1. English pronunciation: phonetics and phonology

This is a book on the pronunciation of English. No matter how obvious our topic might seem, it needs considerable clarification. Namely, we have to explain what we mean by "English" on the one hand, and "pronunciation" on the other.

English has as many as 400 million native speakers in the British Isles, North America, Australia and New Zealand as well as parts of Africa and Asia. It is the most popular language learnt and used as a second or foreign language. As you know, it is a member of the **Indo-European family of languages**, and as such, is genetically related to a number of tongues spoken all over Europe and Asia: from the Indian subcontinent to Western and Southern Europe. In contrast, Hungarian is of **Uralic** (more precisely, **Finno-Ugric**) origin, cognate to, among others, Finnish, Estonian, Lapp, and the Samoyed languages. Therefore, from a historical point of view, English and Hungarian could not be farther from each other. This results in numerous linguistic differences between the two languages, which is why the Hungarian student of English (as well as the English student of Hungarian) is faced with so many difficulties.

However, languages can not only be related **genetically** – English is not only related to the other Indo-European languages (and most closely, of course, to **West Germanic** German, Flemish, Dutch, Afrikaans, Frisian, and Yiddish). Compare English to German, for example: apart from the core of the word stock, they exhibit very few of the similarities one would expect from two languages that have evolved from a common ancestor. As far as linguistic structure is concerned, English shows more resemblances to Chinese (with its comparative lack of different word endings) than to any of

the other members of the Indo-European family. Languages, then, can also be related to each other according to what linguistic type they belong to, that is, **typologically**.

Finally, all languages are naturally related to others **culturally** through the contacts they come into. Therefore, English is so related to North American Indian languages: although they share neither early history nor (much) linguistic structure, they have borrowed a number of place names and terms from each other, in both directions. This is the way in which English can be considered as related to Hungarian, too. Even though the amount of English influence on Hungarian vocabulary is obviously larger, we are able to identify a handful of English words as words of Hungarian origin, including the well-known loanwords *coach* (from *kocsi* 'carriage') and *biro* ('ball-point pen', from the name of the inventor, László Bíró).

English does not only have contacts with non-Germanic languages outside the British Isles; even in its homeland English lives side by side with a couple of **Celtic languages**, which belong to another branch of the Indo-European family: Welsh (spoken in Wales), Irish (or Irish Gaelic, still spoken in parts of Ireland), and Scottish Gaelic (in the north-west of Scotland, especially the Hebrides Islands). It should be kept in mind that these are only distantly related to English, and are languages in their own right. (Unfortunately, all the Celtic languages formerly spoken on the European continent are now extinct, e.g., Gaulish, cf. Asterix and company).

Besides its intricate pattern of connections to other languages and its dominant status on the linguistic map of the world, English is very special in at least one more respect. Due to a series of historical events, a discussion of which is beyond the present purposes, English has developed two **standard varieties**, that is, two forms, both of which are equally accepted by the societies of their respective countries. One is Standard British English in

England, the other is Standard American English in the USA. As this book is exclusively concerned with pronunciation, henceforth we will concentrate on the pronunciation varieties (called **accents**[1]) of the two standards. The standard accent of England is traditionally referred to as **Received Pronunciation** (where *received* means 'accepted'), abbreviated to RP, whereas that of the USA is often referred to as **General American**, or GA for short. The two accents differ in many ways, most of which concern vowels. On the one hand, a number of systematic **sound correspondences** can be identified, e.g., whenever an RP speaker uses the vowel /əʊ/ as in *know, go, boat*, a GA speaker pronounces /oʊ/; RP /ɒ/ in *lot* and *dog* corresponds to a somewhat longer /ɑ/ in GA. On the other hand, there are differences which are not as general as that but only affect certain individual words. For example, a couple of words pronounced with /ɑː/ in RP, e.g., *after, ask, bath, can't, chance, class, dance, glass, grass, half, last, pass, past, path, rather, staff*, have /æ/ in GA. Further examples are given in the chart below:

