

Paul Skandera / Peter Burleigh

# A Manual of English Phonetics and Phonology

4<sup>th</sup> edition

**narr STUDIENBÜCHER**

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# English sounds as IPA symbols

## 24 consonant phonemes

/p/	<i>peach, pen</i>
/b/	<i>banana, bad</i>
/m/	<i>mango, man</i>
/f/	<i>film, fall</i>
/v/	<i>video, van</i>
/θ/	<i>thin, three</i>
/ð/	<i>this, the</i>
/t/	<i>tiger, tea</i>
/s/	<i>snake, see</i>
/d/	<i>dolphin, did</i>
/z/	<i>zebra, zoo</i>
/n/	<i>nightingale, now</i>
/l/	<i>leopard, leg</i>
/r/	<i>red, rat</i>
/ʃ/	<i>cheese, chain</i>
/ʒ/	<i>sherry, shoe</i>
/dʒ/	<i>gin, jam</i>
/ʒ/	<i>measure, vision</i>
/j/	<i>yes, young</i>
/k/	<i>Canada, cat</i>
/g/	<i>Greenland, get</i>
/ŋ/	<i>England, sing</i>
/w/	<i>Wales, wet</i>
/h/	<i>hat, house</i>

## 5 long monophthong phonemes

/i:/	<i>bee, eagle</i>
/ɜ:/	<i>bird, early</i>
/ɑ:/	<i>starling, father</i>
/ɔ:/	<i>horse, saw</i>
/u:/	<i>goose, too</i>

## 7 short monophthong phonemes

/ɪ/	<i>fish, sit</i>
/e/	<i>egg, ten</i>
/æ/	<i>apple, cat</i>
/ʌ/	<i>butter, cup</i>
/ʊ/	<i>olive, got</i>
/ʊ/	<i>pudding, put</i>
/ə/	<i>spaghetti, ago, mother</i>

## 8 diphthong phonemes

/eə/	<i>air, hair</i>
/ɪə/	<i>ear, near</i>
/ʊə/	<i>tour, pure</i>
/eɪ/	<i>face, say</i>
/aɪ/	<i>mind, my</i>
/ɔɪ/	<i>voice, boy</i>
/ɔʊ/	<i>nose, go</i>
/aʊ/	<i>mouth, now</i>

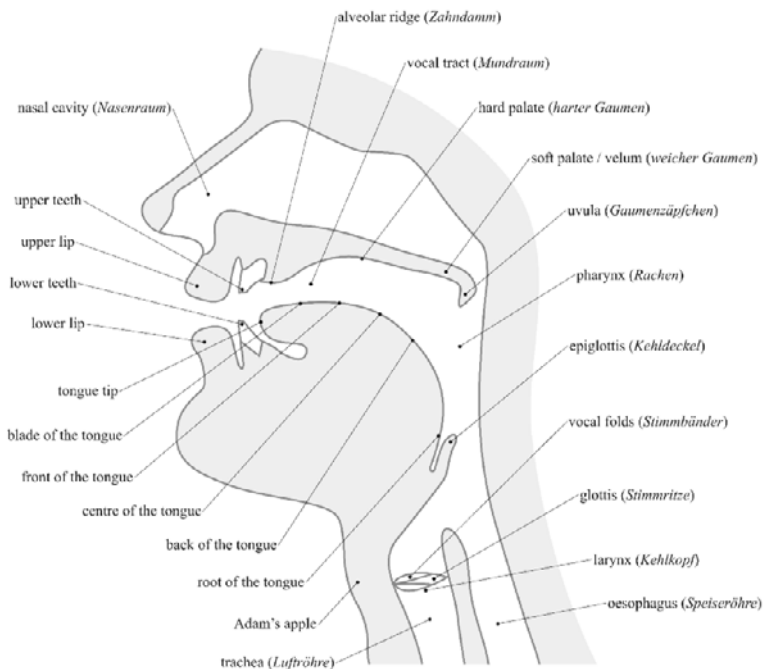
## some allophones

[ʔ]	glottal stop
[ɻ]	retroflex approximant
[r]	alveolar roll/trill
[ɾ]	alveolar flap/tap
[ɹ]	postalveolar approximant
[ɹ̥]	voiced postalveolar fricative
[ʀ]	uvular roll/trill
[ʁ]	uvular fricative
[β]	bilabial roll/trill

