Chapter 1

Understanding the A-B-Cs of Phonetics

In This Chapter

- Nurturing your inner phonetician
- Embracing phonetics, not fearing it
- Deciding to prescribe or describe

People talk all day long and never think about it until something goes wrong. For example, a person may suddenly say something completely pointless or embarrassing. A slip of the tongue can cause words or a phrase to come out wrong. Phonetics helps you appreciate many things about how speech is produced and how speech breaks down.

This chapter serves as a jumping-off point into the world of phonetics. Here you can see that phonetics can do the following:

- Provide a systematic means for transcribing speech sounds by using the International Phonetic Alphabet (IPA).
- Explain how healthy speech is produced, which is especially important for understanding the problems of people with neurological disorders, such as stroke, brain tumors, or head injury, who may end up with far more involved speech difficulties.
- Help language learners and teachers, particularly instructors of English as a second language, better understand the sounds of foreign languages so they can be understood.
- Give actors needing to portray different varieties of English (such as American, Australian, British, Caribbean, or New Zealand) the principles of how sounds are produced and how different English accents are characterized.

This chapter serves as a quick overview to your phonetics course. Use it to get your feet wet in phonetics and *phonology,* the way that sounds pattern systematically in language.

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Speaking the Truth about Phonetics

"The history of phonetics — going back some 2.5 millennia — makes it perhaps the oldest of the behavioral sciences and, given the longevity and applicability of some of the early findings from these times, one of the most successful"

— Professor John Ohala, University of California, Berkeley

When I tell people that I'm a phonetician, they sometimes respond by saying *a what?* Once in a rare while, they know what phonetics is and tell me how much they enjoyed studying it in college. These people are typically language lovers — folks who enjoy studying foreign tongues, travelling, and experiencing different cultures.

Unfortunately, some people react negatively and share their horror stories of having taken a phonetics course during college. Despite its astounding success among the behavioral sciences, phonetics has received disdain from some students because of these reasons:

- **A lot of specialized jargon and technical terminology:** In phonetics, you need to know some biology, including names for body parts and the physiology of speech. You also need to know some physics, such as the basics of acoustics and speech waveforms. In addition, phonetics involves many social and psychological words, for example when discussing *speech perception* (the study of how language sounds are heard and understood) and *dialectology* (the study of language regional differences). Having to master all this jargon can cause some students to feel that phonetics is hard and quickly become discouraged.
- **Speaking and ear training skills:** When studying phonetics, you must practice speaking and listening to new sounds. For anyone who already experienced second language learning (or enjoys music or singing), doing so isn't a big deal. However, if you're caught off guard by this expectation from the get-go, you may underestimate the amount and type of work involved.
- **The stigma of being a phonetician:** Phoneticians and linguists are often unfairly viewed as nit-picking types who enjoy bossing people around by telling them how to talk. With this kind of role model, working on phonetics can sometimes seems about as exciting as ironing or watching water boil.

I beg to differ with these reasons. Yes, phonetics does have a lot of technical terms, but hang in there and take the time to figure out what they mean because it will be worth your time. With phonetics, consider listening and speaking the different sounds as a fun activity. Working in the field of phonetics is actually an enjoyable and exciting one. Refer to the later section, "Finding Phonetic Solutions to the Problems of the World" and see what impact phonetics has in everyday speech.

Prescribing and Describing: A Modern Balance

This idea that *linguists* (those who study language) and *phoneticians* (those who work with speech sounds) are out to change your language comes from a tradition called *prescriptivism*, which means judging what is correct. Many of the founders of the field of modern phonetics, including Daniel Jones and Henry Sweet, have relied on this tradition. You may be familiar with phoneticians taking this position, for example, the character of Henry Higgins, in the play *Pygmalion* and the musical *My Fair Lady,* or Lionel Logue, as portrayed in the more recent film, *The King's Speech.* At this time and place (England in early 1900s) phoneticians earned their keep mainly by teaching people how to speak "properly."

However, much has changed since then. In general, *linguistics* (the study of language) has broadened to include not only studies close to literature and the humanities (called *philology*, or love of language), but also to disciplines within the cognitive sciences. Thus, linguistics is often taught not only in literature departments, but also in psychology and neural science groups.