	typical RP	typical GA
address	/əˈdres/	/ˈædres/
advertisement	/ədˈvɜːtɪsmənt/	/ˈædvərtaɪzmənt/
ate	/et/	/eɪt/
clerk	/klɑːk/	/klɜrk/
figure	/ˈfɪgə/	/ˈfɪgjər/
inquiry	/ɪŋˈkwaɪərɪ/	/ˈɪŋkwərɪ/
laboratory	/ləˈbɒrətrɪ/	/ˈlæbrətɔːrɪ/

[1] Notice that this sense of the word *accent* is much wider than in everyday use, where it basically coincides with what linguists refer to as a foreign accent. Here, in contrast, it is a general expression to refer to the pronounced form of any variety of any language, that is, the standard accent (standard English pronunciation, standard Hungarian pronunciation, etc.) is just another accent in the same way as geographically or otherwise localizable forms (e.g., Australian English, working class London English (called **Cockney**), **Black English** (that is, the African American vernacular), or the Szeged dialect of Hungarian). Every speaker has an accent.

leisure	/ˈleʒə/	/ˈliːʒər/
lieutenant	/lefˈtenənt/	/luːˈtenənt/
(n)either	/ˈ(n)aɪðə/	/ˈ(n)iːðər/
schedule	/ˈʃedjuːl/	/ˈskedʒuːl/
shone	/ʃɒn/	/ʃoʊn/
tomato	/təˈmɑːtəʊ/	/təˈmeɪtoʊ/
vase	/vɑːz/	/veɪs/
Z	/zed/	/ziː/

Although the two varieties of English mostly differ in pronunciation, there exists a certain amount of **vocabulary, spelling and grammatical differences** as well. Since these are irrelevant to the discussion in the rest of this book, we will mention just a few. The following table lists some of the notions that American English (AmE) and British English (BrE) use different words for.

AmE	BrE
apartment	*flat*
baggage	*luggage*
bill	*(bank) note*
cab	*taxi*
candy	*sweets*
closet	*wardrobe*
cookie	*biscuit*
corn	*maize*
diaper	*nappy*
elevator	*lift*
eraser	*rubber*
fall	*autumn*

AmE	BrE
faucet	*tap*
french fries	(*potato*) *chips*
garbage	*rubbish*
gasoline	*petrol*
hood (of a car)	*bonnet*
line	*queue*
(*potato*) *chips*	(*potato*) *crisps*
sidewalk	*pavement*
the first floor	*the ground floor*
truck	*lorry*
trunk (of a car)	*boot*
vacation	*holiday*

In contrast to pronunciation and vocabulary differences, the two systems of spelling and grammar do not deviate considerably. As to differences in spelling, there are two types again: some are systematic (e.g., words ending in *-our, -ise* and *-re* in British English end in *-or, -ize* and *-er* in American

English, e.g., *colour/color*, *realise/realize*[2]*, centre/center, theatre/theater*; in AmE final *-l* is not usually doubled, e.g., AmE *traveler, leveling* – BrE *traveller, levelling*), some characterize individual words only, e.g., BrE *cheque, gaol, plough, programme, pyjamas, tyre* correspond to AmE *check, jail, plow, program, pajamas, tire*. Grammatical differences do not abound, either; perhaps the most conspicuous concerns the usage of *have*, as in AmE *Do you have a problem*? vs. typical BrE *Have you got a problem*? In addition, American English uses simple past tense in some cases where British English has present perfect, e.g., AmE *He just went home*. As to verb forms, in British English the past tense and past participle of *burn, dream, lean*, *learn, smell, spell, spill* and *spoil* are typically irregular while in American English they are regular; *fit, quit* and *wet* are regular in British English but irregular in American English (all three forms being the same); *dive* is regular in British English but irregular in American English (*dive/dove/dived*); and the past participle of *get* is *gotten* in American English, *got* in British English. Finally, there are small differences in the use of prepositions, e.g., AmE *meet with sy* – BrE *meet sy*, AmE *stay home* – BrE *stay at home*, AmE *Monday through Friday* – BrE *Monday to Friday.*

Turning back to pronunciation, in the rest of the book the main emphasis falls on RP since it is the pronunciation most students of English as a foreign language are familiar with all over the world, but its occasional differences from GA (and some other accents) are not left unmentioned, either.

