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**ÁDÁM NÁDASDY**

**BACKGROUND  
TO ENGLISH PRONUNCIATION**

**(PHONETICS, PHONOLOGY, SPELLING)**

**for students of English  
at Hungarian teacher training institutions**

2006

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Az angol kiejtés alapjai  
Felsőoktatási tankönyv

*Bírálok:*

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## PREFACE

This book is primarily intended for B.A. students in Hungarian higher education, training to become teachers of English. It includes much less theory - i.e. much less “linguistics” - than a standard university textbook would; and much more practical material thought to be helpful for the future teacher. The treatment is also highly selective: it concentrates on the difficulties of Hungarian learners and exposes these in great detail, but it often ignores things that are not important from a Hungarian point of view. Thus the book is not a faithful and unbiased description of English pronunciation as such, but a practical textbook for Hungarian teacher trainees, giving linguistic arguments only as background when necessary. It does not contain much of the phonological argumentation that is naturally required at university level.

The three fields covered are phonetics, phonology, and spelling (or “letter-to-sound rules”). It is felt that these contribute about equally to a good pronunciation, and to good pronunciation teaching, and thus they are given about equal weight. This means that there is less emphasis on phonetics proper than traditionally (i.e. less detail of articulation and of methods to eliminate a foreign accent), while more than usual is spent on rules (i.e. phonology), and even more on letter-to-sound rules.

On the other hand, the Gimson variety of the IPA, and the phoneme-based analysis of English that it entails, is accepted without criticism — even though it has now been by-passed by phonological thinking. As this book, however, is not an M.A.-level textbook of English Phonetics or Phonology, it takes the Gimsonian transcription for granted, as if it were the English language itself, and offers basically an apology of this transcription system. While the present author has his reservations about Gimson’s analysis (and generally about producing textbooks that are apologetic rather than critical), it has seemed that for most readers such an approach would be the most profitable, and indeed an eye-opener to the seriousness and importance of studying the sounds of language. It is my warmest hope that interested readers will go on to more serious (and more up-to-date) materials and realize the limitations of the present book, and the necessary distortions following from them.

There are fourteen chapters, of which two (6 and 10) are appendix-like reference lists; the other twelve may be regarded as a possible syllabus of a one-term lecture course. The twelve chapters may be set week-to-week, or read by students at one breath before the endterm examination. The “Questions for Revision” at the end of each chapter are just a selection of possible questions and do not intend to cover the whole material of the chapter.

A detailed Bibliography can be found at the beginning of the volume; we hope that by placing it in the front it will offer itself to use more readily.

The book is based on British pronunciation (RP). There are references to American English where this seemed necessary, but a detailed treatment of that variety of English would have made the book too bulky.

I would like to express my thanks to all who helped, directly or indirectly, in the shaping of this book; my phonetics teacher, the late László T. András; Judit Zerkowitz, who originally asked me to write this book; Péter Szigetvári, for his valuable criticism; and János Kovács, without whose patient encouragement the work would not have come into existence.

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Ádám Nádasy

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## THE SOUNDS OF ENGLISH

Textbooks describing British English (“RP” variety), and using the IPA transcription system, usually list the following sounds.

<b>VOWELS</b>	<b>CONSONANTS</b>
<p><i>Short Vowels</i></p> <p>ɪ     kit</p> <p>e     ten</p> <p>æ     bag</p> <p>ʌ     cup</p> <p>ɒ     lot</p> <p>ʊ     put</p> <p><i>Long Vowels</i></p> <p>i:    seem</p> <p>u:    moon, cube</p> <p>ɔ:    call, lord, store</p> <p>ɑ:    dance, park</p> <p>ɜ:    first</p> <p><i>Diphthongs</i></p> <p>eɪ    name</p> <p>aɪ    five</p> <p>ɔɪ    join</p> <p>oʊ*   home</p> <p>aʊ    town</p> <p>ɪə    beer</p> <p>eə    care</p> <p>ʊə    poor, cure</p> <p><i>Weak Vowels</i></p> <p>ə     <u>a</u>go, letter</p> <p>i     happy, crea<u>t</u>ion **</p> <p>ɪ     ex<u>a</u>ct, want<u>e</u>d</p> <p>u     gradu<u>a</u>te, <u>u</u>nited **</p> <p>ʊ     regul<u>a</u>r</p>	<p><i>Obstruents</i></p> <p><i>Stops</i></p> <p>p     pig</p> <p>b     bed</p> <p>t     tie</p> <p>d     do</p> <p>k     cat</p> <p>g     go</p> <p><i>Affricates</i></p> <p>tʃ    chip</p> <p>dʒ    jam</p> <p><i>Fricatives</i></p> <p>f     fill</p> <p>v     vain</p> <p>θ    think</p> <p>ð    they</p> <p>s    sit</p> <p>z    zoo</p> <p>ʃ    ship</p> <p>ʒ    vision</p> <p>h    hit</p> <p><i>Sonorants</i></p> <p><i>Nasals</i></p> <p>m    meet</p> <p>n    no</p> <p>ŋ    sing</p> <p><i>Liquids</i></p> <p>l    leaf</p> <p>r    red</p> <p><i>Glides</i></p> <p>j    yes</p> <p>w    win</p>

\* /oʊ/ can also be transcribed as /əʊ/.

\*\* Some publications ignore weak /i u/ and use /ɪ ʊ/ instead.



## OTHER SYMBOLS AND SIGNS

[ <sup>h</sup> ]	(raised “h”): aspiration
[ɛ]	the sound of Hungarian <i>e</i> in <i>gyere</i>
[a:]	the sound of H <i>á</i> in <i>láb</i>
[o]	the sound of H <i>o</i> in <i>fok</i>
[o:]	the sound of H <i>ó</i> in <i>só</i>
[ɹ]	frictionless <i>r</i> as in RP <i>rain</i> , <i>carol</i> .
[ɾ]	flap, as in AmE <i>city</i> , or H <i>szamarak</i>
[ə]	R-coloured schwa as in AmE <i>bird</i>
[m̥]	labio-dental nasal as in <i>comfort</i>
[ʔ]	glottal stop
á	vowel with primary stress
à	vowel with secondary stress
/.../	(slanted brackets): phonemes
[...]	(square brackets): sounds
∅	nothing, no sound
<i>po.et</i> /'pou.ət/	(dot between sounds or letters): syllable boundary
[,]	(vertical line under sound): syllabic consonant
[◌]	(small circle under sound): de-voiced sound
[ ~ ]	(tilde above vowel): nasalized vowel
*	(asterisk before a word or sound): incorrect or nonexistent form
%	this form is used by some people, but there exists another pronunciation
#	cross-hatch boundary (morpheme boundary between a word and a neutral suffix)
+	plus boundary (morpheme boundary between a stem or word and a nonneutral suffix)
	morpheme division
~	alternants (both forms exist)
↘	falling intonation
↘↗	falling-rising intonation
↗	low-rising intonation
↗↗	high-rising intonation

**Vowel-letters with accent marks** represent the following sounds:

with length mark		with shortness mark	with circumflex mark
not before <i>r</i>	before <i>r</i>		
ā = /eɪ/	ār = /eə/	ǎ = /æ/	â(r) = /ɑ:/
ē = /i:/	ēr = /ɪə/	ě = /e/	êr = /ɜ:/
ī = /aɪ/	īr = /aɪə/	ĭ = /ɪ/	îr = /ɜ:/
ō = /oʊ/	ōr = /ɔ:/	ö = /ɒ/	ôr = /ɔ:/
ū = /ju:/, /u:/	ūr = /jʊə/, /ʊə/	ű = /ʌ/	ûr = /ɜ:/

Note. The letter *y* (when a vowel) is the same as *i*.

**Stress-accent marks above vowel-letters:**

á primary stress (= / ' a/)

à secondary stress (= / , a/)

## ABBREVIATIONS

- a.k.a. = also known as
- AmE = American English (in this book this refers to General American, GA)
- BrE = British English (in this book this refers to RP)
- C = any consonant
- cf. = compare, refer to, see also... (Latin *confer*)
- E = English
- e.g. = for example (Latin *exempli gratia*)
- ed. = edition, editor, edited by
- et al. = and others, members of a team (Latin *et altri*)
- H = Hungarian
- i.e. = that is (Latin *id est*)
- IPA = International Phonetic Alphabet
- p. = page
- pp. = pages
- resp. = respectively
- RP = Received Pronunciation (educated Southern British, also called BBC English)
- V = any vowel
- viz. = namely (Latin *videlicet*)
- vs. = as opposed to, against (Latin *versus*)

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## PART I – GENERAL PROBLEMS

### CHAPTER 1

#### THE COMPONENTS OF PRONUNCIATION

**1.1** What does a person have to know in order to pronounce English correctly? What are the components of a good pronunciation? To answer this question, we might take an imaginary ideal learner (or even a native speaker of English) and examine his performance, describing all that he knows. But the opposite approach is also possible: let us imagine learners of English who commit all conceivable types of pronunciation mistakes, and let us ask in each case: what element of knowledge would be necessary to avoid that mistake? This approach will provide us with more diagnostic insight into the various components of pronunciation, because by isolating and classifying pronunciation mistakes, we can also isolate and classify the components of knowledge that are necessary to avoid them.

Many people think that “pronunciation” and “phonetics” are the same thing, the name “phonetics” being just a more elegant word to describe pronunciation. This is not so; the main aim of this chapter is to show that not all pronunciation mistakes are phonetic mistakes, and consequently, not all pronunciation knowledge is phonetic knowledge.

#### THE PHONETIC COMPONENT

##### Production

**1.2 Segmental elements.** — Imagine that a Hungarian learner of English pronounces *room* with an *r* just like that in H *rúd*; or that he pronounces *thief* as \*/si:f/; or that he makes the word *so* (correctly /soʊ/) sound \*/so:/, i.e. exactly like H *szó*. (The asterisk (\*) indicates a nonexistent or incorrect form.) Why does he make these mistakes? The answer is self-evident: because the English sounds /r/, /θ/, or /oʊ/ are unfamiliar to him. They do not exist in Hungarian, so he finds them difficult to articulate. (Note that the transcription symbol /r/ is quite misleading as it conceals the difference between H *r* and E *r*!)

The problem facing our learner is, in this case, not an intellectual one. His tongue and lips are required to make movements and take up positions he is not accustomed to. Indeed, some English sounds count as mistakes in Hungarian speech: for example, using /θ/ counts as a speech defect (“pöthe”). He is unable or unwilling to condition his muscles in the necessary fashion, and helps himself out by replacing the unfamiliar sound with one known in his mother tongue. Such a phenomenon is a case of native language transfer because the learner transfers his native habits on to the target language.

**1.3** The situation is somewhat different when somebody pronounces *sing* (correctly /sɪŋ/) as \*/sɪŋg/. This is not because the sound /ŋ/ in itself is unfamiliar or difficult: it occurs in Hungarian, e.g. *leng* /leŋg/, *sonka* /ʃoŋkɒ/. So why is it difficult to pronounce words like E *sing* correctly? Because in Hungarian this sound /ŋ/ never stands at the end of a word (its distribution is different from that of E /ŋ/; see 2.2).

Similarly, many learners pronounce *matchbox* (correctly /'mætʃbɒks/) as \*/'mædʒbɒks/, with a voiced /dʒ/. Again, we may ask: is it difficult for a Hungarian to articulate the consonant /tʃ/? Of course not; cf. *csíp*, *rács*. In Hungarian, however, /tʃ/ must become /dʒ/ when followed by /b/, so that e.g. *rácsban* must be pronounced /ra:dʒbɒn/. There is no such voicing rule in English, where /-tʃb-/ is a permitted sequence.

This type of mistake, then, is not due to some absolute difference between the two languages (as in 1.2), but to a relative difference: it is only in particular positions or in specific combinations that the sound is difficult for the learner to articulate.

**1.4** **Suprasegmental elements.** — In the two sections above we saw the necessity of being able to produce (to articulate) the individual sounds of the target language, including those that are unknown in the mother tongue and those that are known but appear in unusual positions. In phonetic terminology individual sounds are called **segments**, so this type of knowledge is segmental articulation.

Pronunciation, however, includes elements that are (so to speak) “above” the segments. These are called **suprasegmentals** (from Latin *supra* ‘above’): they are stress and intonation.