## diacritics

[◌̥]	devoicing
[◌̚]	voicing
[◌̪]	dentalisation
[◌̤]	fronting
[◌̥]	retraction
[◌̩]	syllabicity
[◌̩̥]	stress
[◌̥]	aspiration
[◌̥]	absence of aspiration
[◌̥]	labialisation
[◌̥]	retroflexion
[◌̥]	palatalisation
[◌̥]	velarisation
[◌̥]	nasalisation
[◌̥]	nasal release
[◌̥]	lateral release
[◌̥]	inaudible release
[◌̥]	glottalisation, glottal reinforcement

# Speech organs



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Paul Skandera / Peter Burleigh

# **A Manual of English Phonetics and Phonology**

Twelve Lessons with an Integrated Course  
in Phonetic Transcription

4<sup>th</sup> revised edition

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Bibliografische Information der Deutschen Nationalbibliothek

Die Deutsche Nationalbibliothek verzeichnet diese Publikation in der Deutschen Nationalbibliografie; detaillierte bibliografische Daten sind im Internet über <http://dnb.dnb.de> abrufbar.

4., revised edition

3., revised edition 2016

2., completey revised edition 2011

1. edition 2005

DOI: <https://doi.org/10.24053/9783823394495>

© 2022 · Narr Francke Attempto Verlag GmbH + Co. KG

Dischingerweg 5 · D-72070 Tübingen

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eMail: [info@narr.de](mailto:info@narr.de)

CPI books GmbH, Leck

ISSN 0941-8105

ISBN 978-3-8233-8449-6 (Print)

ISBN 978-3-8233-9449-5 (ePDF)



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## A note to students and instructors

This book is a manual of English phonetics and phonology intended for students of English in undergraduate university courses in the German-speaking region. It deals mainly with British English, but makes references to American English where appropriate and occasionally also to other varieties. The book is motivated by the fact that there is currently no textbook which satisfactorily combines an introduction to the theory of phonetics and phonology with the practice of transcription even though at nearly all universities both fields are mandatory subjects of study. Thus the book has been designed to be used either as seminar material in the classroom or for self-study.

The book is tailored to the workload of one semester, spanning twelve weeks or more. Its breadth, therefore, does not compete with other, more extensive introductions to phonetics and phonology. In fact, the spirit of the book is revealed in the word *manual*: Our introduction is a compendium, a handbook that can be worked through from cover to cover, giving the pedagogic gratification of completeness and achievement, and avoiding the recurrent questions of which chapters or sections from a longer work are relevant to a course, or rather an exam.

The manual is entirely self-explanatory and requires absolutely no prior knowledge of linguistics. The first lesson begins, then, with the basic question of what linguistics is. It gives a short overview of the various branches of linguistics, and locates phonetics and phonology in this broad context. This approach is especially advantageous for students who begin their English studies with phonetics and phonology before taking other, more general linguistics courses. As the manual progresses, terminology and knowledge are advanced in a carefully staged manner, with each lesson building on previous lessons. Complementary exercises in a separate section at the end of each lesson give students the opportunity to put the theory they have learnt into practice.

Technical terms that are introduced appear first in bold (or sometimes in italic) type, and are often followed by common alternative terms and a gloss in German. Thus new terms and concepts can be clearly identified, which facilitates progression in the course and is useful for revision and exam preparation. The alternative terms are given because it is one of the aims of this manual to prepare students for the array of (sometimes confusing and contradicting) terminologies used in other textbooks, which they will be reading in more advanced courses. This aim can only be achieved by acquainting the readers with a variety of different terms for the same concept, and, conversely, with different definitions of the same term. At the same time, this approach pre-empts the widely held expectation that, in technical jargon, there must be a one-to-one correspondence between concept and term. While this would certainly be desirable, it is far from the academic reality. A glossary of most of the technical terms is provided at the end of the manual.