These changes have also affected the field of phonetics. Overall, phoneticians have learned to listen more and correct less. Current phonetics is largely *descriptive* (observing how different languages and accents sound), instead of being prescriptive. Descriptive phoneticians are content to identify the factors responsible for spoken language variation (such as social or geographic differences) and to not necessarily translate this knowledge into scolding others as to how they *should* sound.

You can see evidence of this descriptive attitude in the term *General American English (GAE),* used throughout this book, when talking about American norms. (GAE basically means a major accent of American English, most similar to a generalized Midwestern accent; check out Chapter 18 for more information about it.) Although the difference may seem subtle, GAE has a very different flavor than a label such as *Standard American English (SAE),* used by some authors to refer to the same accent. After all, if someone is *standard*, what might that make you or me? Substandard? You can see how the idea of an accent standard carries the sense of prescription, making some folks uneasy.

Scientifically, descriptivism is the way to go. This viewpoint permits phoneticians to study language and speech without the baggage of having to tell people how they should sound. Other spokespeople in society may take a presciptivist position and recommend that certain words, pronunciations, or usages be promoted over others. This prescriptivism is generally based on the idea that language values should be preserved and that nobody wants to speak a language that doesn't have correct forms.

Finding Phonetic Solutions to the Problems of the World

Phonetics can help a lot of problems related to speech. You may be surprised at how omnipresent phonetics is in everyday speech. If you're taking a phonetics course or you're reading to discover more about language and you come across a perplexing problem, the following can refer you to the chapter in this book where I address the solutions.

- How does my body produce speech? Check out Chapter 2.
- I have seen these symbols: /ʒ/, /ʧ/, /ə/, /θ/, /ɚ/, /æ/, /ŋ/, /ʌ/, and /ʊ/. What are they? Refer to Chapter 3.
- Why do Chinese and Vietnamese people sound like their voices are going up and down when they speak? Head to Chapter 3.
- What happens in my throat when I speak, whisper, or sing? Flip to Chapter 4.
- How are speech sounds classified? Check out Chapter 5.
- I have taken a phonetics course, but I *still* don't understand the ideas of *phoneme* and *allophone.* What are they? Refer to Chapter 5.
- What exactly is a glottal stop? Go to Chapter 6.
- What is coarticulation? Does it always occur? Flip to Chapter 6.
- How are vowels produced differently in British and American English? Check out Chapter 7.
- Is it okay to drop my "R"s? Head to Chapter 7.
- What exactly is phonology? Go to Chapter 8.
- Do all people in the world have the same kind of sound changes in their languages? Check out Chapter 8.
- How do I apply diacritics in transcription? Chapter 9 can help.
- I need to know how to narrowly transcribe English. What do I do? Look in Chapter 9.
- How do I transcribe speech that is all run together? Head to Chapter 10.
- What role does melody play in speech? Go to Chapter 10.
- How do I mark speech melody in my transcriptions? Check out Chapter 11.

- How is speech described at the level of sound? Refer to Chapter 12.
- How can I use computer programs to analyze speech? Look in Chapter 12.
- My teacher asked me to decode a sound spectrogram, and I am stuck. What do I do? Chapter 13 can help.
- How do people perceive speech? Refer to Chapter 14.
- Why do speakers of different languages make those odd creaky and breathy sounds? Go to Chapter 15.
- What is voice onset time (VOT)? Chapter 15 has what you need.
- How do speakers of other languages make those peculiar r-like sounds? What about guttural sounds at the backs of their throats and clicks? Look in Chapter 16.
- Are some consonants held longer than others? What about some vowels? Refer to Chapter 16.
- How do I transcribe child language? Check out Chapter 17.
- How can you tell normal child speech from child speech that is delayed or disordered? Go to Chapter 17.
- What exactly are the differences between British, Australian, and New Zealand English? I just opened my mouth and inserted my foot. Chapter 18 can help ease your problems.
- Can you show me some examples of aphasia, apraxia, and dysarthria transcribed? Head to Chapter 19.
- I make mistakes when I transcribe. What can I do to improve? Chapter 20 discusses ten of the most common mistakes that people make when transcribing, and what you can do to avoid them.
- How can I know when someone is telling an urban myth about English accents? Zip to Chapter 21.