**1.5** The place and intensity of **stress** (H ‘hangsúly’) may differ from language to language, and its knowledge is an important component of pronunciation. Hungarian word stress is simple because the stress always falls on the first syllable of a word. There are many such words in English too, e.g. *rápid*, *militáry*, *átitude*, *récognizing*, *hóoligan*. (In non-transcribed English words the stress will be shown with an accent mark above the vowel-letter, e.g. *á*, *é*.) However, in English stress may fall on some other syllable too: *tomórrów*, *invéstigated*, *paráde*, *Portuguése*. The learner has to be able to pronounce a word with stress not on its first

syllable, e.g. to say *beginning* /brɪ'gɪnɪŋ/ and not \**béginning* \*/'bɪgɪnɪŋ/. (It is surprising how little difficulty Hungarians normally have with this.)

Correct stressing not only means knowing where to put the stress, but also where not to put any. This is more difficult for Hungarians. For example, the second half of *postman* is unstressed and therefore its *a* is weakened to /ə/, i.e. /'pəʊstmən/. Learners often ignore this and give some stress to *-man*, saying \*/'pəʊst,mæn/. They also have to learn that some words — called function words, like auxiliaries, prepositions, etc. — are pronounced weak (= completely unstressed) in most cases. For example, in *Where does Margaret live?* the word *does* is unstressed, pronounced in its weak form /dəz/, despite its grammatical importance: /'weə dəz 'mɑ:grət 'lɪv/.

Units larger than the word — such as word groups or sentences — also have their characteristic stress problems. The main stress of a sentence (also called “tonic”) normally falls on the last word (shown by ♪ before the syllable):

Her aunt is a nice old ♪LADy.

In Hungarian this is unusual, as there the main stress of the sentence falls on an earlier word:

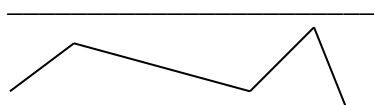
A nagynénje ♪HElyes öreg néni.

The Hungarian learner easily transfers this on to the English sentence, producing the incorrect stressing

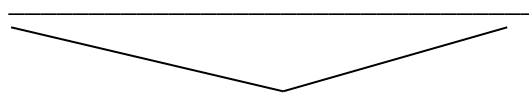
\*Her aunt is a ♪NICE old lady.

Correct sentence stress, then, is necessary for correct rhythm, and this is also part of pronunciation.

**1.6** The other important suprasegmental element is **intonation** (H ‘hanglejtés’), i.e. the melody of a sentence. This is not the same as rhythm. You must be able to produce the characteristic melodies of English, which often differ from those of the mother tongue. For example, the intonation of one type of question in English, called Yes/No Question, is very different from Hungarian question-intonation. Compare:



A papája némettanár?



Is her dad a German teacher?

The last four syllables show a fall-rise-fall in Hungarian, but a steady rise in English. If the Hungarian learner says the English sentence with the Hungarian intonation, an English hearer will not be sure whether it was a question or not, as the melody gives him contrary information: to him, a sentence whose intonation falls at the end is more likely to be a statement than a question.



## Perception

**1.7** So far, we have spoken of the knowledge (or the ability) to produce the various sound-elements of the target language. With a general term we call this the correct articulation of the language: segmental articulation and suprasegmental articulation.

But this is only one side, the “active” side of pronunciation; there is a “passive” side as well. When we hear English speech, we must be able to recognize, to perceive its elements. Each of the above areas of articulation has its perceptual counterpart. For instance, the word *heat*, usually transcribed as /hi:t/, has in fact a shortened vowel because of the following /t/, thus [hit]. Now, a Hungarian who hears this may be misled by the shortness of the vowel into believing that what he hears is [hrt], and think of the word *hit*. He has wrongly perceived the vowel segment. Or, on hearing the pronounced word /bæŋ/ (=bang), he might think of /bæn/ (=ban), deceived by the absence of a /g/ sound at the end of the word.

Besides segmental perception, we must learn to recognize suprasegmental elements for what they are. A low-rising intonation in English expresses a statement about which the speaker is indifferent or careless. The sentence

She ↗knows

pronounced with this low-rising intonation means “She knows, but I don’t really care, it makes no difference to me”. The same sentence pronounced with a high-rising intonation would be a question:

She ↗knows

means “Does she know? Really?” In Hungarian, however, any rising intonation is perceived as a question, and so our learner will misinterpret the low-rising English sentence, thinking of the low-rising Hungarian sentence

↗Tudja

which has the value of a question. Thus he has made a mistake in suprasegmental perception.

**1.8** All components of knowledge we have described so far can be called phonetic knowledge (or ability), and the mistakes phonetic mistakes. The science of phonetics deals with the production and perception of the sounds of human speech, both at the segmental and at the suprasegmental level. Phonetics describes and classifies vowels, consonants, syllables, degrees of stress, sentence rhythms and intonation patterns. The ideal learner should be able to produce and perceive all these. In practice this is, of course, seldom possible (especially in the “active” or production sense) — and usually not really necessary. In everyday life it is quite acceptable if the learner has a good approximation of the native speaker’s phonetic ability: a pronunciation with a more or less recognizable foreign accent is not to be ashamed of.

However, to “know the pronunciation” of a foreign language means more than phonetic knowledge. Let us go on to discover the nonphonetic component of pronunciation.

## THE NONPHONETIC COMPONENT

### Lexical knowledge in pronunciation

**1.9** Imagine that a learner pronounces *gone* as \*/gʌn/ instead of the correct /gɒn/. This is certainly a mistake — but not a phonetic one! After all, a word /gʌn/ does exist in English (*gun*), so /gʌn/ is phonetically well-formed: no phonetic feature of the language is violated by saying it. The trouble is that /gʌn/ is not the pronunciation of *gone*: the learner has confused two words (two lexical items). He did not make this mistake because he was unable to articulate correctly, since from a phonetic point of view /gʌn/ is correctly articulated. Nor did he replace a difficult sound by an easy one, since /ʌ/ is not easier than /ɒ/. Our learner simply does not know which vowel is contained in the word *gone*; this is, then, a lexical mistake.

A similar example is provided by the word *wilderness* /'wɪldənəs/, which many learners mispronounce as \*/'wɑɪldənəs/. Is it easier to say /wɑɪl-/ than /wɪl-/? Certainly not. This mistake is, again, not of a phonetic but of a lexical type. The learner assumes (correctly) that *wilderness* is derived from *wild* /wɑɪld/, and also assumes (incorrectly, in this case) that the derived word has the same vowel as the base word. Please note that from a purely phonetic point of view both /'wɪldənəs/ and \*/'wɑɪldənəs/ are well-formed; the problem is simply that the second form does not exist. The learner should have learnt the pronunciation of *wilderness* as a separate lexical item. His phonetic knowledge will not help him here: he has to possess lexical knowledge, i.e. he has to learn which sounds occur in which words, especially where the spelling is misleading.

**1.10** Lexical knowledge is a matter of storing unconnected bits of information in our memory. This is needed in speaking any language, because sounds and meanings are arbitrarily connected. You just have to know that *dim* is “homályos” and *grim* is “zord” and not the other way round. A learner of Hungarian has to know whether “chimney” is *kemény* or *kémény*. Now, in most cases our lexical knowledge (our memory) is backed up and reinforced by the spelling: it is helpful to think of the written form of the word, or look at it in a text or dictionary, and we immediately know whether our word is *dim* or *grim*, *kemény* or *kémény*. The problem in English is that the spelling often gives no clue as to what should be pronounced. The written form *gone* does not help us to choose between /ɒ/ and /ʌ/. (Actually, it suggests /ʌ/ on the analogy of *done* and *one*, which are /dʌn wʌn/.) Similarly, the identical letter *i* of *wild-wilderness* also hides the difference in sound.

If someone confuses *dim* with *grim*, or *kemény* with *kémény*, people do not regard this as a mistake in pronunciation, because the differences are shown in the spelling too. But if someone confuses *gone* with *gun*, or *wild* with *wild(-erness)*, or *lead* /li:d/ “vezet” with *lead* /led/ “ólom”, we speak of a pronunciation mistake, because the sound-composition of these words is not directly derivable from their written form. Let us stress that from a phonetic point of view this whole distinction is meaningless, because phonetically *gone* and *gun*, *lead*

(verb) and *lead* (noun) are just as different as, say, *dim* and *grim*, *lock* and *luck*, or *meet* and *met*.

## Knowledge of rules

**1.11 Regularities of Spelling (Letter-to-Sound Rules)** — English spelling is not entirely irregular: usually it is quite regular, though the rules may be complicated. These regularities should be learnt (and taught!) like any other regularity in any language.

For example, if you are uncertain whether *hall* is /hɒl/ or /hɔ:l/, you must remember the rule that the letter *a* is never pronounced /ɒ/ — so *hall* can only be /hɔ:l/. The sound /ɒ/ is found when the spelling has *o*, *oa*, *ou*, *ow*, e.g. *hole*, *goal*, *soul*, *bowl* — but never in words where the spelling of the vowel is (or begins with) *a*, e.g. *hall*, *warm*, *law*, *Paul*. These latter all have /ɔ:/. In deciding which word has /ɒ/ and which has /ɔ:/, the spelling, then, is a reliable guide, even if not as directly as in Hungarian or Italian or Finnish. If you do not know this, it is because you never cared to learn it (or because your teacher never cared to tell you), and not because English is phonetically difficult.

Sometimes we have very simple general rules: English *j* is always /dʒ/; *sh* is always /ʃ/; *c* followed by *a*, *o*, *u* is always /k/ (*cat*, *cot*, *cut*), etc. Sometimes we have only “negative” rules, e.g. that *a* is never /ɒ/; *w* is never /v/; *g* is never sounded in final *ng* (= /ŋ/) etc. Admittedly, there are unpredictable exceptions to most of these rules, but the existence of exceptions does not invalidate any rule in any language.

Thus we conclude that the lexical knowledge-component of pronunciation includes the knowledge of letter-to-sound rules.

**1.12 Morpheme alternations.** — We shall now examine yet another nonphonetic aspect of pronunciation. Imagine that someone pronounces *the act* as \*/ðə 'ækt/, instead of the correct /ði 'ækt/. The mistake is not in articulation, and not even in lexical knowledge. The word *the* can certainly be pronounced /ðə/ — but not in this environment. Our learner does not know the rule prescribing that *the* becomes /ði/ before a vowel. This rule is really a grammatical rule because the conditions for it (“in what environment does it happen?”) can be given clearly: it happens before vowels. The change from /ðə/ to /ði/ is predictable. The learner is thus making a grammatical mistake, of the same type as if he said \**a act* instead of *an act*.

Or take someone who knows the word *insane* /ɪn'seɪn/ and thinks that the noun derived from it, *insanity*, is \*/ɪn'seɪnəti/. The correct pronunciation, however, is /ɪn'sænəti/. The learner is carrying over the vowel /eɪ/ from the base word to the derived word, much as he did in the *wild–wilderness* example; yet the problem here is different because in *wilderness* the change from /aɪ/ to /ɪ/ was unpredictable (and therefore had to be learned lexically as a property of this particular word), while in *insanity* it is predictable: the suffix *-ity* always makes the preceding vowel short. Many other words follow this pattern, e.g. *grave* /eɪ/ – *gravity* /æ/, *divine* /aɪ/ – *divinity* /ɪ/.

Again, these pronunciation mistakes do not have their basis in phonetics, but come from an insufficient knowledge of the systematic rules (broadly speaking, the grammar) of the language.

**1.13** The “grammatical” component of pronunciation also includes the correct forms of suffixes in different environments. For example, the past tense suffix is always spelt *-ed*, but is pronounced /-d/, /-t/ or /-ɪd/ depending on the environment — namely, the last sound of the verb to which the suffix is attached. The suffix is /-d/ in *played* /pleɪd/, but /-t/ in *kissed* /kɪst/.

Such automatic change from one form to another is called **alternation**, and the forms themselves **alternants**. We have just seen that the article *the* has the alternants /ðə ~ ði/, the stem *insan-* has a longer and a shorter alternant /ɪn'seɪn ~ ɪn'sæn-/, and that the suffix *-ed* has the three alternants /d ~ t ~ ɪd/.

The collective name for such small but meaningful grammatical elements as suffixes, function-words, or stems, is **morpheme**. We have just seen some examples of morpheme alternation. In other languages this is considered a part of the grammar, but in English it frequently presents itself as a pronunciation problem because the spelling does not always distinguish the alternants from one another.

