship. John Adams did lead an unsuccessful attempt to create an American Academy on the model of the Académie Française (see Mathews [1931](#) : 39 – 43), and Webster himself helped to create a

Philological Society, but Commager again states the crucial fact: “ The Academy was never born; the Society withered and died; but they were not necessary. Webster ’ s books did their work ” ([1958/1962](#) : 8). Webster ’ s *American Spelling Book* (see [Figure 5.6](#)) began its career as a part of his *Grammatical Institute* but was later published widely as a separate volume. A footnote (dated March 1818) in the preface of the 1831 edition of *The American Spelling Book* claimed that sales to that point “ amount to more than FIVE MILLIONS of copies, and they are annually increasing ” ([1831/1962](#) : 15). Webster wrote that his book had become “ the principal elementary book in the United States. In a great part of the northern States, it is the only book of the kind used; it is much used in the middle and southern States; and its annual sales indicate a large and increasing demand ” ([1831/1962](#) : 15). The justice of his claim is shown by Mathews ’ estimate that *The American Spelling Book* had sold 50 million copies by 1865 ([1931](#) : 45), and by Pyles ’ estimate that over 100 million copies were sold before it was replaced by other books ([1952](#) : 98).

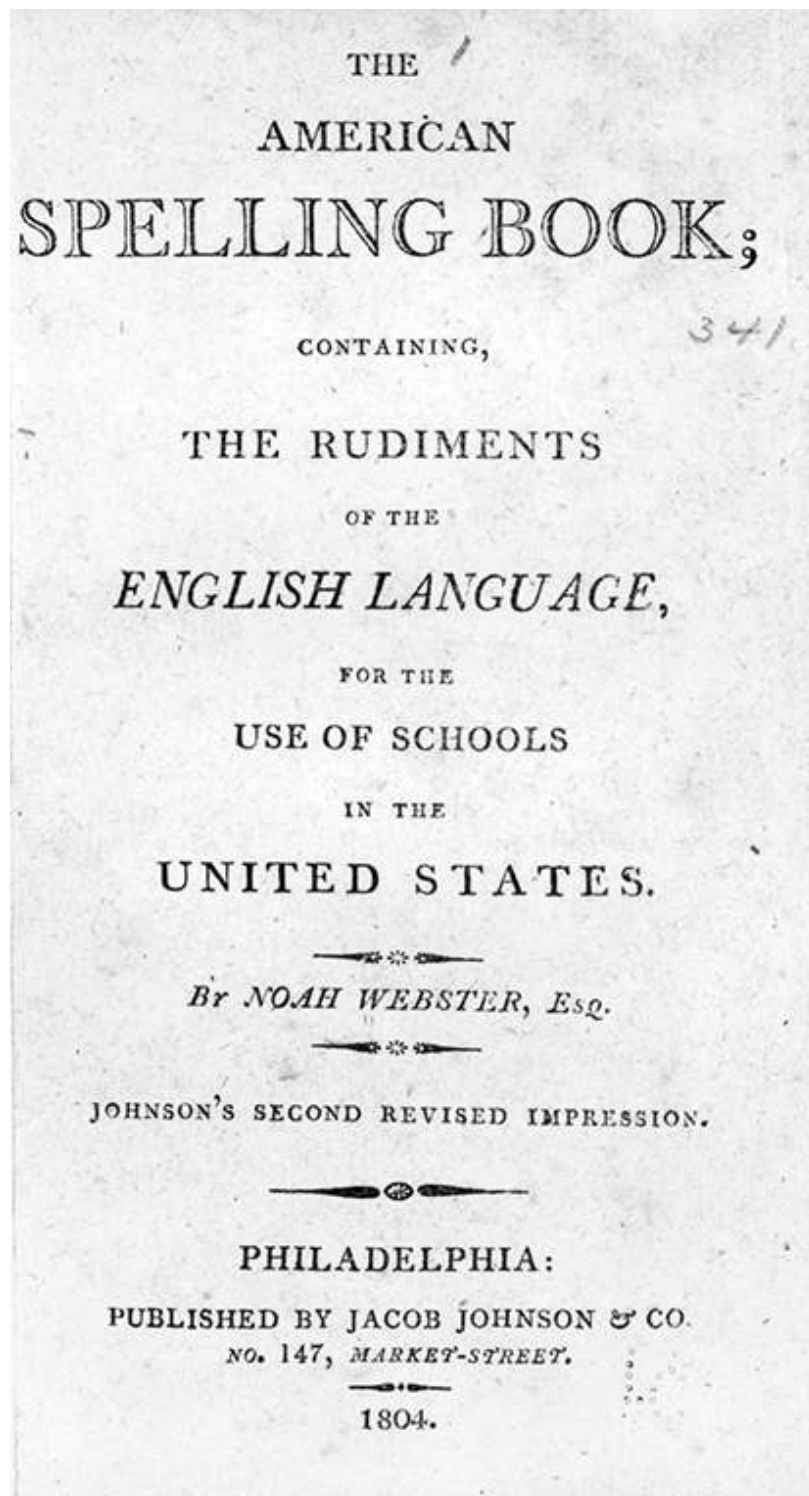


Figure 5.6 *The American Spelling Book* .

[Figure 5.6 long description.](#)

Source: MPI/Stringer/Getty Images.

More famous than *The American Spelling Book* but less successful in sales was Webster ' s *American Dictionary of the English Language* (1828). Pyles reports that " Unfortunately Webster, who was extremely good at the promotion of his books ... was not a very good man of business " (1952 : 98). Webster had sold the rights to *The American Spelling Book* and thus did not accrue royalties on most of the millions sold, and he had to borrow money to finance both the first and second editions of the *American Dictionary* so that they, in Pyles ' words, " did not pile up much of a profit " (1952 : 120). Still, the success of Webster ' s promotional efforts created one of the most successful textbooks of all time and made his name, in America at least, synonymous with the dictionary. Pyles offered the following summary assessment (1952 : 123):

It has been remarked that Webster may have taught us how to spell but taught us nothing else. With this it is difficult to agree. Webster was certainly one of the most influential commentators upon language who ever lived. More than any other single person, he shaped the course of American English, for he supplied us with the schoolmaster ' s authority which we needed for linguistic self-confidence. He was largely responsible for the dissemination in this country of an attitude toward language that prevails to this day, even among the rank and file of our people – an attitude which, while it is by no means exclusively American, is yet notably so.