But what elements is pronunciation composed of? Let us first take a look at the basic mechanism that is used to produce speech sounds in English and in most Indo-European languages and also in Hungarian. The first phase

[2] In this book, we follow the British conventions for spelling. However, in words with alternative *-ise/ize*, *-ize* is used henceforth, as this form is getting so widespread that even major British publishers recommend it to their authors.

in the process of **articulation** (speech production) is called a **pulmonic egressive airstream mechanism**, meaning that the source of the air to be used in speech is the lungs ("pulmonic") and that the direction of the airflow is outward ("egressive"). It is important to note as other languages might use other kinds of airstream mechanisms to produce certain speech sounds – e.g., implosives, ejectives and clicks, which are not found in Indo-European languages or in Hungarian.

As the air leaves the lungs it continues upward in the windpipe (trachea), and enters the so-called vocal tract, where it is modified in various ways by the movements of the speech organs called articulators. All speech sounds can be classified according to where in the vocal tract this modification takes place (the so-called **place of articulation**) and how exactly this modification is carried out (the **manner of articulation**). As a third term in the description of speech sounds, we can specify how active the vocal cords are: whether they vibrate (in **voiced** sounds) or not (in **voiceless** sounds). A more detailed discussion of the articulation of English consonants is found in Chapter 2, of the articulation of English (more precisely, RP) vowels in Chapter 3, and of voicing and related phenomena in Chapter 6.

The features mentioned above characterize individual **segments**, that is, speech sounds – manner, place and voicing are the so-called **segmental features** of speech. However, larger chunks of pronunciation also have characteristics of their own – these are the so-called **suprasegmental features**. They are named so because in some sense of the word they are situated "above" segments, they affect elements which are higher up in the hierarchy of linguistic units: syllables, phrases, sentences. The two most significant suprasegmental features are **stress** (discussed in Chapters 7, 8, and 9) and **intonation** (Chapter 10). Notice that it is never a single consonant or vowel which is stressed, but the combination of consonants and vowels called

syllable; it is never a single consonant or vowel which has a characteristic intonational contour, but a whole phrase or sentence.

The scientific study of the segmental and suprasegmental features of speech is called **phonetics**. Although this is not clear from the above discussion, phonetics does not only deal with the process of articulation, that is, speech production, but it is concerned with **acoustics** (the way speech travels in the air in the form of sound waves) and speech perception (sometimes referred to as **auditory phonetics**), too. All the three aspects of pronunciation are of equal importance, nevertheless, in the rest of the book we will concentrate on articulation as it comprises a minimally necessary element of the physical properties of speech, which is at the same time sufficient for the present purposes.

A different point of view is taken by the branch of linguistics called **phonology**. It also deals with speech and sounds, and it borrows the terms and notions of phonetics, but it only uses them as tools to achieve the ultimate objective: describe the functions the segments have in speech, the relationships they contract with each other, and the various systems and patterns they constitute. For example, the same sound, i.e., the same phonetic object, may serve as an independent unit (a **phoneme**) in one language but only as a form, a positional variant (an **allophone**) of a phoneme in another. Two phonemes always enter into such a relation that they contrast and distinguish words; allophones never do so but are predictable instead. For example, a plain [k] sound and its aspirated version [k^h] (with an extra puff of air following the consonant – see Chapter 6) are separate phonemes in, e.g., Hindi, where a lot of word pairs (called **minimal pairs**) like /kan/ and /k^han/ are distinguished by this very feature – and it *does* matter which word you mean as the former means 'ear' while the latter 'mime'. The same is not true for these sounds in English: in *skin* it is plain but in *kin* it is aspirated,

however, this is totally predictable as all word-initial *k*'s are aspirated unless they are preceded by a *s*, in which case they are always plain. Because of this it is impossible for them to appear in identical phonological positions, they mutually exclude each other, that is, are in **complementary distribution**.