**1.14 Sound alternations.** — Not only morphemes can alternate in regular ways, but sounds as well. One classical example of sound alternation in English is the weakening (“reduction”) of vowels in unstressed syllables. Take the word *rebel* for example. As a noun, it has the stress on the first syllable, and thus the *e* of the second syllable is weakened to /ə/ or disappears completely: *a rébel* /'rebəl/ or /'rebl/. But when this word is a verb, it has the stress on the last syllable, and now it is the first vowel that is weakened to /ə/ or a very short /ɪ/, *to rebél* /rə'bel/ or /rɪ'bel/. In other cases the stress moves away because of the addition of a suffix, as in *horízon* /hə'raɪzn/ but *horizóntal* /,hɒrə'zɒntl/. Here, too, the change of vowel quality from full to weak (or vice versa) is a consequence of the shifting of stress from one syllable to another.

Another regular sound alternation is Pre-R Breaking, the change of quality of most long vowels before *r*. Compare, for example, *Judy* /'dʒu:di/ with *jury* /'dʒʊəri/, or *been* /bi:n/ with *beer* /bɪə(r)/, where the difference in vowel sound is an automatic consequence of the following *r*.

## Rules for suprasegmentals

**1.15** The correct pronunciation of suprasegmental features, too, may depend on grammatical factors. We saw in [1.5](#) that each sentence has its main stress, which usually falls on the last word. However, when the last word is a preposition, the main stress (shown here with ♣) has

to fall on one of the preceding words, since a preposition is normally unable to take stress on itself:

Jim is the guy who spoke  $\nabla$ FRENCH.

Jim is the guy we  $\nabla$ SPOKE about.

In certain cases, when a preposition happens to have the same sound shape as some other word (e.g. *to* and *two*), the correct placement of the main stress may distinguish one sentence from another:

Jim would like  $\nabla$ TWO. /... 'lɜ:k 'tu: /

Jim would  $\nabla$ LIKE to. /... 'lɜ:k tu: /

In 1.5 we said that the learner must know how to pronounce weak forms (e.g. /dəz/ for *does*, or /ə/ for *are*). But he also has to learn when to use the weak form. This depends on the environment of the word (its position among the surrounding words). In the following sentences the word *does* has different stressing and articulation according to its environment:

'Does your 'brother  $\nearrow$ KNOW? /'dʌz/ stressed, strong

I be'lieve  $\nabla$ EVERYone does. /dʌz/ unstressed, strong

'What does it  $\nabla$ MEAN? /dəz/ unstressed, weak

This is another aspect of pronunciation knowledge derived from grammatical knowledge.

**1.16** To sum up: someone who knows how to pronounce English has the following knowledge at his disposal:

A) PHONETIC KNOWLEDGE

I. Production

a: Segmental elements

- Absolute articulation (*so* ≠ H *szó*)
- Relative (positional) difficulties (*sing* ≠ H *ing*)

b: Suprasegmental elements

- Stress and rhythm
- Intonation

II. Perception (of all elements above)

B) NONPHONETIC KNOWLEDGE

I. Lexical-type knowledge

- sound composition of lexical items (*gone*, *wilderness*)
- spelling irregularities and traditionalisms (*lead* v. ≠ *lead* n.)

II. Grammar-type (systematic) knowledge

- spelling (letter-to-sound) regularities (*hall* ≠ *hole*)
- morpheme alternations (*the* + Cons. ≠ *the* + Vow.)
- sound alternations (*rébel* ≠ *rebél*; *been* ≠ *beer*)
- stress and intonation as prescribed by grammar

## THE RELATIONSHIP OF PHONETICS AND PRONUNCIATION

**1.17** It should now be clear that phonetics is not the same as pronunciation. On the one hand, knowing the pronunciation of English means more than just knowing its phonetics; pronunciation includes nonphonetic knowledge. On the other hand, the science of phonetics deals with many things (the anatomy of speech organs, acoustics, instrumental measurements, speech therapy, etc.) that are by no means necessary for a good pronunciation of any foreign language.

In everyday life people often use the term “phonetics” loosely, to describe pronunciation and things connected with it. A book like the present volume is likely to be referred to by students (and teachers) as “the phonetics textbook”; a language teacher may say to his class at school: “children, let’s do a bit of phonetics”. Strictly speaking, this use is incorrect — but once you bear this in mind, you may as well go on using it, just like people speak of “sunrise” and “sunset”, though we have known since Copernicus that the sun does not really “rise” or “set” at all.

The phonetics of English (in its strict scientific sense) shows that English, like all other languages, has some peculiar sounds that are difficult, but on the whole it is not something exotic or unusual. It is certainly difficult for a Hungarian to articulate *twelfth* correctly, but it is equally difficult for an English speaker to pronounce words like H *gyönyörű* or German *Herbstpflanze* “autumnal plant”.

We shall not really go into phonetics in this course. We will only use it as background, as far as we need accurate phonetic descriptions of those elements — both segmental and suprasegmental — that are difficult for Hungarians.

**1.18** And yet, it is widely held that English pronunciation is very difficult: more difficult than Hungarian or German or Spanish pronunciation. This is true, but the unusually difficult nature of English pronunciation is not due to its phonetics (which is like that of any language) but to **the unreliability of the spelling**. Written English often confuses the learner and suggests the wrong pronunciation. This is far less frequent in other languages, where you can more safely rely on the spelling when you want to pronounce something.

When a Hungarian learner pronounces *debt* (correctly /det/) as \*/debt/, this has nothing to do with phonetics: he is simply deceived by the spelling (just like with *gone* or *wilderness*). It is often said that words like *debt* have an “irregular pronunciation”. This statement is true only if by “pronunciation” we mean the relationship of spelling to sounds. Actually, it would be more precise to say the opposite: the word /det/ — which is, in itself, a perfectly easy and regular phonetic form — has an irregular spelling, with a superfluous silent letter *b* in it.

## Morpheme identity vs. morpheme alternation

**1.19** In Hungarian, morpheme alternants are usually indicated in spelling. For example, if the root vowel is shortened before a suffix, this is shown in writing: *nyár ~ nyaral*, *híd ~ hidak*. In English there is a similar shortening, but it is not shown: *insane ~ insanity*, *wild ~ wilderness*. To take another example, in Hungarian the past tense suffix *-t* becomes *-tt* after a vowel, and the spelling reflects this: *reszelt ~ köhögött*. In English the past tense suffix *-ed* becomes /t/ after a voiceless consonant, e.g. *kissed* /kɪst/, but the spelling does not reflect this: it has the same *-ed* in all cases. (Exceptions are verbs with irregular vowel-shortening, e.g. *slept*, *lost*.) The spelling of English is, by and large, insensitive to morpheme-alternation.

This fact makes English difficult to “pronounce” (not to articulate!), because you have to remember the alternations and provide them from your memory. But it has its advantages as well: it makes English easier to “scan” (to read silently and understand the meaning of the text), and easier to spell. English spelling is grammatically more logical, more abstract, than Hungarian. Whatever the pronunciation of the past tense suffix, it is spelt *-ed*, which is quite logical since it is the same suffix. Whatever change may happen to the stem *wild* during word formation processes, it is still spelt *wild*. Thus English spelling emphasizes morpheme identity and ignores morpheme alternation.

The opposite is true for Hungarian, where morpheme alternation is emphasized at the cost of morpheme identity. For example, the H imperative suffix *-j* has the alternants *-sz*, *-z*, *-s*, which are all explicitly shown in spelling: *írj*, *ússz*, *nézz*, *bánts* (and not, as would be logical by English standards, *írj*, *\*ússzj*, *\*nézj*, *\*bántj*). This makes Hungarian “pronunciation” easy, for you just have to look at the word and say what is written; but the scanning and the orthography become more difficult, as you have to learn that these different *-sz*, *-z*, *-s* endings are really the alternants of the same morpheme *-j*.

**1.20** Pronunciation may be defined as consisting of those elements of knowledge that do not appear in writing, or cannot be directly inferred from the written form of the language. It will be interesting to draw the borderline between pronunciation knowledge and grammatical knowledge. Traditionally, grammar is the knowledge of writing and of things written (the word *grammar* derives from the Greek *gramma*, which means “writing”).

It is commonly agreed that grammatical mistakes are those that show up in writing — or would show up in writing if the speaker were to write down what he is saying. For example, to say \*/ə 'ækt/ is called a grammatical mistake, because if we wrote it down, it would appear as a mistake in writing too: *\*a act*. On the other hand, to say \*/ðə 'ækt/ is not called a grammatical mistake, for when written down it would look faultless: *the act*. This is why \*/ðə 'ækt/ is regarded as a mistake “in pronunciation only”.

The borderline between grammar and pronunciation thus depends on what phenomena of the language are indicated in its writing and what are not. Consequently, the “amount of pronunciation” in each language will depend on how detailed its spelling is or to what extent

it follows (or ignores) the alternations of the language. If the spelling is “sensitive”, as in Hungarian, the language has “much grammar” and “little pronunciation”. If the spelling is “insensitive” to alternations, as in English, there will seem to be “little grammar” and “much pronunciation”. If a learner of Hungarian says \**úszj* instead of *ússz*, this counts as a grammatical mistake; if a learner of English says \*/kɪzd/ for *kissed* (correctly /kɪst/), which is exactly the same type of error, people will consider it a pronunciation mistake. Because English spelling is “insensitive”, many alternations remain unindicated in writing — but remember: the rules are still rules, whether they are reflected in spelling or not.

## Teaching phonetic and nonphonetic knowledge

**1.21** When teaching and learning English pronunciation, we have to distinguish the two types of pronunciation knowledge: phonetic and nonphonetic. They must be approached and evaluated differently.

Phonetic “knowledge” is not really knowledge but a skill. It is not so much a question of understanding what ought to be done, as of being physically able to perform the required articulatory movements. It is similar to learning to play a musical instrument: you may well understand what you ought to play, yet your fingers need a lot of practice before your performance sounds right. Here demonstration, repetition and practice matter more than logical understanding. Individual performances will vary tremendously: each of us has his or her limit — a “ceiling”, as it were — beyond which we cannot really improve our articulation. A lot depends on talent, less on diligence. Some people can never get rid of their foreign accent, no matter how hard they try. It is not worthwhile to press learners beyond their limits. If somebody — after a good deal of demonstration and practice — is still unable to pronounce, say, the English *th*-sounds, he should not be pressed further. If his speech is otherwise correct and fluent, he will be understood even if he says *sick* instead of *thick*.

Nonphonetic knowledge is quite different. This is a question of understanding and memorizing facts, rules, and their interconnections, and has nothing to do with talent. No learner must be forgiven for pronouncing *figure* as \*/'fɪdʒə/, because anyone can learn the rule that *g* is always /g/ when followed by *u*. If somebody pronounces *kissed* as \*/kɪzd/, this is not because his articulatory abilities are limited, but because he was not diligent enough to learn the rules — or he was badly taught. In short: nonphonetic pronunciation knowledge is like the other aspects of language knowledge (grammar, vocabulary, or style): it can be mastered by anybody through devoted learning and good teaching.

**1.22** Teachers should be careful not to equate good pronunciation with a pleasant English-sounding articulation. It is certainly desirable that learners should articulate almost like native speakers do, but often these same learners make serious mistakes in the lexical-type or grammar-type components of pronunciation, and these mistakes may be more dangerous than an “ugly” foreign-sounding articulation. Which learner speaks English better: Alajos, who pro-



nounces *wilderness* with a pleasant English articulation as \*/'wáɪldənəs/, or Borbála, who pronounces it with a harsh Hungarian accent as \*vildörnesz? Do we prefer Aranka, who pronounces *various* with well-articulated English sounds as \*/və'raɪəz/, or Balázs, who pronounces it \*veriösz, using only Hungarian sounds? Certainly, all four of them say the words badly, but Borbála and Balázs will be more readily understood than Alajos or Aranka.

The teacher should try to improve Borbála's and Balázs's articulation as far as possible — but they may have reached their “ceiling”; in that case they must be praised for their careful learning and solid knowledge. On the other hand, the teacher should tell Alajos and Aranka that they are saying imaginary words; they should be reproached for carelessly relying on their “intuitions” instead of opening a dictionary, or learning the rules for the suffix *-ous*. The teacher should not be overimpressed by an easy-flowing articulation: all that glitters is not gold.

There are situations, depending on the learners' age or background, where a strong Hungarian accent is acceptable, and should not be regarded as embarrassing or shameful. Such a pronunciation will be clearly understandable for foreign speakers of English, both native and non-native.

Let us print the above paragraph in such a Hungarian-accent pronunciation:

Der ár szitjuésösz, dipending on dö lörnörz édzs ór bekgraund, ver a sztrong hangérien ekszönt iz ökszeptöböl, end sud not bí rigárdid ez imberöszing ór sémfül. Szacs a pronansziésön vil bí klírli andör-sztendöböl for forin szpíkörz ov inglis, bószt néatív and non-néatív.