Standard American English is Webster ' s legacy, but not primarily for the particular features of American spelling he advocated, but rather for the association of language with nationalism, uniformity, moral virtues, and authority, especially within the school setting.

The 1831 edition of *The American Spelling Book* had simply referred to " the most accurate rules of pronunciation, and the most general usage of speaking " (1831/1962 : 16). At the same time that this edition headed all of its pages with " An Easy Standard of Pronunciation, " its preface further asserted that, " A perfect standard of pronunciation, in a living language, is not to be expected; and when the best English dictionaries differ from each other ... where are we to seek for undisputed rules? And how can we arrive at perfect uniformity? " Webster and his revisers through numerous editions were interested in uniformity, authority, and the rules of English, even though they recognized variation in actual practice. It is interesting to note that grammar was not a large part of the system. The 1831 edition tells us that the abridged grammar originally included in the book had been omitted, along with the geographical tables, because " Geography and Grammar are sciences that require distinct treatises " and " It is believed to be more useful to confine this work to its proper objects, the teaching of the first elements of language, spelling and reading. " Authoritative treatment of grammar was not yet part of the American paradigm for elementary language teaching in these books.

The main content of the book is presented in numerous tables. Many of these consist of words deemed to belong to a " class " (e.g., one syllable, two syllables accented on the first, three syllables accented on the second, etc.), in which the spelling and syllabification of the words is accompanied by diacritical marks to indicate pronunciation. The earliest tables consist of single syllables, some of which are words in their own spelling (*h ē* , *sh ē*). Others are only syllables (*h ī* , *p ī*), considered valuable for later word formation. Many tables also contain example sentences, including very short ones in the early tables and more complex ones later. As the sentences get longer they begin to have useful content, such as " The world turns round in a day " or " The best paper is made of linen rags. " Moral lessons were also popular, such as " A rude girl will romp in the street " and " Bad boys love to rob the nests of birds, " or " I love the young lady that shows me how to read " and " The Holy Bible is the book of God. " Each sentence for a table tells its own story:

Strong drink will debase a man.
Hard shells incase clams and oysters.
Men inflate balloons with gas, which is lighter than common air.
Teachers like to see their pupils polite to each other.
Idle men often delay till to-morrow things that should be done to-day.
Good men obey the laws of God.