Phonology also attempts to handle cases when a sound appears in different forms in different environments, i.e., when phonemes or allophones alternate. For example, the two types of English *k* above can be argued to stand in such a correlation: a common underlyer *k* is realized as aspirated at the beginning of words, as plain after an *s*. Such **alternations** in linguistics are commonly referred to as **rules**. A note of warning is in order here, though. The word *rule* should not be taken here in the same sense as in the case of, e.g., the rules of the Highway Code, or the rules of etiquette. Instead, the rules of language are more like the rules (or "laws") of physics or football: it is the rules which constitute the system, which cannot exist without these rules. There is no physical world without, say, gravitation, and a ball game in which the players are allowed to catch the ball cannot be football. In contrast, traffic *does* exist without the Highway Code (in fact, there used to be a time when cars were already used but no traffic signs had been invented yet; and we also know how often drivers and pedestrians break these rules without traffic as such coming to an end); and it *is* possible to show (some kind of) human behaviour without respect to the rules of politeness (and how many people do so at least in certain situations!). The rules of a language are not like that. Languages do not exist without their rules – in fact, the rules define the languages. A system in which all *k*'s are plain cannot be (native) English; pronunciations like that of *kin* with a plain *k* are **ill-formed** (or, **ungrammatical**), at least in standard English, and will henceforth be indicated with an **asterisk** (*), e.g., *[kɪn]. The word *rule* therefore denotes

the observation of some systematic regularity rather than a regulation which must be obeyed by all good citizens.

To summarize the discussion so far, we can state that phonetics treats speech sounds from the viewpoint of their physical properties, while phonology is concerned with their function and patterning within a linguistic system. Sometimes these two viewpoints arrive at totally different conclusions. For example, compare two vowels of English, the one at the beginning of *a̲bout* (called **schwa**) and the vowel of *bi̲rd*. Phonetically, they are almost identical: in both cases the airstream entering the vocal tract is only slightly modified, with the tongue resting in its neutral position. Phonologically, however, they are each other's opposites: the former can only occur in weak, unstressed syllables, whereas the latter can only occur in strong, stressed syllables. That is why no minimal pairs exist for these two sounds: they mutually exclude each other. Therefore, two phonetically nearly identical objects are evaluated by phonology as two distinct elements. A great number of further examples illustrate that the phonetic and the phonological classes of sounds do not necessarily coincide.

The two different points of view may also influence the notational conventions analysts use. No matter to what extent the **transcription** system of the International Phonetic Alphabet (**IPA** for short) is based on universal agreement, phonologists vary as to which symbols to use in their description. For instance, someone primarily governed by phonetic criteria will choose the same symbol for *a̲bout* and *bi̲rd*, e.g., /ə/; while phonology-oriented researchers will transcribe only *a̲bout* with a schwa (/ə/) and mark the *bird*-sound differently, e.g., with /ɜ/. Actually, both types exist in Englsh: the first solution characterizes the so-called **Jonesian notation** (found in, e.g., the old bilingual Országh-dictionaries) whereas the second one is utilized in the so-called **Gimsonian system** (e.g., the latest editions of *Oxford Advanced*

Learner's Dictionary). (You may have already guessed that both are named after the person who devised them.) The two transcription systems vary in several other respects as well; this book favours Gimson's version of the IPA.