— o —

## QUESTIONS FOR REVISION

1. What is the definition of pronunciation? What kinds of knowledge does it include?
2. What is the difference between phonetics and pronunciation?
3. Is English phonetics more difficult than that of other languages?
4. If we say, “English pronunciation is especially difficult,” what are we referring to?
5. What are morphemic alternations? Give E and H examples.
6. Why do many Hungarians pronounce *gone* as /gʌn/?
7. Why do many Hungarians pronounce *thick* as /sik/?
8. What are the “suprasegmental” elements of pronunciation?

## CHAPTER 2

### SOUND, ALLOPHONE, PHONEME

**2.1 Richness of sound variety.** — How many sounds are there in English? If we look for a phonetic answer to this question, we will find that there are very many indeed. For example:

- the /p/ in *pig* is different from the /p/ in *sleeps* or *sleepy*: the first is pronounced with a short [h] sound after it, so it is really [p<sup>h</sup>ɪg], while in *sleeps* or *sleepy* it is a plain [p] just like in H *pipa*. (The first type is called aspirated, the second type unaspirated.)

- the vowel /i:/ in *heat* is much shorter than the same vowel in *mean* or *sea*.

- the /l/ in *leaf* is quite different from the /l/ in *feel*; namely, in *leaf* it is like H l (e.g. *liszt*, *nyíl*), in the word *feel* it is pronounced with an [o]-coloured articulation, almost [fiol]. (The first type is called Clear-L, the second type Dark-L.)

- the /r/ in *train*, *address* — when it follows /t d/ — is fairly different from /r/ when it occurs on its own, as in *rain*, *arrest*. In /tr dr/ the /r/ is more like a real consonant.

We could continue listing such differences, some smaller, some bigger, till we arrived at the conclusion that there are hundreds of different sounds in English!

**2.2** Before we go on, let us point out that the situation is no better in other languages: every language has hundreds of different sounds. In Hungarian, the *n* of *ronda* is different from the *n* in *rongál* (which is /ŋ/), and it is again different in *hangya*, which is pronounced *hany-gya*; and again different in *honvéd*, which is pronounced like “*homvéd*”, but with an *m*-like sound (symbolized as [m̥]) different from the [m] in *hombár*. The first *e* of *forduljanak erre* [ɛ:rɛ] is much longer than the the first *e* of *a paprika ere* [ɛrɛ]. And so on. Richness of phonetic nuance is a natural feature of all languages — English is no exception.

### Distribution

**2.3** This bewildering variety of sounds, however, does not mean that you have to choose between hundreds of possibilities every time you want to pronounce a new word. Things are in fact much simpler, because the sounds of language have some systematic rules — very much like the rules of grammar.

For one thing, sounds are not evenly distributed over words or syllables: not all sounds can stand in all positions. For example, English /h/ is very unevenly distributed: it can only be pronounced at the beginning of a word or before a stressed vowel, e.g. *háppy*, *behínd*, *com-*

*prehénd*. In other positions *h* cannot be pronounced, e.g. *Gráham* /'grɛɪɒm/, *véhicle* /'vi:ɪkl/, *annihilate* /ə'naiələt/, *Sarah* /'seərə/. Thus English /h/ has a restricted distribution: it occurs in certain positions but not in others.

To take another example: the short vowels /æ, e, ɪ, ɒ, ʌ, ʊ/ (as in *bag, ten, kit, lot, cup, put*) have an important distributional restriction: they can only occur before a consonant — never before another vowel or at the end of a word. So if you wonder whether the *o* is pronounced as /ɒ/ or /oʊ/ in words like *poet, heroic, judo, potato — you can be sure it is /oʊ/, since a short vowel like /ɒ/ is not allowed in these positions.*

By the **distribution** of a sound we mean the sum of those positions (= environments) in which it can occur. Most sounds have some restriction on their distribution, i.e. there is some position in which they never occur.

## SOUND AND PHONEME

**2.4** Are all phonetic differences equally important? Do all sounds play the same role in communication? The function of sounds in the language system is to identify words, that is, to distinguish one word (or morpheme) from another. Some sounds in English do have this function: for example, *tie* is not the same word as *die*, *send* is not the same as *sand*, and *wash* is not the same as *watch*. These pairs show that in English the sounds /t/ and /d/, /e/ and /æ/, /ʃ/ and /tʃ/ are capable of distinguishing words. Their differences are not purely phonetic, but have a **distinctive** function in the language. Putting it differently, we may say that the difference between /t/ and /d/, etc. is not just a **surface** difference but an **underlying** one.

Such distinctive (i.e. contrastable) sound units, which represent an underlying difference, are called **phonemes**. The difference between /t/ and /d/ is a phonemic or distinctive difference, so /t/ and /d/ are different phonemes. (Pronounce /'fəʊni:m/, /fəʊ'ni:mɪk/.)

A phoneme is an underlying sound unit capable of distinguishing one word from another in a given language. It is called underlying (H. “mögöttes”) because one phoneme may have different realizations, that is, the same underlying unit may appear as different sounds on the surface in actual pronunciation. The number of phonemes in a language is normally around 40, much smaller than the number of sounds.

### Minimal pairs

**2.5** To find out which sound-differences are distinctive, we must take two words that differ in one particular sound only, e.g. *send* and *sand*. If we find that the two forms are judged by native speakers to be two different words (and not just the same word pronounced differently), then the two sounds in question represent two different phonemes, and the word pair is

a minimally differing pair. (Such a pair is usually called “**minimal pair**” for short, but of course it is not the pair that is minimal, but the difference!)

To put it more technically: we take an environment, say /s\_\_nd/, and try both /e/ and /æ/ into it to check if the meaning changes. We find that it does: /send/ is a different word from /sænd/. This proves that in English the /e ↔ æ/ difference is distinctive: we conclude that /e/ and /æ/ are not only two different sounds but two different phonemes as well.

On the other hand, if we replace the English-type /r/ in *room* with a Hungarian (or Scottish) type trilled *r*, the result will not be a different word, just a curious or dialectal rendering of the same word. There is no minimal pair in English whose difference would hinge on the two kinds of *r*.

**2.6 Relationship of minimal pairs to spelling.** — In the preceding sections we used simple examples where the spelling also makes it clear that we have to do with minimal pairs. The letters *t – d*, *e – a*, *sh – tch* faithfully indicate the contrast between the phonemes in question. Unfortunately, this is not always so: the spelling is often misleading as to whether there is a phonemic contrast or not.

**a) Homograph minimal pairs.** Sometimes two words are spelt the same but are in fact a minimal pair because one of their phonemes is different. For example:

*lead* /li:d/ ‘vezet’ ≠ *lead* /led/ ‘ólom’  
*wind* /wɪnd/ ‘szél’ ≠ *wind* /waɪnd/ ‘teker’  
*wound* /wu:nd/ ‘seb’ ≠ *wound* /waʊnd/ ‘tekert’  
*live* /lɪv/ ‘él’ ≠ *live* /laɪv/ ‘élő’  
*tear* /teə/ ‘tép’ ≠ *tear* /tɪə/ ‘könny’  
*use* /ju:z/ ‘használ’ ≠ *use* /ju:s/ ‘használat’

**b) Misleading spelling differences.** Sometimes the spelling suggests that there is more than one difference, but in pronunciation only one phoneme is different, so the words are really a minimal pair (e.g. *cold – called*). At other times the spelling shows one difference, but in pronunciation there is another (e.g. *colour – collar*, where the two stressed *o*’s are different, but the final unstressed syllables are the same). In the following examples the contrasting phonemes are underlined; the rest of the words sounds the same!

<i>c<u>o</u>ld</i> /kɔ:ld/	≠	<i>ca<u>l</u>led</i> /kɔ:ld/	<i>se<u>x</u></i> /seks/	≠	<i>sa<u>ck</u>s</i> /sæks/
<i>s<u>u</u>dden</i> /'sʌdən/	≠	<i>sou<u>th</u>ern</i> /'sʌðən/	<i>co<u>l</u>our</i> /'kɒlə/	≠	<i>co<u>l</u>lar</i> /'kɒlə/
<i>re<u>a</u>son</i> /'ri:zn/	≠	<i>ri<u>s</u>en</i> /'rɪzn/	<i>cu<u>r</u>sed</i> /kɜ:st/	≠	<i>co<u>a</u>st</i> /kɒst/
<i>to<u>r</u>ches</i> /'tɔ:ʃɪz/	≠	<i>to<u>r</u>tures</i> /'tɔ:ʃəz/	<i>Es<u>s</u>ex</i> /'esɪks/	≠	<i>eth<u>i</u>cs</i> /'eθɪks/
<i>v<u>e</u>rse</i> /vɜ:s/	≠	<i>w<u>o</u>rse</i> /wɜ:s/	<i>nie<u>c</u>e</i> /ni:s/	≠	<i>kn<u>e</u>es</i> /ni:z/

**c) Homophones.** The opposite may also happen: two words are spelt differently but pronounced exactly the same (just like H *háncs = hánts*, *fojt = folyt*). These look like minimal pairs in writing, but in reality they are homophones and not minimal pairs at all. For example:

<i>meat</i> /mi:t/ = <i>meet</i>	<i>way</i> /weɪ/ = <i>weigh</i>
<i>war</i> /wɔ:/ = <i>wore</i>	<i>there</i> /ðeə/ = <i>their</i>
<i>son</i> /sʌn/ = <i>sun</i>	<i>two</i> /tu:/ = <i>too</i>

*berry* /'beri/ = *bury*  
*red* /red/ = (*he*) *read*  
*guest* /gest/ = *guessed*

*practice* /'præktɪs/ = *practise*  
*nose* /noʊz/ = *knows*  
*plane* /pleɪn/ = *plain*

## Subphonemic differences

**2.7** Not all sound-differences have such phonemic function. If we replace the unaspirated [p] sound of *sleepy* with the aspirated [p<sup>h</sup>] sound of *pig*, the meaning will not change. The result is just a strange, slightly un-English rendering of the same word *sleepy*. This shows that though phonetically [p] and [p<sup>h</sup>] are different sounds, their difference is not distinctive in English. It is not a phonemic difference but only a **subphonemic** one. The aspirated/ unaspirated difference has no function in distinguishing one English word from another. No minimal pair can be found where the meaning would depend on one word having an aspirated consonant, the other having an unaspirated one.

Such sounds, which are different phonetically, yet do not produce minimal pairs (i.e. they have no distinctive function), are regarded as variants (or alternants) of the same phoneme, and are usually not distinguished in transcription. In technical writings — including the present book — it may still be necessary to use notation which is capable of showing either sounds or phonemes, as the case may be. The convention is to use different types of brackets for the two purposes, namely [square brackets] are used to symbolise sounds, and /slants/ are used to symbolise phonemes. For example, we found that the sounds [e] and [æ] belong to two different phonemes in English, so we can write them as /e/, /æ/; but the sounds [p] and [p<sup>h</sup>] are just variants of the same phoneme /p/, so we do not put [p<sup>h</sup>] between slants.

When a phoneme has several variant realizations, the simplest or most frequent of these is chosen as the “chief” member to stand for all the others. Thus the phoneme symbol /p/ includes both [p] and [p<sup>h</sup>].

## Allophones: complementary distribution

**2.8** Very often it can be predicted which of the variants will appear in a given environment, that is, their distribution can be specified. For example, at the very beginning of a word or of a stressed syllable, the phoneme /p/ is articulated as an aspirated [p<sup>h</sup>], as in *pí*g, *compá*re, *occupá*tion, *permi*ssion. In all other positions /p/ is articulated as an unaspirated [p], as in *sléep*y, *speak*, *cómpa*ny, *sleep*s. Such alternants of a phoneme, whose occurrence is regularly predictable from the environment, are called the **allophones** of the phoneme.

The fact that the choice between the allophones of a given phoneme is automatically prescribed by the environment means that in certain positions you have to use allophone A, in others allophone B. Allophones are in **complementary distribution**: where one appears, the other does not, and vice versa. To return to our example, in one group of environments (at the

beginning of a word or of a stressed syllable) the speaker must choose [p<sup>h</sup>], elsewhere he must choose [p]. The two allophones thus “complement” each other, and together they make up all the occurrences of the phoneme /p/.

It follows from the above, of course, that the allophones of a phoneme can never appear in each other’s position, since they mutually exclude each other in any given environment. Therefore they can never be in contrast with each other — consequently there are no minimal pairs with them. This is why they are not phonemes, just allophones.