Most importantly, the exercises in the separate sections constitute a fully integrated course in phonetic transcription, including annotated model solutions at the end of the book. They develop in a carefully graded way from the transcription of simple written

texts to the more difficult transcription of naturally spoken dialogue. All spoken texts are provided online via the narr eLibrary (click on the respective green additional material icon in the e-book version). The exercises are meant to be done parallel to each lesson, thus steadily building students' confidence and skill in transcription.

The authors worked together for several years in the Department of English at the University of Basel, and the manual is based on teaching material developed for the Introduction to English Phonetics course taught there. We will always be grateful to Professor D. J. Allerton, whose lecture shaped the subject matter of our manual, and to whose memory we dedicate this manual. Thanks are also extended, however, to the large number of students who contributed to the development of the exercises and model solutions over the years. Finally, the authors express their gratitude to Dr. James Fanning of the University of Greifswald for his detailed critique of the first edition of this book, which was indispensable in the preparation of the second edition.

*Paul Skandera, Innsbruck*  
*Peter Burleigh, Basel*

# Lesson One: The Preliminaries

## What is linguistics?

### Prescriptivism and descriptivism

From ancient times until the present, language purists have believed that the task of the grammarian is to *prescribe* (rather than *describe*) correct usage that all educated people should use in speaking and writing. **Prescriptive** language scholars have laid down rules that are often based on Latin and Greek, on a classical canon of literary works, on the origin of particular words, on logic, or simply on their personal likes and dislikes. Prescriptivists have been criticised for not taking sufficient account of ongoing language change and stylistic variation. By contrast, the aim of linguistics is to *describe* language objectively and systematically. **Descriptive** linguists observe and analyse language as it is used naturally in any given speech community [*Sprachgemeinschaft*], and they attempt to discover the rules and regularities of the underlying language system, or code.

### Parole vs. langue and performance vs. competence

In order to separate the two meanings of the word *language* implied in the last sentence of the previous paragraph, the Swiss linguist Ferdinand de Saussure (1857–1913) proposed the French terms **parole** to refer to actual language use (i.e. to concrete utterances) and **langue** for a speech community's shared knowledge of a language (i.e. for the language system).

A similar dichotomy was put forward by the American linguist Noam Chomsky (b. 1928), who used the terms **performance** and **competence** to refer to largely the same concepts. Chomsky, however, put more emphasis on the individual nature of language. Performance, then, is the actual language use of an individual speaker, and competence is that individual speaker's knowledge of the language. Chomsky later replaced these terms with **E(xternalised)-language** and **I(nternalised)-language**, but the new terms are rarely used.

### The four core areas of linguistics

The system or structure of a language (langue or competence) can be described at four different levels, which form the core areas of linguistics, sometimes called *microlinguistics*: (1) **Phonetics** and **phonology** deal with pronunciation, or, more precisely, with speech sounds and the sound system. (2) **Morphology** covers the structure of words. (3) **Syntax** explains sentence patterns. (Morphology and syntax, often combined into *morphosyntax*, have traditionally been referred to as *grammar*.) (4) **Lexicology** and **semantics** describe the vocabulary, or lexicon, and explore different aspects of meaning.

## Other branches of linguistics

Utilising the core areas are various other branches of linguistics, sometimes referred to as *macrolinguistics*. Most of these are interdisciplinary fields because they overlap with other sciences. The first four branches are concerned with language variation, and are therefore often subsumed under the label *variational linguistics*: (1) **Dialectology** is at the interface between linguistics and geography. It is the study of regional variation within a language. (2) **Sociolinguistics** connects linguistics with sociology. It is concerned with language variation according to age, sex, social class, etc. (3) **Ethnolinguistics** overlaps with anthropology and investigates language variation and the role language plays in ethnic groups. These three branches study the way language is used in different speech communities. They are therefore often referred to as *sociolinguistics*, which is then used in a broader sense as a superordinate term. The language variety [*Varietät*] spoken in a particular speech community is referred to as a *lect*. Thus we speak of *dialects*, *sociolects*, and *ethnolects*. The characteristic speech of an individual person is called an *idiolect*.