The differences of phonetic detail versus phonological analysis in transcription can be highlighted by enclosing the two types in different **brackets**: usually square brackets [ ] denote a phonetic transcription while slant brackets / / stand for a phonological one. E.g., English *kin* [kʰɪn] can be phonologically transcribed as /kɪn/ since the aspirated *k* is simply a phonetic variant (allophone) of the phoneme /k/.

A crucial difference between phonology and phonetics lies in their status concerning native speakers: namely, the former is, but the latter is not, part of linguistic knowledge. Native speakers know when to aspirate their *k*'s because they are native speakers; they learn this when they acquire their mother tongue, and anybody who is ignorant of aspiration must be a non-native speaker. They also know, subconsciously of course, that the first vowel in *po̲lice* is not the same as the one in *pe̲arly*: only the former is weak enough to be dropped, for instance, so that /pəˈliːs/ frequently becomes /ˈpliːs/ (cf. Chapter 5), but the same is impossible with the latter: /ˈpɜ(r)lɪ/ is never */ˈplɪ/. As opposed to this, native speakers are typically unaware of phonetic facts like the near physical identity of the two vowels, or the exact articulatory gestures involved in their production (not to mention their acoustics).

Not only the phonetic aspect of a language is considered to lie outside the linguistic knowledge of native speakers – so is the history of the language (would you as a native speaker of Hungarian know that your mother tongue is a Finno-Ugric language had you not been taught this at school?) as well as the written form, the **spelling**.

The relationship between English pronunciation and spelling (also called **orthography**, and commonly given between angle brackets, < >) is worthy of interest in this book, for at least two reasons. On the one hand, the spelling system of English is a mixture of several different traditions and no major reforms have affected it for centuries – as a result, there are not too many one-to-one spelling-to-pronunciation correspondences, or **letter-to-sound rules**. The same sound, say /e/, can be spelt, with **single letters**, as <e> (in *bed*), <a> (in *many*), <u> (in *bury*), or with **digraphs** (combinations of two graphic symbols) like <ea> (in *head*) (for more detail on letter-to-sound rules, see Chapters 11-12). On the other hand, being non-native learners of English, we are very often first confronted with an unknown word in its spelt form and consequently we tend to overestimate its role: pronounce long consonants (called **geminates**) – erroneously – for double consonant letters (e.g., *Emma*), or pronounce silent letters (e.g., *iron, Wednesday*). Notice however, that human language is primarily spoken: children learn to speak first and are explicitly taught to read and write somewhat later (in fact, some native speakers never acquire the spelt form of their language and remain illiterate); and speech comes first in the history of language itself, too (writing systems have emerged to represent already existing spoken languages, and many cultures have never employed an orthography). Thus writing must be conceived of as a derived version of the spoken language, and not the other way round.

That component of linguistic knowledge that we are concerned with here is, therefore, phonology. Nevertheless, we are forced to make constant reference to other components as well, since phonology seems to be heavily influenced by the rules of word formation (**morphology**) and, to a more limited extent, the rules of sentence formation (**syntax**). In addition, most phonological processes have exceptions, which cannot be accounted for by

the rules but must be stored in the speakers' memory (called the **lexicon**). For example, the fact that stress falls on the first syllable in *personal* but on the second in *personify* is due to the morphological difference between these words (viz., they are derived from the same **stem**, *person*, using **suffixes** of different types); the fact that stress falls on the first syllable in *blackbird* ('feketerigó') but on the second in *black bird* ('fekete madár') is due to the syntactic difference between a single (compound) noun and a phrase composed of an adjective and a noun. Finally, the fact that stress falls on the first syllable in the noun *present* but on the second in *event* is an example of a mere idiosyncracy: the stress pattern of *event* must be memorized in the lexicon as irregular. (On stress placement, see Chapters 8 and 9.)

In the remaining eleven chapters follows a description of the main phonetic and phonological features of standard English pronunciation (RP and GA), together with all the morphological, syntactic and lexical conditions, which every student of English in higher education is expected to be aware of, be able to recognize in native speech, and consciously use in order to improve their pronunciation.