## Free variation

**2.9** Less often we find cases where the speaker can freely choose between variants, that is, where there is no distributional rule prescribing which one has to be used. For example, the vowel in *go* (and *home*, *road*, *blow*, etc.) is usually pronounced [oʊ], a diphthong sound whose first element is [o]; but it can also be pronounced [əʊ], with a first element [ə] similar to H *ö*. Both are correct: [goʊ] or [gəʊ], though the second is more current in BrE, the first is normal in AmE. The sounds [oʊ] and [əʊ] are free variants of the phoneme /oʊ/.

To take another example: the unaspirated allophone of the phoneme /t/, that is, plain [t], when followed by a consonant, may be replaced by a sound called “glottal stop” (a catch in the throat, a little silence, symbolized as [ʔ]). *Scotland* ['skɒtlənd] may become ['skɒʔlənd] (something like *Sco'land*); similarly *not now* ['nɒt 'naʊ] may become ['nɒʔ 'naʊ] (something like *no'now*). The sounds [t] and [ʔ], then, are free variants of the unaspirated allophone of the phoneme /t/.

The sounds which we have examined in this section are **subphonemic free variants**. Like allophones, they never cause a change in meaning, but — unlike allophones — they are not in complementary distribution. Their use is not governed by the phonetic environment but by the taste or social position of the speaker (i.e. style, age, region, etc.).

**2.10** Free variation is occasionally possible between phonemes. For example, *ate* can be pronounced /et/ or /ert/ without any difference in meaning. Remember that in other environments, the segments /e/ and /eɪ/ are in phonemic opposition, as shown by the minimal pairs *get* ≠ *gate*, *men* ≠ *main*, etc. **Phonemic free variation** of the *ate* type cannot be explained — we just have to accept it. All languages have it, but it is never very frequent. In Hungarian, *telt* ≠ *tölt* is a minimal pair, which shows that /e/ and /ö/ are different phonemes; in some words, however, these two sounds are in free variation, e.g. *fel* = *föl*, *seper* = *söpör*. Some other English examples are: *either* /'aɪðə/ = /'i:ðə/; *issue* /'ɪʃu:/ = /'ɪʃju:/; *bouquet* /'boʊ'keɪ/ = /bu:'keɪ/; *room* /ru:m/ = /rʊm/.

Phonemic free variation — as opposed to subphonemic free variation — is lexically bound: it only applies to certain words but not to most others. While you are indeed free to pronounce *room* as /ru:m/ or /rʊm/, you have no such choice with, say, *food*, which is only

/fu:d/ and cannot be \*/fʊd/. The same is true for H *e* and *ö*: *seper* may be *söpör*, but *teker* cannot be *\*tökör*.

Such free variation must be learnt as a property of certain words, and is not really a phonetic phenomenon but a lexical one. As usual, it is made problematic in English by the fact that the spelling does not show the variants.

## PHONETICS AND PHONOLOGY

**2.11** It should be clear from the above that the sounds of a language can be approached and described in two different ways, leading to quite different results.

One approach is that of **phonetics**: it examines the physical properties of sounds (cf. 1.8). In a phonetic investigation we ask how the different sounds are produced, transmitted through the air, and heard (perceived) by the hearer; what are the articulatory differences between the sounds of a language, or between the sounds of two different languages. Phonetics deals with the “material” aspect of sounds. It describes them very much like the natural sciences describe the phenomena of nature.

The other approach is that of **phonology**: it examines the function of sounds within the system of one particular language (cf. 2.4). In phonological analysis we ask whether certain sounds (or rather the differences between them) are capable of distinguishing words; whether their occurrence in certain environments is predictable; what restrictions exist on their distribution; which sounds are the variants of the same phoneme; and so on. Phonology deals with the “organizational” aspect (as we often say, the “behaviour”) of sounds. It tries to discover their values in the system. Phonological analysis is, fundamentally, phonemic analysis.

The same sound can be examined by both phonetics and phonology. This is similar to the way a coin can be examined by both numismatics and economics. The first examines the physical (or material) features of the coin (what is it made of? what is its size, weight, inscription, etc.?), while the second examines its value in a monetary system of a particular country at a particular time (what can you get for it? is its value stable? what other coins or banknotes is it equivalent to?).

**2.12** Phonology is more abstract than phonetics, because phonology can ignore those features of a sound that are non-distinctive, and concentrate on the distinctive features only. For example, Hungarian phonology can claim that *á* is “the long pair” of *a*, even though phonetically they are quite different vowels: *á* is [a:], but *a* is [ɒ]. English phonology can claim that /i:/ is always long, as in *mean*, even though it loses its length in certain positions, e.g. *heat* is phonemically /hi:t/ but phonetically [hit], with a shortened vowel. But since this length difference is non-distinctive (it is predictable, caused by the environment of a following /t/), pho-

nology can claim that underlyingly the vowel of *heat* is as long as that of *mean*, and neither of these has length as a distinctive feature.

It is often quite controversial what the real distinctive features are. For example, what distinguishes *heat* /hi:t/ from *hit* /hɪt/? Is it the length feature, the vowel quality feature, or both (as our transcription suggests)? Or what distinguishes /t/ from /d/? Is the voiceless/voiced difference distinctive here, or is it something else like aspiration? It falls outside the scope of this book to discuss theoretical details of phonemic analysis, but we shall consider some of these problems as we go along.

## Phonetic classification and phonemic system

**2.13** The phonemic system of a language is different from the phonetic classification of its sounds, and does not directly follow from it. Take, for example, the sounds [n] and [ŋ] in English and Hungarian. From a phonetic point of view, these sounds are the same in the two languages: [n] in E *sin*, H *ronda*, [ŋ] in E *sing*, H *rongál*. From a phonological point of view, however, their value is different. In Hungarian, [ŋ] only occurs in a particular environment: before /k/ or /g/, where [n] is not permitted; thus [n] and [ŋ] are in complementary distribution, and therefore not separate phonemes but allophones of the underlying phoneme /n/. In English, however, [ŋ] may also stand at the end of a word or before a vowel (*sing* [sɪŋ], *singer* [sɪŋə] — since the *g* is silent!) and thus we get minimal pairs like *sin* ≠ *sing*, *sinner* ≠ *singer*, which shows that [n] and [ŋ] are in contrast. Therefore in the phonemic system of English these two sounds are two phonemes: /n/ and /ŋ/.

The above example shows that the same feature — i.e. the difference in place of articulation between the two nasals [n] and [ŋ] — is a nondistinctive, allophonic feature in Hungarian, but a phonemic distinctive feature in English. This difference does not follow from the phonetic properties of these sounds (which are identical in the two languages), but from their “value” in the language systems, their ability to distinguish words from each other.

**2.14** Within the same language, phonology may also discover relationships between phonemes where phonetics will not find any particular similarity or affinity. Take for example, the English vowels /aɪ/ and /ɪ/. Phonetically, the vowel /aɪ/ is classified as a diphthong, together with /eɪ/, /aʊ/, etc., while /ɪ/ is classified as a short or lax vowel, together with /e/, /ʌ/, etc. Phonology, however, reveals that /aɪ/ and /ɪ/ are intimately related in the system of English despite their phonetic nonsimilarity. They often alternate in the same morpheme, e.g. *wild* – *wilderness*, *child* – *children*, *type* – *typical*, *hide* – *hid*, *Christ* – *Christmas*, *five* – *fifteen*, etc. These pairs show that /aɪ/ and /ɪ/ are somehow each other’s “counterparts” in the phoneme system of English.



**2.15** If we ask, what is the vowel most closely related to /ɪ/ in English, phonetics will point to /i:/, because *hid – heed*, *list – least* and other pairs with /ɪ/ – /i:/ show that these are phonetically very similar sounds. Phonology, on the other hand, will give us /aɪ/ as closest “relative” of /ɪ/, because this alternation can be found in many grammatically related words (as shown above), whereas *hid – heed*, *list – least*, etc. are totally unrelated words. Thus while two sounds may be close in their phonetic classification, other sounds may be closer in their place in the phonological system.

## **The variety described: RP**

**2.16** The sounds described in this book are those of Educated Southern British English. This variety of English is called “Received Pronunciation” (abbreviated as RP), an old-fashioned term from the days when you had to speak this variety to be “received” in good jobs, cultivated society, etc. The RP accent is sometimes also referred to as “BBC English”, “Oxford English”, or “King’s/Queen’s English”. It is recognized as the most neutral variety of English, and thus best suited for foreign students. At any rate, you should be prepared to meet many English people whose accent is more or less different from RP.

**2.17** We shall not describe the sound system of **American English**, apart from occasional hints at the most important differences between BrE (which for us = RP) and AmE. It must be stressed, however, that AmE is just as acceptable as a target accent as BrE: if you speak with an American accent, go ahead and teach that to your pupils. I have chosen BrE because that is what I speak, and that is what most textbooks now used in Hungary are based upon.

There are people who think that American is an “incorrect” or even “unpleasant” accent. Such a view is, from a linguistic or cultural point of view, complete nonsense; it can only be stated as a strictly personal and subjective opinion, like preferring fat women to thin, or tall men to short. Remember that AmE is not a variant of BrE (and certainly not a spoilt or deviant one!), but both are descendants of the English of the 17th century, the time when the two accents began their separate development. Chaucer or Shakespeare did not write in British English: they wrote in English!

The reason we chose RP among the British varieties has a socio-linguistic justification: RP is considered the most polite or educated among British accents. Our reasons for choosing British rather than American English, however, has no such justification: it is an arbitrary choice dictated by the fact that the author of this book speaks BrE, and so do most teachers of English in Hungary.

**2.18** For the purposes of this book, we shall assume that the phonemes of English (RP) are those listed on p. 8. The list requires comment, of course, which will be given in Part II,

where we shall examine the phonemes, their relations to each other, their principal allophones, as well as their spelling.

Such an approach to phonology is called taxonomic, because it establishes an exhaustive list of phonemes (i.e. a taxonomy). It is assumed that any English word or sentence can be analysed (and consequently, transcribed) as a string of these phonemes and no others. This means that no word or phrase, however unusual its pronunciation may seem, contains other phonemes than the 46 in our taxonomic list.

The reader must bear in mind, however, that other analyses are also possible (especially for AmE), and that other books may present a slightly different list of phonemes. Some authors, for example, consider /tr/ and /dr/ (as in *train*, *address*) as unitary phonemes. Readers interested in the problems of phonemic analysis may consult the works in the “General phonetics and phonology” section of the Bibliography at the beginning of this book.

## **PHONOLOGY, THE NATIVE SPEAKER AND THE LANGUAGE LEARNER**

**2.19** In everyday use people often say “sound” when they really mean “phoneme”. One will say, for example, that in English [p<sup>h</sup>] and [p] are “the same sound”. Of course they are not — but it is true that they represent the same phoneme (i.e. they are both allophones of /p/). We even speak of the “sound system” of a language; in reality the sounds of a language do not constitute a system — or inasmuch as they do, they are not sounds but phonemes, so we should only speak of the “phoneme system” of a language. But such inconsistencies of usage must be put up with, as long as we see the fundamental differences clearly.

**2.20** It is important to realize that the native speaker is usually unaware of subphonemic variants in his own language. To an English speaker it seems that he is producing the same bilabial stop consonant in *pig* and *lip*, even though the first is aspirated and the second is not. Hungarian speakers are convinced that the *n*'s in *ronda* and *rongál* are articulated the same way; of course their intuition refers not to the phonetic but to the phonemic value of these sounds, since in Hungarian [n] and [ŋ] are allophones of the phoneme /n/.

Traditional alphabetic spelling systems are largely based on this intuitive phonemic principle. Letters (or letter-combinations) represent phonemes, not sounds. This is why we write the same letter *p* in *pig* and *lip*, and the same letter *n* in H *ronda*, *rongál* (cf. 3.2).

**2.21** When we learn a foreign language, we perceive its sounds through the “grid” of the phonology of our mother tongue. Consider the following examples.

Because in Hungarian [ŋ] is but an allophone of /n/, Hungarians find it hard to notice that in another language it is a phoneme in its own right. To them [sɪŋ] and [sɪŋ] appears to sound the same.

Because in Hungarian the length of vowels is a phonemic distinctive feature (*mivelünk* ≠ *mívelünk*, *szurok* ≠ *szúrok*), Hungarians tend to perceive English vowels according to their length: this is why they think that *hit* /hɪt/ and *heat* /hi:t/ (actually pronounced as [hit]), where both vowels are short, are the same word, maybe with some subphonemic free variation! In reality this is a minimal pair in English since the “length” of the *heat*-vowel is expressed by a tense articulation (the vowel is more close). Phonetically we hear [hɪt] and [hit]; phonemically the English hearer analyses this as /hɪt/ and /hi:t/, but the Hungarian hearer perceives them as /hit/ and /hit/, two identical words!