(4) **Discourse analysis**, **text linguistics**, and **stylistics** are closely related disciplines that also deal with language variation. Unlike the first three branches, however, they do not look at the way language is used in different speech communities, but rather at the language characteristics of different text types, especially beyond the sentence level. The language of these text types is communicated either through the medium of speech (e.g. personal conversations, broadcast discussions, lectures) or through the medium of writing (e.g. personal letters, newspaper articles, academic papers). And even though many linguists tend to be primarily interested in spoken language, one important field of study, which connects linguistics with literary science, is the characteristic use of language in works of literature.

The next four branches of linguistics are not concerned with language variation: (5) **Contrastive linguistics** describes the similarities and differences between two or more modern languages, especially in order to improve language teaching and translation. (6) **Psycholinguistics** overlaps with psychology and explores mental aspects of language, such as language learning. (7) **Neurolinguistics** overlaps with medical science and investigates the connection between language and the nervous system. It is especially interested in the neurological processes necessary to produce speech sounds and in language disorders [*Sprachstörungen*]. (8) **Computational linguistics** [*Computerlinguistik*] overlaps with artificial intelligence. Some of its concerns are machine translation, automatic speech recognition, and speech simulation.

The four core areas and all the other branches of linguistics mentioned so far extend their insights to various other domains. The practical application of linguistic findings, for example to the field of foreign language teaching, is called (9) **applied linguistics**. This term is contrasted with **general** or **theoretical linguistics**, which denotes a more theoretical orientation.

In the four core areas and in branches (1) to (4) above, linguists usually study the state of a language or variety at one particular period of time (e.g. present-day English or English at the time of Shakespeare). This approach is called **synchronic linguistics** [from Greek

*sún khrónos*, ‘together with time’]. But linguists may also study and compare the states of a language or variety at different points in time. This approach is called **(10) historical or diachronic linguistics** [from Greek *diá khrónos*, ‘through time’]. It connects linguistics with history and is concerned with language change and with the origin of words. Diachronic linguistics overlaps with **(11) comparative linguistics**, which also compares the states of languages or varieties at different points in time, but uses its findings to study the historical relations between different languages.

Finally, it is important to note that the various linguistic disciplines can hardly be kept apart, and that the borders between them are often blurred. If, for example, we were doing a study of the use of the *’s*-genitive (as in *the girl’s father*) and the *of*-genitive (as in *the father of the girl*) in working-class speech in London over the past two hundred years, we would be doing morphology, syntax, sociolinguistics, dialectology, and historical linguistics at the same time.

All the different branches of linguistics are recapitulated in Figure 1.

## What are phonetics and phonology?

We have already learnt that phonetics and phonology are concerned with speech sounds and the sound system. We also know that linguists analyse actual language use (parole or performance), and then try to infer the underlying language system (langue or competence).

### Phonetics

Phonetics first of all divides, or segments, concrete utterances into individual speech sounds. It is therefore exclusively concerned with parole or performance. Phonetics can then be divided into three distinct phases: (1) articulatory phonetics, (2) acoustic phonetics, and (3) auditory phonetics.

**(1) Articulatory phonetics** describes in detail how the speech organs, also called vocal organs or articulators [*Sprechwerkzeuge*], in the vocal tract [*Mundraum*] are used in order to produce, or articulate, (specific) speech sounds. **(2) Acoustic phonetics** studies the physical properties of speech sounds, i.e. the way in which the air vibrates as sounds pass from speaker to listener. A spectrograph is a machine that measures the soundwaves [*Schallwellen*] and depicts them as images, called spectrograms or sonograms, showing the duration, frequency, intensity, and quality of the sounds. **(3) Auditory phonetics** investigates the perception of speech sounds by the listener, i.e. how the sounds are transmitted from the ear to the brain, and how they are processed.

