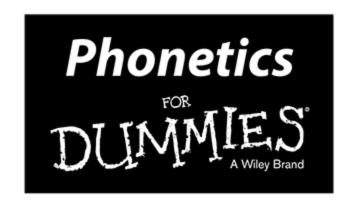
Phonetics

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Learn to:

- Understand the science behind speech
- Grasp real-world applications of phonetics
- Transcribe speech using the International Phonetic Alphabet (IPA)
- Perform well in your phonetics course

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Phonetics For Dummies®

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Introduction

Welcome to the world of phonetics — the few, the bold, the chosen. You're about to embark on a journey that will enable you to make sounds you never thought possible and to scribble characters in a secret language so that only fellow phoneticians can understand what you're doing. This code, the International Phonetic Alphabet (IPA), is a standard among phoneticians, linguists, teachers, and clinicians worldwide.

Phonetics is the scientific study of the sounds of language. Phonetics includes how speech sounds are produced (*articulatory phonetics*), the physical nature of the sounds themselves (*acoustic phonetics*), and how speech is heard by listeners (*perceptual/linguistic phonetics*).

The information you can gain in an introductory college course on phonetics is essential if you're interested in language learning or teaching. Understanding *phonetic transcription* (that special code language) is critical to anyone pursuing a career in speech language pathology or audiology.

Others can also benefit from studying phonetics. Actors and actresses can greatly improve the convincingness of the characters they portray by adding a basic knowledge of phonetic principles to their background and training. Doing so can make a portrayed accent much more consistent and believable. And if you're a secret drama queen, you can enjoy the fun of trying very different language sounds by using principles of articulatory and acoustic phonetics. No matter what your final career, a basic phonetics class will help you understand how

spoken languages work, letting you see the world of speech and language in a whole new light.

About This Book

Phonetics For Dummies gives you an introduction to the scientific study of speech sounds, which includes material from articulatory, acoustic, and perceptual phonetics.

I introduce the field of *phonology* (systems of sound rules in language) and explain how to classify speech sounds using the IPA. I provide examples from foreign accents, dialectology, communication disorders, and children's speech.

I present all the material in a modular format, just like all the other *For Dummies* books, which means you can flip to any chapter or section and read just what you need without having to read anything else. You just need to adhere to some basic ground rules when reading this book and studying phonetics in your class. Here are the big three:

- ✓ **Study the facts and theory.** Phonetics covers a broad range of topics, including physiology, acoustics, and perception, which means you need to familiarize yourself with a lot of new terminology. The more you study, the better you'll become.
- ✓ Practice speaking and listening. An equally important part of being successful is ear training and oral practice (like learning to speak a second language). To get really good at the practical part of the trade, focus on the speaking and listening exercises that I provide throughout the book.

✓ **Stay persistent and don't give up.** Some principles of phonetics are dead easy, whereas others are trickier. Also, many language sounds can be mastered on the first try, whereas others can even take expert phoneticians (such as Peter Ladefoged) up to 20 years to achieve. Keep at it and the payoff will be worth it!

You can only pack so much into a book nowadays, so I have also recommended many Internet websites that contain more information. These links can be especially helpful for phonetics because multimedia (sound and video) is a powerful tool for mastering speech.

Conventions Used in This Book

This book uses several symbols commonly employed by phoneticians worldwide. If they're new to you, don't worry. They were foreign to even the most expert phoneticians once. Check out these conventions to help you navigate your way through this book (and also in your application of phonetics):

- //: Angle brackets (or slash marks) denote broad, phonemic (indicating only sounds that are meaningful in a language) transcription.
- ✓ []: Square brackets mark narrow, phonetic transcription. This more detailed representation captures language-particular rules that are part of a language's phonology.
- ✓/kæt/ or "cat": This transcription is the International Phonetic Alphabet (IPA) in action. The IPA is a system of notation designed to represent the sounds of the spoken languages of the world. I use the IPA in slash marks (broad transcription) for more general

description of language sounds (/kæt/), and the IPA in square brackets ($narrow\ transcription$) to capture greater detail ([kʰæt]). I use quotation marks for spelled examples so you don't mistake the letters for IPA symbols.

I use these additional conventions throughout this book. Some are consistent with other *For Dummies* books:

- ✓ All Web addresses appear in monofont. If you've reading an ebook version, the URLs are live links.
- words that would leave a normal person with a throbbing headache. For example, anticipatory labial coarticulation or intra-oral articulatory undershoot.

 Maybe academics just don't get enough love as young children? At any rate, this shouldn't be your problem!

 To spare you the worst of this verbiage, I use italics when I clearly define many terms to help you decipher concepts. I also use italics to emphasize stressed syllables or sounds in words, such as "big" or "pillow".

 I use quotation marks around words that I discuss in different situations, such as when I transcribe them or when I consider sounds. For example, "pillow" / 'pɪlo/.
- ▶ Bold is used to highlight the action parts of numbered steps and to emphasize keywords.

Foolish Assumptions

When writing this book, I assume that you're like many of the phonetic students I've worked with for the past 20 years, and share the following traits:

- You're fascinated by language.
- ✓ You look forward to discovering more about the speech sounds of the world, but perhaps you have a

feeling of chilling dread upon hearing the word *phonetics*.

- You want to be able to describe speech for professional reasons.
- ✓ You enjoy hearing different versions of English and telling an Aussie from a Kiwi.
- ✓ You're taking an entry-level phonetics class and are completely new to the subject.

If so, then this book is for you. More than likely, you want an introduction to the world of phonetics in an easily accessible fashion that gives you just what you need to know.