The words *film* and *foam* can be almost indistinguishable to the Hungarian ear. Learners find it hard to believe that the [o]-like segment often heard in the middle of *film* (when pronounced [fɪɹm]) is actually an allophone of the consonant phoneme /l/.

Words like *send* and *sand* are frequently mixed by Hungarians, both in production and in perception. This is not (or not only) because they are unable to articulate these sounds or hear their difference. The reason is that they have got accustomed to treating these two vowel sounds, [e] and [æ], as subphonemic free variants, because that is how they are treated in Hungarian. Whether you pronounce [tʃɛnd] or [tʃænd] to a Hungarian, he will perceive both forms as *csend*. He must be taught that to an English speaker, [e] and [æ] are two opposing phonemes: /send/ and /sænd/ cannot be the same word.

**2.22** We can now distinguish between phonetic (or allophonic) mistakes, which affect only subphonemic variants, and phonemic mistakes, which affect the phonemes of the target language. For example, English /r/ is phonetically very different from H /r/: the two are articulated quite differently. If you replace one by the other, you are certainly making a phonetic mistake. But can this lead to misunderstanding? No; this replacement does not violate any phonemic contrast of English. To the English ear, H [r] is a subphonemic variant of the phoneme /r/ — a very strange-sounding one, perhaps an unpleasant one, but not a misleading one. If the learner uses H [r] in his English speech, this will not lead to a phonemic mistake.

More harmful are mistakes like replacing /θ/ by /s/ (e.g. pronouncing *think* as “szink”), because the learner destroys a phonemic opposition in English: *think* /θɪŋk/ ≠ *sink* /sɪŋk/. The same type of damage is done when a learner pronounces both *send* and *sand* as H. “szend” (phonetically [s<sup>ɹ</sup>nd]).

**2.23** Generally speaking, the teacher should strive to teach learners to produce and perceive all the phonemic contrasts of English, that is, to distinguish all kinds of minimal pairs actively and passively.

Subphonemic differences are less important, as they — theoretically at least — are not capable of changing one word into another. Some of them, however, are so characteristic of English speech that their absence makes the speech flow harder to understand. They include the aspiration of /p t k/ in certain positions (*pig, ten, come*); the Dark-L (*feel, milk, Wales*); the shortening (“clipping”) of long vowels before voiceless consonants (*heat, make, port, house*); the de-voicing of voiced consonants in word-final position (*plays, dog, bridge*); and a few others. These will be discussed later.

When there is free variation, learners need to actively use only one variant, but should be aware of the other possible pronunciations (like *Sco'land* for *Scotland*). The differences between BrE and AmE can be handled along much the same lines.

— o —

## QUESTIONS FOR REVISION

1. How many sounds are there in English?
2. How can we establish the phonemes of a language?
3. What is the difference between phonetics and phonology?
4. What is distribution? When is it complementary?
5. How does phonology discover the “closeness” of relation between phonemes of a language?
6. What are allophones? How are they different from free variants?
7. Why is phonology language-specific?
8. How can we classify pronunciation mistakes from a phonological point of view?
9. Mention some phoneme contrasts of English that are difficult for Hungarians.
10. Which of the following are minimal pairs: *cuff – cough, wear – where, he's – his, sow*  
“vetni” – *sow* “koca”, *tomato* /tə'mɑ:tʊ/ – /tə'mertʊ/
11. What is RP, and why is it the chief concern of this book?

## CHAPTER 3

### SPELLING AND TRANSCRIPTION

**3.1** Most dictionaries and textbooks of English as a foreign language give the pronunciation of words in some kind of transcription. This is a practice peculiar to English teaching. While college students of German or Spanish also study transcription as part of their linguistics course, they would not dream of using it in the classroom while teaching, let alone teach it to their pupils. Nor do dictionaries of German or Spanish or Hungarian normally include the transcribed form of words. In dealing with most languages, transcription is a tool for scientific analysis and professional study; but in dealing with English it is a teaching aid in the most practical sense of the word. This chapter will examine why this is so.

Transcription is commonly called “phonetic transcription” or “phonetic notation”. We have seen that in linguistics the term “phonetics” has its well-defined and fairly narrow meaning (2.11): in that sense the transcription used in teaching English is not really phonetic at all. We shall therefore refer to it simply as “transcription”.

It is also widely held that transcription is always helpful, and that the more a teacher uses it the better. This is an oversimplification. Transcription is a double-edged weapon: in many cases it is useful, indeed indispensable, but in many other cases it does more harm than good. We shall discuss this, too.

### PROBLEMS OF ALPHABETIC SPELLING

#### The phonemic principle in spelling

**3.2** Pronunciation and spelling do not fully coincide in any language. Alphabetic writing systems — ideally at least — represent the phonemes of a language, not its sounds. Subphonemic variants like allophones or free variants are not indicated in ordinary spelling, for the following reasons:

1) Subphonemic variants have no informative value. For example, in writing the word *pig*, what is important is to distinguish it from other similar words like *big* or *peg* or *pin*. It is not necessary for the spelling to indicate that the *p* in *pig* is aspirated, since this feature does not distinguish *pig* from any other word.

2) Subphonemic variants are chosen by the native speaker automatically, depending on the environment (for allophones) or depending on dialect or style (for free variants). Of course, what is automatic and unconscious for the native speaker may be difficult and unnatural for the foreign learner — but writing systems are never invented for the foreigner!

To sum up: the spelling of English — like that of other alphabetically spelt languages — tends to ignore subphonemic variants. Such fairly different sounds as aspirated vs. unaspirated *p*, or clear vs. dark *l*, or fully long vs. shortened *ee*, are never distinguished in spelling. This is a perfectly logical solution for the native speaker, but for the foreigner it means that he has to learn the conventions (i.e. rules) for subphonemic variants (and their distribution) by heart if he wants to convert the written form correctly into pronunciation..

**3.3 Other, non-phonemic factors in spelling.** — There are some factors which may override the above described phonemic principle in spelling.

**a) Conservatism** (traditionalism). The spelling preserves older forms which no longer correspond to the pronunciation they originally indicated. For example, the words *too* and *blew* originally had different pronunciations: in Chaucer's time (14th century) they were /to:/ and /ble:u/. Today they both have the same /u:/, but the spelling has not changed, and preserves the stage when there was a difference in sound. In Hungarian, *súly* and *fűj* end in the same sound /j/, but the spelling is different because some generations ago *j* and *ly* were pronounced differently. English spelling is extremely conservative. Many words are still spelt the same way as they were pronounced in the 14th century.

**b) Foreignism.** Foreign words borrowed into English usually retain their original spelling even after they have become fully anglicized in pronunciation and grammatical behaviour. Words like *chic* /ʃi:k/, *buffet* /'bʊfeɪ/ (from French), *cello* /'tʃelʊ/, *scherzo* /'ʃkeətsʊ/ (from Italian) continue to be spelt in the original foreign fashion. In Hungarian the usual practice is to re-spell such words according to the rules of Hungarian orthography: *sikk*, *büfé*, *cselló*; but even Hungarian has foreignisms: French *blouse* 'shirt' is re-spelt as *blúz*, but the homophonous English *blues* 'song' is not. Similarly, Hungarian writes *A scherzót játszották*, not \**szkercót*. English is very rich in words of foreign origin which are spelt and pronounced according to non-English rules.

**c) Morpheme identity.** The spelling may wish to represent alternants of the same morpheme in an identical form. English very strongly observes this principle, as explained in 1.19 (think of *wild+erness*, *insan+ity*, or the *-ed* ending). English spelling usually reflects the grammatical (morphemic) composition of words rather than their pronunciation or even phonemic composition. Hungarian is generally more phonetically spelt (e.g. *úsz+j = ússz*), though it also uses morphemic spelling ("szóelemző írásmód"), for example, *H bánt*, *bánts*, *bántja* all have the same root morpheme *BÁNT-*, and the spelling is made to reflect this logical fact rather than the actual pronunciations "*báncs*, *bánytya*".

**3.4** Words whose spelling is not influenced by such factors are said to be spelt phonetically. Such “phonetic spelling” is not the same as phonetic transcription: it simply means that the word is spelt according to the normal practice of representing sounds in that particular language. For example, the English word *cheese* is spelt entirely phonetically, because in English *ch* normally represents /tʃ/, *ee* represents /i:/, and final *-se* after a vowel represents /-z/. By the same token we say that H *csíz* is also spelt entirely phonetically, since in Hungarian it is *cs* that normally represents /tʃ/ and *í* represents /i:/. Phonetic spelling may differ from language to language, depending on the local conventions for representing sounds.

Transcription, on the other hand, is international: both E *cheese* and H *csíz* have the same transcription: /tʃi:z/, because they sound (practically) the same.

**3.5** If a word is spelt phonetically, then its pronunciation is fully **predictable** from the written form, which means that the relation between its written and spoken form is **unambiguous** (pron. /ˌʌnæmˈbɪɡjʊəs/). There is no doubt as to how it must be pronounced, provided that we know the letter-to-sound rules for the language in question. The English word *cheese* is predictably and unambiguously /tʃi:z/, therefore it can be said to be spelt phonetically and regularly.

The letter-to-sound correspondence may also be a one-way relationship: in such cases the pronunciation is predictable from the spelling but not the other way round. For example, both *blue* and *blew* are predictable: when you see them written, you can be sure their vowel is /u:/, even though they are spelt traditionally (i.e. not entirely phonetically). Note that the opposite is not true: when you hear /blu:/, as in a dictation, you might consider the spellings *blew*, *blue* or even *\*bloo*, since these would all represent /blu:/. This, however, is a problem of sound-to-letter correspondence, which is not the concern of the present book. (Compare with the similar case of *j – ly* in Hungarian.)

To sum up: when the written form of a word unambiguously indicates its pronunciation by means of the spelling conventions of the particular language (*cheese*) — including traditional spellings whose pronunciation is unambiguous (*blue*, *blew*) —, or when there is some rule that prescribes the choice of a particular morphemic alternant (*begged* /d/ – *kissed* /t/), we say that the pronunciation of the word is predictable. The words *cheese*, *too*, *blue*, *blew*, *begged*, *kissed*, *insanity* are predictable; the words *gone*, *debt*, *where*, *wear*, *wilderness*, *cello* are not.

## Phonetic spelling

**3.6** If the pronunciation of a word is **unpredictable** (= ambiguous), we need some method to **disambiguate** it. The best way to do this, of course, is to transcribe it. However, for readers who do not know transcription (most native speakers don't!) the IPA means absolutely nothing. For them there is another, more traditional method: **phonetic spelling**. This means

writing down the word according to the usual spelling conventions of the language. For example, the word *move* is pronounced unpredictably /mu:v/, since it might equally be \*/moʊv/ (cf. *stove*) or perhaps \*/mʌv/ (cf. *love*). We can disambiguate its pronunciation by giving a phonetic spelling: “*moov*”. Similarly, we can show that *orchestra* is pronounced “*orkestra*”, *debt* is “*det*”, *gone* is “*gon*” (and not “*gun*”), *cello* is “*chello*”, etc. The re-spelt forms show what spelling the word ought to have if it were spelt phonetically.

Phonetic spelling is often used among native speakers to disambiguate unphonetic spellings. You will read things like “*Salisbury* is pronounced *Saulsbury*”; “*Dylan* is pronounced *dillan*, not *die-lan*”; “*Nike* shoes are called *niky* shoes”, etc. (In transcription these words would be /'sɔ:lzbəri/ /'dɪlən/ /'naɪki/.) The same can be done in Hungarian too, e.g. *egyesült* = “*eggyesült*”, *Attila* = “*atilla*”, *állj félre* = “*áj fére*”, *scherzo* = “*szkerzó*”.

The phonetic spelling of a word may coincide with a word already existing in the language, e.g. *two* = *too*, *colonel* = *kernel*, *suite* = *sweet*, *Korea* = *career*, *bury* = *berry*. Such pairs are of course homophones whose second member is pronounced predictably but the first is not.