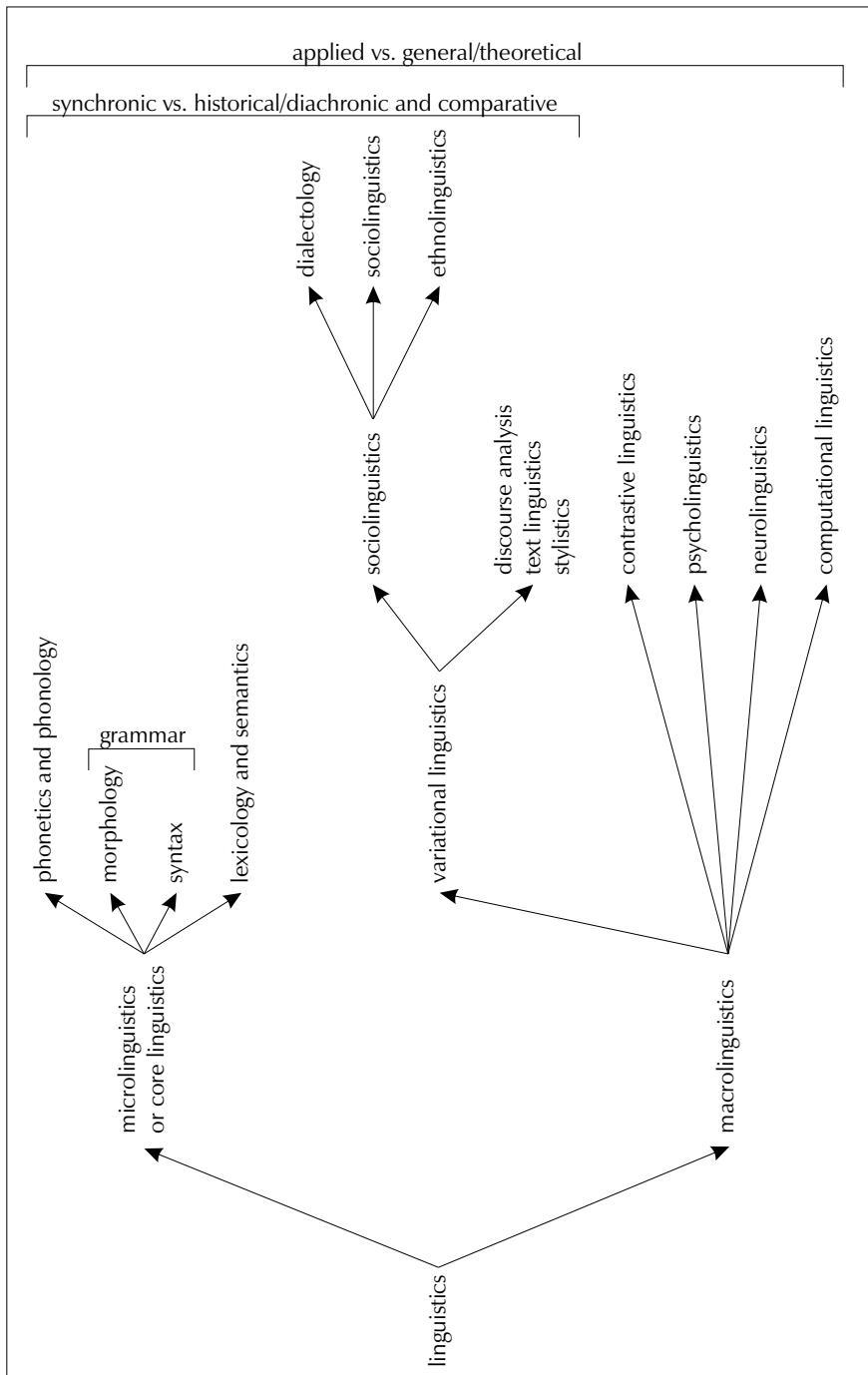


Fig. 1: The different branches of linguistics.



Owing to its close association with physics (and also with medicine), phonetics is sometimes considered a natural science, rather than a branch of linguistics (which belongs to the humanities) in the narrow sense. But no matter how we classify it, phonetics is an indispensable prerequisite for phonology, and is therefore an integral part of all introductions to linguistics. In the language departments of most universities, however, the study of phonetics is largely restricted to articulatory phonetics because of its applications to the learning and teaching of pronunciation. For that reason, this manual, too, will only be concerned with articulatory phonetics, and phonology.