When sentences were introduced, they were explicitly religious and moral:

Lesson I
No man may put off the law of God:
My joy is in his law all day.
O may I not go in the way of sin!
Let me not go in the way of ill men.

Lesson II

A bad man is a foe to the law:
It is his joy to do ill.
All men go out of the way.
Who can say he has no sin?

Thus Webster and his revisers created Standard American English out of nationalism, and linked it explicitly with moral and religious teachings presented as reading instruction. The legacy in America of *The American Spelling Book* is an ideology of standard spelling and pronunciation, if not complete uniformity in either, as an expression of morality and patriotism.

It is now clear why an institutional language construct like Standard American English is not the same sort of thing as a natural language variety. The claim that there is a “standard” in the sense of a “default” variant for any linguistic feature is not compatible with the complex system of language in use. The only problem with the incorporation of Standard American English in the American educational system, beginning with Webster and continuing through the present day, is the unexamined assumption that Standard American English has an empirical basis in language in use. It does not. Standard American English is actually just another manifestation of a particular culture, amongst the many regional and social cultures in pluralistic American society (see [Chapter 12](#) for more information).

At the end of the National Period came the greatest disturbance ever for the American social experiment, the Civil War. The northern Union states opposed the practice of slavery, and eleven southern Confederate states (with two other states represented in the Confederate Congress) insisted on states’ rights, really the continuance of slavery. The Confederate states had economic interests in plantations and cotton production that dominated their politics, although large numbers of their residents were small farmers in areas not well suited to plantation agriculture. Plantations were where large numbers of slaves were needed; small farmers often had no slaves. Opposition to slavery in the north had a long history beginning in the eighteenth century. The Underground Railroad (a means of escape from the South for African Americans) was founded in 1838, and Harriet Beecher Stowe’s anti-slavery novel *Uncle Tom’s Cabin* was published in 1852. During the four years of the war (1860 – 1865) as many as 750,000 soldiers died, about 50,000 alone at the Battle of Gettysburg (1863), and an uncounted number of civilians. The war ended in 1865 with General Robert E. Lee’s surrender, Lincoln’s assassination, and the passage of the Thirteenth Amendment to the Constitution which outlawed slavery. The confederate states were readmitted to the union between 1866 and 1870. Much of the fighting had occurred in the southern states so that the infrastructure of the South was destroyed and its way of life changed forever. Changed but not forgotten. To this day many Southerners look back to the genteel society of the mid-nineteenth-century South, and prefer to remember that gentility instead of the treatment at the time of African Americans. The South has remained a socially stigmatized region ever afterwards.

Summary

During the National Period America grew from coastal colonies into a large nation, and its population ended the period six times larger than when it began. Settlement patterns formed out of westward immigration from coastal port cities, and language features followed the people west. American English borrowed words from Native Americans and many European languages. Influences from other languages, however, were always subject to the operation of the complex system of speech. Noah Webster began the institutionalization of Standard American English that still obtains today.

Key Terms

American Spelling Book

density estimation

Inland North

Midland

multiple modal auxiliary verbs

Noah Webster

New England

North Midland

Northern

pidgin

plural verbal -s

South Midland

Southern

Standard English

Audio Samples

The following samples of the primary American regions were recorded in 1928 (available at www.cambridge.org/williamakretzschmar). Each is a recording of the Grip the Rat passage. Can you hear any differences?

a5.1 Inland Northern – 1928

a5.2 Midland – 1928

a5.3 Southern – 1928

Exercises

1. Try to rewrite the chapter 's Anne Royal passage in modern colloquial English.
2. Look up the Mexican War (also called the Mexican-American War). How did it affect the territory of the United States? What do you think its consequences were for American English?
3. What do you think of *The American Spelling Book* as the most popular textbook of all time, given the passages mentioned in the chapter? Would it be permitted in schools today? Do you think it goes along with the American experience as a social experiment?