**3.7** Some teachers object to the use of phonetic spelling on the ground that it may interfere with the learner’s spelling skills. Undoubtedly, to write forms like “*moov*” or “*orkestra*” would count as serious spelling mistakes, just like mixing up *two* with *too*, or *bury* with *berry*. To use phonetic spellings in ordinary writing shows carelessness or a lack of education (just like H “*báncs*”, “*súj*”, “*eggyesült*”). On the other hand, it helps the learner to recognize the letter-to-sound correspondences, to realize that there is a finite set of sound-units (i.e. phonemes), and to recognize homophones.

The contraction of function words in fast speech may also be shown:

<u>Ordinary spelling</u>	<u>Phon. Spelling</u>	<u>Transcription</u>
I want to go	“I wanna go”	/aɪ 'wʌnə 'gɔʊ/
don’t you see	“doncha see”	/'dɒntʃə 'si:/
he’s going to win	“he’s gonna win”	/hi:zgənə 'wɪn/
my cup of tea	“my cuppa tea”	/maɪ 'kʌpə 'ti:/

Phonetic spelling is also used in literature and songs for humorous purposes, or to express class, education, and other socio-cultural features. Some examples are: “*luv*” = *love*, “*sizzers*” = *scissors*, “*forrin*” = *foreign*, “*sez*” = *says*, “*culler*” = *colour*, “*Injun*” = *Indian*, “*ganxta*” = *gangster*. Remember that these phonetic spellings do not indicate any deviation in pronunciation.

A completely different case is the use of phonetic spelling to indicate some real pronunciation difference, especially dialect. This is seen in e.g. “*fella*” to represent /'felə/, an uneducated pronunciation of *fellow* (standardly /'feləʊ/); “*loov*” to represent /lʊv/, the Northern English pronunciation of *love* (RP /lʌv/); “*clurk*” to represent /klɜrk/, the AmE pronunciation of *clerk* (BrE /klɑ:k/); “*'oid*” to represent /ɔɪd/, a Cockney pronunciation of *hide* (standardly /haɪd/). (Shaw’s “*Pygmalion*” is full of such phonetic spellings.)



**3.8.** Three of the factors responsible for the unphonetic character of English spelling were given under 3.3.a-b-c. Two others remain to be mentioned. Note that for d) and e) below phonetic spelling can offer no cure.

**d) Defective coding.** There are more phonemes in English than there are letters in the Roman alphabet. Some of the “surplus” phonemes are indicated by letter-combinations (called *digraphs* or *trigraphs*), e.g. *ee* = /i:/, *ch* = *tch* = /tʃ/, *ou* = *ow* = /aʊ/. Even so, some phonemes have no letter(s) to indicate them unambiguously:

- /ð/ shares the digraph *th* with /θ/, cf. *think* vs. *this*;
- /ʒ/ can only be indicated by *s* or *g*, cf. *vision*, *rouge*;
- /ʊ/ can only be indicated by *oo* (*good*) or *u* (*put*), but both of these graphemes have their own, regular pronunciations: /u:/ for *oo* (*food*), and /ju:/ resp. /ʌ/ for *u* (*cute*, *cut*).

**e) Absence of stress marking.** The place of stress in a word is not indicated by English spelling, though it heavily influences pronunciation. The words *évent*, *cháraction* are often mispronounced, simply because their stress is in an unusual place: if the stress was indicated (as we have done, with an accent mark above the vowel), there would be no difficulty. Recall also the word *rebel* (1.14), which has two different pronunciations depending on the place of stress; or compare *horízon* /hə'raɪzn/ with *horizóntal* /,hɒrə'zɒntl/, where the suffix causes stress-shift, which in turn changes the whole pronunciation pattern.

**3.9.** We saw in Chapter 1 that English spelling is often “unphonetic”, i.e. the pronunciation is not directly predictable from the written word. We distinguished the unreliability of the spelling from its insensitivity to morpheme alternants. The above sections have shown what spelling features are responsible for this. Here is a summary:

**Unreliability** is due to **conservatism** (*where* = *wear*), **foreignism** (*cell* ≠ *cello*), **defective coding** (*put* ≠ *cut*), and partly to the absence of **stress marking** (*recent* ≠ *event*). The result is that the pronunciation of many words (or some part of them) has to be learnt by heart as lexical information.

**Insensitivity** is manifested by **conservatism** (*child* – *children* still spelt with the same vowel-letter), an **abstractness** of representation (*-ed* used irrespective of the actual pronunciation), and the absence of **stress marking** (*rebel* noun vs. verb). The result is that some rules of grammar must be learnt before one can pronounce English correctly.

These features make it necessary to use transcription in teaching English to foreign students.

## THE FUNCTIONS OF TRANSCRIPTION

**3.10** In Europe, textbooks and dictionaries of English as a foreign language use a system of transcription called the International Phonetic Alphabet (IPA). As this system is almost exclusively used in Hungary today, we shall limit our discussion to it. The IPA has several versions, which differ slightly in the choice of vowel symbols and the use of the length mark /:/. The consonant symbols are practically the same in all versions.

The most widely used version of the IPA for English was introduced by A. C. Gimson in 1977; it is therefore referred to professionally as “Gimsonian” transcription. Hungarian textbooks and dictionaries usually use this (or an older, slightly different version of it, introduced by Daniel Jones). In the present book I use the Gimson version, for it is now the most widely used one in textbooks and dictionaries describing BrE for foreigners. It must be noted, though, that some books (chiefly those that are not produced for foreigners) use different systems, especially in America. To compare and analyse these, however, would belong in an MA-level textbook rather than a background material like the present book.

**3.11** A transcription may fulfil four functions:

- 1. to represent the actual pronunciation of words or phrases (the *representing function*);
- 2. to disambiguate the pronunciation of those words whose spelling makes them unpredictable (the *disambiguating function*);
- 3. to analyse the phonological system of the language (the *analysing function*);
- 4. to contrast the sounds of the target language with those of the learners’ mother tongue (the *contrasting function*).

Let us examine how the IPA, and especially the Gimson version of it, fulfils these functions.

### The representing function

**3.12** To what extent does our transcription represent the actual sounds that are pronounced in a word? To answer this question, let us take a simple word, *port*, which is transcribed by Gimson as /pɔ:t/, and let us give a phonetic description of its sounds.

The first sound in this word is a voiceless bilabial stop, aspirated according to the rule in 2.8: [p<sup>h</sup>]. The second is a vowel, somewhere between H *o* and *ó* — it is represented in general phonetics as [o]. It is pronounced short in this word, because it happens to be followed by a voiceless consonant, that is why no length mark is needed; and anyway, the vowel is “cut short” by the glottal stop [ʔ] that normally comes between a stressed vowel and /t/ (pre-glottalization, 4.14). The final sound is almost like H *t*, but articulated differently: the tongue does not touch the back of the teeth but the bone-ridge behind them. English /t/ is therefore not dental, as its H counterpart, but alveolar (i.e. post-dental), which can be represented by [t̪].

Moreover, this sound is released here with a very short [s]-like sound after it (fricative release, 4.37) — so its full phonetic representation is [t̪<sup>s</sup>]. Thus we have seen that the actual pronunciation of the word *port* is [p<sup>h</sup>oʔt̪<sup>s</sup>].

**3.13** You may now wonder which of the two transcriptions is correct: [p<sup>h</sup>oʔt̪<sup>s</sup>] or /pɔ:t/? The answer of course is that both are correct, but they serve different purposes.

A transcription like [p<sup>h</sup>oʔt̪<sup>s</sup>] for *port* may be called “strictly phonetic” or “**narrow**” (or allophonic) transcription, since it narrowly (i.e. closely) follows the articulatory processes of speech. Its task is to provide a faithful record of all phonetic events, to pin down every little difference in sound. Narrow transcription represents sounds in their physical reality.

A transcription like /pɔ:t/ for *port* may be called “**broad**” (or phonemic) transcription, since it only gives the broad outlines of the pronunciation of the word: only as much as is necessary to distinguish it from other words, e.g. from /bɔ:t/ (*bought*) or /pɑ:t/ (*part*) or /pɔ:k/ (*pork*). It ignores all subphonemic nuances and represents phonemes only, taking the chief allophone to stand for all variants of the same phoneme (see 2.7). Broad transcription uses exactly as many symbols as there are phonemes in English (counting compound symbols as /tʃ/ or /aɪ/ as one symbol), as shown in the list on page 8. In this respect broad transcription is nothing but a regularized alphabet.

In linguistics, narrow or allophonic transcription is enclosed in square brackets: [...], while broad or phonemic transcription is enclosed in slants: /.../. Practical materials like dictionaries or EFL textbooks do not stick to this distinction. Since they always use the “broad” transcription, they may enclose it in whatever type of brackets they find most convenient.

**3.14** Needless to say, such detail as recorded by narrow transcription is only of interest to the scholar or the specialist. The narrow variety of the IPA (actually there are several varieties with different degrees of “narrowness”) will largely be ignored in this book, as it is neither necessary nor feasible for foreign language teaching. Such transcription would be difficult to print and to learn. In the rest of our discussion, “transcription” refers to broad transcription.

Textbooks and dictionaries use broad transcription: it is a much simpler system, in which a lot of phonetic detail is by-passed, and [p<sup>h</sup>oʔt̪<sup>s</sup>] is represented as /pɔ:t/. Very good; but there is a danger that we spill the baby with the bathwater. Some subphonemic variants (allophones, etc.) are so difficult and so unexpected for Hungarians, and so characteristic of English speech (like Dark-L), that it would be advisable to retain them even in broad transcription — after all, people do expect a transcription to represent whatever has to be pronounced. Yet most authors stick to the phonemic principle, even at the cost of “underrepresenting” things for the learner; but for the teacher in the classroom practical results should matter more than scientific etiquette. For example, to warn the Hungarian learner, we may transcribe Dark-L as /ɫ/, e.g. *level* /'levɫ/, *ultimately* /'ʌltɪmətli/. Certain allophones, at least occasionally, may deserve a special symbol.

**3.15** Even if we smuggle back some allophones, broad transcription leaves much phonetic detail unindicated. Yet many people — teachers and laymen alike — think that by transcribing the word they have “given its exact pronunciation”. This is not so. The transcription we use fulfils this representing task only for those phonemes which have no important variants, like /m/, /h/, /θ/ or /ʌ/. For most other phonemes it will be misleading unless we make our learners aware that they must apply various subphonemic conventions in order to get the actual pronunciation from the transcription. We must teach them that, for example, the symbol /l/ stands for two different sounds (Clear-L vs. Dark-L), and so does /p/ (aspirated vs. unaspirated), /i:/ (long vs. shortened) and many others. In this sense the transcription /pɔ:t/ does not “represent” the pronunciation of *port* any better than the ordinary spelling “*port*” (from which you can also unambiguously guess the pronunciation if you know the letter-to-sound rules). The subphonemic conventions are not indicated by either the spelling or the transcription — the reader must supply them from his own memory (see [3.2](#)).

**3.16** Our transcription, then, is phonemic — and as such, abstract. It indicates neither an aspirated [p<sup>h</sup>] nor an unaspirated [p], but a common abstract /p/ phoneme. Now, if our transcription is abstract, then the choice of its symbols is **arbitrary**, the actual shape of the symbols does not matter as long as they are used consistently: one symbol for one phoneme. By adopting the Gimson notation in the present book I do not imply that other symbols are incorrect, let alone unscientific. For example, Gimson transcribes the vowel in *put* as /ʊ/ (for his reasons see [7.22](#)); but it would be just as correct to transcribe it as /u/ (as Jones did), provided this symbol was consistently used whenever the *put*-vowel appears in any word, and was never used to transcribe any other phoneme. To take another example: the *home*-vowel is transcribed in this book (and many current publications) as /oʊ/, but some authors prefer the symbol /əʊ/ since it is actually closer to the BrE pronunciation, representing it better.

## The disambiguating function

**3.17** The main function of transcription is not representing but disambiguating, that is, helping the learner overcome the confusing effect of spelling. For example, in *port* the letter *r* is silent; the transcription /pɔ:t/ makes this unambiguous. When a dictionary transcribes *debt* as /det/, it informs us that this word does not rhyme with *kept* but with *set*. The transcription disambiguates the phonemic composition of the word. This function of transcription is similar to that of phonetic spellings like *move* = “*moov*”, only transcription performs this task more logically and simply (though at the cost of unnecessarily differing from the rules of English spelling, cf. [3.25](#)). If in English a given letter (or digraph) always represented one and the same phoneme — as in Hungarian or Spanish —, then the disambiguating function of transcription would not be necessary.