What You're Not to Read

Like all *For Dummies* books, this one is organized so that you can find the information that matters to you and ignore the stuff you don't care about. You don't even have to read the chapters in any particular order; each chapter contains the information you need for that chapter's topic, and I provide cross-references if you want to read more about a specific subject. You don't even have to read the entire book — but gosh, don't you want to?

Occasionally, you'll see sidebars, which are shaded boxes of text that go into detail on a particular topic. You don't have to read them unless you're interested; skipping them won't hamper you in understanding the rest of the text. (But I think you'll find them fascinating!)

You can also skip paragraphs marked with the Technical Stuff icon. This information is a tad more technical than what you really need to know to grasp the concept at hand.

How This Book Is Organized

This book is divided into five parts. Here is a rundown of these parts.

Part I: Getting Started with Phonetics

Part I starts with the source-filter model of speech production, describing how individual consonants and vowels are produced. You get to practice, feeling about in your mouth as you do so. I then show how speech sounds are classified using the IPA. This part of the book includes an introduction to phonology, the rules of how speech sounds combine.

Part II: Speculating about English Speech Sounds

Part II shows you further details of English sound production, including processes relevant to narrow transcription. This part focuses on concepts such as feature theory, phonemes, and allophones — all essential to understanding the relationship between phonetics and phonology. This part also includes information about melody in language, allowing you to analyze languages that sound very different than English and to include prosodic information in your transcriptions.

Part III: Having a Blast: Sound, Waveforms, and Speech Movement

Part III provides grounding in acoustic phonetics, the study of speech sounds themselves. In this part, I begin with sound itself, examining wave theory, sound properties of the vibrating vocal folds, and sound shaping by the lips, jaw, tongue, and velum. I also cover the practical skill of spectrogram reading. You can uncover ways in which speech sounds affect perception (such as voice onset time and formant frequency transitions).

Part IV: Going Global with Phonetics

Part IV branches out with information on languages other than English. These languages have different airstream mechanisms (such as sucking air in to make speech), different states of the voice box (such as making a creaking sound like a toad), and use *phonemic tone* (making high and low sounds to change word meaning). This part also has transcribing examples drawn from children's speech, different varieties of English and productions by individuals with aphasia, dysarthria, and apraxia of speech. The goal is to provide you with a variety of real-world situations for a range of transcribing experiences.

Part V: The Part of Tens

This part seeks to set you straight with some standard lists of ten things. Here I include ten common mistakes that beginning transcribers often make and what you can do to avoid those mishaps. This part also seeks to dispel urban legends circulating among the phonetically non-initiated. You can also find a bonus chapter online at www.dummies.com/extras/phonetics for a look at phonetics of the phuture.

Icons Used in This Book

Every *For Dummies* book uses icons, which are small pictures in the margins, to help you enjoy your reading experience. Here are the icons that I use:

When I present helpful information that can make your life a bit easier when studying phonetics, I use this icon.

This icon highlights important pieces of information that I suggest you store away because you'll probably use them on a regular basis.

The study of phonetics is very hands-on. This icon points out different steps and exercises you can do to see (and hear) firsthand phonetics in action. These exercises are fun and show you what your anatomy (your tongue, jaw, lips, and so on) does when making sounds and how you can produce different sounds.

Although everything I write is interesting, not all of it is essential to your understanding the ins and outs of phonetics. If something is nonessential, I use this icon.

This icon alerts you of a potential pitfall or danger.

Where to Go from Here

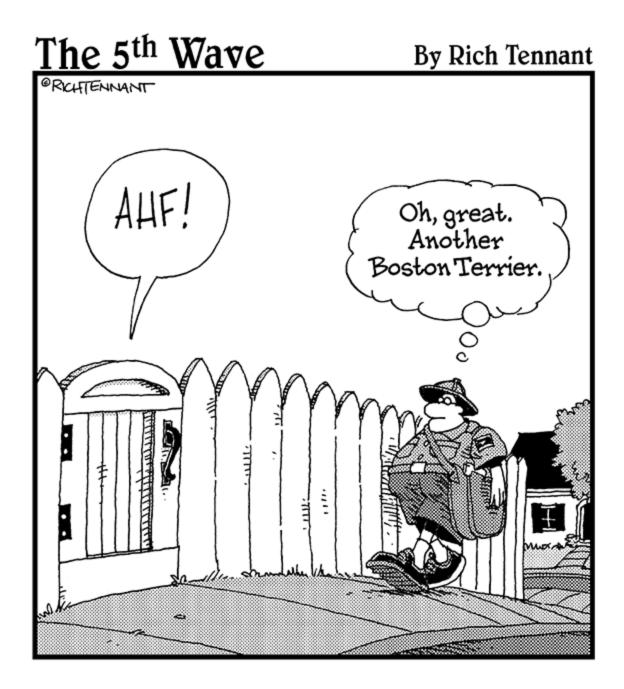
You don't have to read this book in order — feel free to just flip around and focus in on whatever catches your interest. If you're using this book as a way of catching up on a regular college course in phonetics, go to the table

of contents or index, search for a topic that interests you, and start reading.

If you'd rather read from the beginning to the end, go for it. Just start with <u>Chapter 1</u> and start reading. If you want a refresher on the IPA, start with <u>Chapter 3</u>, or if you need to strengthen your knowledge of phonological rules, Chapters <u>8</u> and <u>9</u> are a good place to begin. No matter where you start, you can find a plethora of valuable information to help with your future phonetic endeavors.

If you want more hands-on practice with your transcriptions, check out some extra multimedia material (located at www.dummies.com/go/phoneticsfd) that gives you some exercises and quizzes.

Part I Getting Started with Phonetics





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