Computer Exercise

[Exercise App3.5 in Appendix 3](#) explores variation in individual communities, as discussed in the experiment about dialect words in this chapter.

Further Reading

Albert Marckwardt , *American English* (New York : Oxford University Press , 1958) ; Thomas Pyles , *Words and Ways of American English* (New York : Random House , 1952) . These are two earlier textbooks of American English, each notable in their own ways. Marckwardt ' s book was later revised and republished by Joey Dillard, which only diminished the value of the book. A more recent book by Walt Wolfram and Natalie Schilling , *American English: Dialects and Variation* , 3rd ed. (Oxford : Wiley-Blackwell , 2015) focuses on sociolinguistic aspects of American English.

James Milroy, " The Ideology of the Standard Language, " in Laura Wright , ed. *The Development of Standard English 1300-1800* (Cambridge : Cambridge University Press , 2000), 11 – 28 . Milroy ' s essay clearly describes how the idea of a standard arose and become entrenched in schools. His earlier book with Lesley Milroy , *Authority in Language: Investigating Standard English* , 3rd ed. (London : Routledge , 1998) , provides a longer account, especially including the " complaint tradition " in England.

6

Gilded Age to World War II (1866 - 1945)



In This Chapter

The industrialization of America created a Gilded Age of wealth and excess, at the same time as the Great Plains and West were settled and the population grew at a tremendous rate. Industrialization enlarged cities, which created new urban neighborhoods for new immigrants. The Great Depression caused a pause in this rapid growth, which again accelerated for World War II.

Timeline

1867

Purchase of Alaska

1870

Population 38,818,449; Standard Oil Company founded

1873

Twain and Warner, *The Gilded Age*

1876

Bell telephone, barbed wire invented

1880

Population 50,155,783

1885

Stanford University founded

1886

Statue of Liberty dedicated; Coca-Cola merchandised

1890

Population 62,947,714

1892

University of Chicago founded

1896

Edison introduces motion pictures in the United States

1899

Carnegie Steel Company organized

1900

Population 75,994,575

1903

Wright Brothers fly

1909

first mass produced Model T Ford

1910

Population 91,972,266; NAACP founded (African American organization)

1917

The United States enters World War I; emergence of Hollywood

1919

H. L. Mencken, *The American Language*

1920

Population 105,710,620; first commercial radio broadcast

1927

The Jazz Singer, "talking pictures"; Lindbergh flies New York to Paris

1929

Stock market crash: Great Depression

1930

Population 122,775,046; first supermarket

1939

Regular trans-Atlantic air service

1940

Population 131,669,275

1941

World War II (1941 – 1945)

After the terrible divisions of the Civil War, America was symbolically joined in 1869 by the driving of the Golden Spike at Promontory Summit, Utah, which connected the railway systems of the eastern and western states. Leland Stanford, who later founded

Stanford University (1885), drove the ceremonial spike. The whole event stands as an emblem of schizophrenic times in America: occupation of the full area of the original forty-eight states and acquisition of territories (Alaska, Hawaii) that would become the last two states, the advance of industry and technology, and parallel advance of higher education and culture, as against the importance of “gilded” ceremony, and the ruthlessness of robber barons out to acquire wealth and power. Near the beginning of this period, **Mark Twain** and co-author Charles Warner wrote the novel *The Gilded Age* (1873) to satirize the extremes of greed and corruption of the time, both in politics and industry. As they say, “if the shoe fits wear it,” and so Twain and Warner’s title has become the first part of the title of this chapter. If we take the **Great Depression** beginning in 1929 as the end of the Gilded Age, we can also see emerging what has been called “the American Century” of new involvement in world affairs, confirmed by America’s role in the second part of the title, World War II.

Robber Barons

Perhaps the first of the robber barons was Cornelius Vanderbilt (1794 – 1877) (see [Figure 6.1](#)). He made his fortune as a shipping magnate. He began his career as a ferry operator between Staten Island and Manhattan, and over the years came to dominate the new steamboat business around New York City owing to a combination of business ability, fiercely competitive prices, and accepting payments not to compete with rivals. He expanded to ocean-going steamships, and again in cutthroat fashion won a monopoly on the California steamship trade. He was later instrumental in the construction of railroads, eventually buying the New York Central Railroad (1867), which became one of the largest in America.