# Phonology

Phonology deals with the speakers' knowledge of the sound system of a language. It is therefore exclusively concerned with langue or competence. (Phonology, then, is not the study of telephone manners, as one student once jokingly suggested.) Phonology can be divided into two branches: (1) segmental phonology and (2) suprasegmental phonology.

**(1) Segmental phonology** is based on the segmentation of language into individual speech sounds provided by phonetics. Unlike phonetics, however, segmental phonology is not interested in the production, the physical properties, or the perception of these sounds, but in the function and possible combinations of sounds within the sound system.

**(2) Suprasegmental phonology**, also called **prosody**, is concerned with those features of pronunciation that cannot be segmented because they extend over more than one segment, or sound. Such features include stress [*Betonung*], rhythm, and intonation (also called pitch contour or pitch movement [*Tonhöhenbewegung*]).

The three phases of phonetics and the different spheres of phonetics and phonology are illustrated by the speech chain in Figure 2.

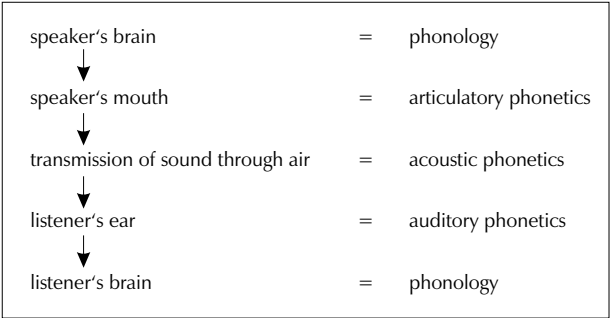


Fig. 2: The speech chain.

## Whose pronunciation are we describing?

### The notion of a standard variety

In all linguistic research, we have to define the language variety that we are concerned with by delineating the speech community and/or the text type. For example, we can investigate the Manchester dialect, the language used in e-mail messages, or the speech of children in conversations with their peers.

In language teaching, on the other hand, it is customary to use a more idealised **standard variety**, or simply **standard** [*hochsprachliche Variante*], as a model. A standard variety is the form of a language that is generally associated with educated speakers. And even though it may have a regional base, we regard it as regionally neutral in that it can be found anywhere in a country. A standard is therefore a sociolect, rather than a dialect. The standard variety of English in Great Britain is called *Standard British English* (popularly referred to by such non-linguistic terms as *King's English*, *Queen's English*, *BBC English*, or *Oxford English*). The standard variety spoken in the United States is called *General American (English)* or *Standard American English*.

### Received Pronunciation: An accent

A standard variety has a fixed grammar and vocabulary, but its pronunciation may vary according to the regional origin, social group, or ethnicity of the speaker. We use the term **accent** to refer to the way a variety is pronounced. It is quite possible, then, that a standard variety is spoken in different accents. One of these accents usually carries the most prestige, and is used as a model in the teaching of pronunciation. The most prestigious accent of Standard British English, for example, was first called *Public School Pronunciation* and renamed **Received Pronunciation**, or simply **RP**, in the 1920s. There is no widely used term for the most prestigious accent of General American, but it is sometimes referred to as *Network Standard* or *Network English*.

Received Pronunciation is associated with the dialect spoken in the south-east of England. The word *received* may seem awkward in this construction, but it is used here in the sense 'generally accepted as proper'. RP was initially described by the British phonetician Daniel Jones (1881-1967) in the first edition of his *English Pronouncing Dictionary* in 1917. And although RP is probably the most discussed accent around the world, it is important to note that it is a minority pronunciation unlikely ever to have been used by more than 3 to 4 per cent of the British population. Most educated speakers of British English speak a modified RP or near RP.

In this manual, we use RP, or near RP, as our model to illustrate English phonetics and phonology. RP is also the accent used in practically all British dictionaries and introductory textbooks.