The above two cases are, however, different. In the case of *port* it is predictable that the *r* is silent in British English, since there it is a rule that *r* cannot be pronounced before a consonant. This is something the learner ought to learn as a general rule (the “R-dropping rule”, 5.14) and not discover separately for every single word. If he knows the R-dropping rule and the related rule that such an *r* “broadens” the preceding vowel (8.10), he will find the pronunciation of *port* completely predictable: it cannot really be anything but /pɔ:t/ — there remains nothing to disambiguate! In such cases transcription is not really necessary.

The case of *debt* is different. There is no rule predicting that the *b* is silent here, so this must be indicated in transcription; in such cases transcription is an aid in the lexical component of pronunciation (1.9).

It often happens that only part of a word is unpredictable. For example, in *clerk* only the vowel is unpredictably /ɑ:/, while the consonants are completely uninteresting, so to speak. If we transcribe the whole word, /klɑ:k/, we are unnecessarily transcribing the consonants /kl...k/, which are unambiguously indicated by the spelling.

**3.18** Transcription is unquestionably an excellent disambiguating tool. The teacher should be careful, however, to use it only when there really is something to disambiguate. Unfortunately, many teachers are of the opinion that in English each and every new word has to be given in transcription, whether its pronunciation is entirely predictable as *cheese* /tʃi:z/ or *port* /pɔ:t/, or partly or wholly unpredictable as *debt* /det/, *clerk* /klɑ:k/ or *choir* /'kwɪə/. This practice of transcribing everything can easily backfire, as it gives the learner the impression that nothing is predictable in English pronunciation. If every word is transcribed, the learner will sit back comfortably and make no effort to acquire the letter-to-sound rules which (despite all irregularity) are valid for the vast majority of English words.

To take an example: in an intermediate textbook the word *coach* is followed by its transcription, /kəʊtʃ/. But is it really conceivable that an intermediate student should not be able to predict the pronunciation of this word? He ought to know that *c* is /k/ when followed by *o*, that *oa* is /oʊ/ when not followed by *r*, and that *ch* is regularly /tʃ/ — so this word is most certainly pronounced /kəʊtʃ/. If he does not know this by now, he has been badly taught, and the teacher should not blame this on “the difficult pronunciation of English”. If we transcribe everything indiscriminately, we actually divert the learner’s attention from those words that are pronounced irregularly. If *coach* and *oak* and *soap* and *toast* are all (unnecessarily!) transcribed, nobody will notice that the words *broad* and *abroad* are the only irregular ones where *oa* is /ɔ:/ (even though there is no *r* after it), thus /brɔ:d/, /ə'brɔ:d/. The vowel of these words must of course be transcribed, no matter how much experience the learners have had, because it is totally unpredictable.

Compare this to the treatment of the past tense of verbs in grammar. There, too, we meet with a number of irregular forms, often in the most frequent verbs. But that does not lead us to say, “oh, it is never safe to guess, so we shall give you the past tense of every new verb

you learn". No; we teach the rules for the spelling and pronunciation of the regular ending -ED, and give extra information only when there is some irregularity.

**3.19** Most coursebooks today do not teach the letter-to-sound rules, so the teacher may wish to supply the rules himself (in some simplified form, if necessary) as he goes along with the course. (See Chapter 9 for these rules.) As the learners get acquainted with more and more rules, we can reduce the use of transcription, keeping it for those words (or parts of words) that are truly unpredictable. There are many fully predictable words (including the place of stress), which should need no transcription at all, and all learners beyond one year of study must be able to guess their pronunciation correctly. For example: *port, cheese, gun, sleepy, goal, grim, lead (v.), law, heat, hit, grave, term, extra, reason, hole, packet, stone, cosy, store, glory, railway, huge, sudden, Essex*, etc. etc. At a somewhat higher level, words like the following should need no transcription either, since they, too are predictable, though one needs to know a larger body of rules (including stress-placement rules) to figure out their pronunciation: *duty, fury, elephant, insanity, hall, whole, warm, judo, wash, bang, decorate, during, nation, motion, solution, completion, ethics, typical, cynical, cubicle*.

There are also partially unpredictable words. These contain some sounds which are unpredictable from the spelling (usually the stressed vowel); these sounds (or the syllable in which they stand) must be given in transcription, possibly with an exclamation mark to call attention to their unexpected pronunciation. Examples for unpredictable vowels:

<i>broad</i> /ɔ:/	<i>because</i> /-ˈkɔz/	<i>bury</i> /ˈbe-/
<i>leopard</i> /ˈle-/	<i>tomato</i> /-ˈmɑ:-/	<i>move</i> /u:/
<i>wilderness</i> /ˈwɪl-/	<i>post</i> /ɒʊ/	<i>love</i> /ʌ/
<i>says</i> /e/	<i>prophet</i> /ˈprɒ-/	<i>lettuce</i> /-ɪs/

Examples for unpredictable consonants:

<i>possess</i> /-ˈzɛs/	<i>Celtic</i> /k-/	<i>orchestra</i> /-k-/
<i>listen</i> /-sn/	<i>Thomas</i> /ˈtɒ-/	

A relatively small number of words (around 2-300) have a pronunciation so unpredictable from the spelling that they (but only they!) are best transcribed entirely. For example:

<i>one</i> /wʌn/	<i>Graham</i> /ˈɡreɪəm/	<i>anxious</i> /ˈæŋkʃəs/
<i>debt</i> /det/	<i>enough</i> /ɪˈnʌf/	<i>perhaps</i> /præps/
<i>iron</i> /ˈaɪən/	<i>foreign</i> /ˈfɔrɪn/	<i>answer</i> /ˈɑːnsə/
<i>queue</i> /kju:/	<i>colonel</i> /ˈkɜːnl/	<i>vague</i> /veɪg/
<i>scissors</i> /ˈsɪzəz/	<i>cupboard</i> /ˈkʌbəd/	<i>gaol</i> /dʒeɪl/

## The analysing function

**3.20** A broad transcription is necessarily based on a phonemic analysis of English, and thus it represents the linguist's view of the phoneme system of the language. Let us compare the vowels of *bad* and *bard* for example. Phonetically they are both long: the word *bad* is pro-

nounced exactly as long as the word *bard*, therefore their narrow transcription is [bæ:d], [bɑ:d]. However, in broad transcription they are written as /bæd/, /bɑ:d/. This means that the phonetically long vowel-sound [æ:] of *bad* is analysed as a short vowel phoneme /æ/.

The reason for this is that the *bad*-vowel — despite its phonetic length — behaves like a short vowel in the phonology of English and not like a long one. All long vowels in English can freely occur at the end of a word, e.g. *spa* /-ɑ:/, *see* /-i:/, *law* /-ɔ:/, *menu* /-ju:/, etc. At the same time, long vowels cannot occur before /ŋ/, thus no word ends in \*/-ɑ:ŋ/, \*/-i:ŋ/, etc. Now the segment [æ:] does not share these distributional properties of the long vowels: it does not occur at the end of a word, but it can freely occur before /ŋ/ (*sang*, *bang*). Based on these distributional (i.e. “behavioural”) findings the phonologist classifies it with the short vowels, and this is shown by the transcription /æ/. The transcription /æ/ expresses the distributional rather than the phonetic properties of the sound: it reflects the result of linguistic (=phonemic) analysis, not of phonetic observation. The vowel in *bad* is phonetically long, but phonologically short: *bad* = [bæ:d] = /bæd/.

Similar arguments speak against transcribing the *bad*-vowel as /æe/ (that is, two symbols instead of the single symbol /æ/). In the IPA transcription all vowel digraph-symbols represent diphthongs, like /aɪ/, /ɪə/, /aʊ/. The English *bad*-vowel, however, is not a diphthong but a simple vowel, and so a single symbol is needed for it: /æ/. The transcription /æe/ would suggest the wrong analysis of the status of this sound.

**3.21** Another example for the analysing function of transcription is provided by the pair *duty* – *fury*, usually transcribed as /'dju:ti/ and /'fjʊəri/. The different pronunciation of the vowels is due to the following *r* in the second word, which “breaks” the vowel before it (8.7). Before *r* we never get /u:/, while /ʊə/ practically always stands before *r* (and hardly before any other consonant): *fury*, *during*, *purify* have /ʊə/. They seem to be in complementary distribution; this would point to [ʊə] being an allophone of /u:/ Now, why is it necessary to indicate the breaking of /u:/ to /ʊə/ in *fury* if it predictably happens before *r*? Why can we not transcribe *fury* as \*/'fju:ri/, leaving the adjustment of /u:/ to [ʊə] to the subphonemic conventions — as is our general practice in broad transcription?

Indeed, if we only analysed words in which /ʊə/ is followed by a pronounced /r/ (i.e. *r* plus another vowel, as in *fury*) the above analysis would be correct: here /ʊə/ behaves like an allophone of /u:/. The opposition between /u:/ and /ʊə/ is **neutralized** in this position, because only one of them, /ʊə/, is permitted. But in word-final position the two vowels can be opposed, as shown by the minimal pairs /ju:/ – /jʊə/ (*shoe* – *sure*), /tu:/ – /tʊə/ (*too*, *two* – *tour*). The IPA accepts it as an axiom that if two sounds are found to be in opposition in some position, they shall be regarded as distinct phonemes in all other positions too. (This is nicknamed the “once a phoneme — always a phoneme” principle.) Based on this axiom we establish that /ʊə/ is a phoneme, and not an allophone of /u:/. Logic now forces us to transcribe

*fury*, etc. with /ʊə/, even though in this environment (i.e. before *r*) the appearance of /ʊə/ is predictable.

To sum up: the analysing function of transcription is to convey the results of the linguist's phonological analysis of the language. It does this even at the cost of “misrepresenting” the actual phonetic facts, or ignoring predictable neutralizations. The teacher who uses transcription must be aware of its theoretical nature.

## The contrasting function

**3.22** Transcription should ideally point out the differences between the target language and the mother tongue. Unfamiliar sounds, which occur in the target language but are missing from the mother tongue, ought to be represented by unusual symbols to call attention to their “strange” pronunciation. For example, the sounds /θ/, /æ/, /ə/ do not exist in Hungarian; these curious symbols aptly indicate their unfamiliar articulation.

**3.23** The IPA, however, was not constructed with the Hungarian learner in mind, and thus it is rather by coincidence if it fulfils this contrasting function. The English /r/, for example, is very different from H *r*, and yet the symbol is the same. The symbol /w/ suggests to a Hungarian the familiar sound /v/, since in Hungarian the letter *w* is pronounced /v/ (*watt*, *Wesselényi*, *WC*). The learner, when seeing the English word *tell* transcribed as /tel/, will unfortunately assume that this word is composed of three easy and familiar sounds — whereas in reality English /t/, /e/, and /l/ (in this position) are quite different from Hungarian *t*, *e*, *l*.

On the other hand, the curious-looking symbols /ʃ/, /tʃ/, /ʒ/, /eɪ/ seem to suggest to the learner that he has to articulate something totally different from Hungarian — whereas these sounds are practically the same as H *s*, *cs*, *zs*, *éj*. When the learner sees the pronunciation of *change* given as /tʃeɪndʒ/, he thinks: “oh dear, look how difficult English pronunciation is” — until someone tells him that all he has to say is *cséjndzs*!

Both familiar and unfamiliar sounds are represented by familiar and unfamiliar symbols. Thus there is no one-to-one correspondence between the unfamiliarness of symbols and that of sounds.

**3.24** The IPA, then, is not able to draw the Hungarian learner's attention to the main differences between the pronunciations of the two languages. It represents some perfectly easy and familiar sounds with curious symbols — and vice versa. It would be good to have a transcription based on Hungarian, in which all and only unfamiliar sounds would have non-Hungarian symbols. We do not really help the beginner by transcribing *cheese* as /tʃi:z/, when a transcription /csíz/ would be much more useful (if this word needs transcribing at all, since it is entirely predictable according to the rules of English). It might be helpful at beginning level to use a transcriptions which is, at least partly, based on Hungarian spelling — for those sounds



that are roughly the same in the two languages. Thus /cséjndzs/ can be quite a good guide to the pronunciation of *change*.

I have to stress that a transcription using partly Hungarian-based symbols is not less scientific or less logical than the IPA (recall the arbitrariness principle, 3.16) — as long as it is used consistently. There is no scientific linguistic criterion which could decide whether *thigh* is better transcribed as /θáj/ (Hungarian-based) or /θaɪ/ (IPA). Of course you must never transcribe *thigh* as /száj/ or /táj/, as that would violate the phonemic principle: *thigh* – *sigh* – *tie* are phonemically different in English.

The great advantage of the IPA is not a scientific but a practical one: it is widely used in British (or other international) publications, and is more or less uniform, regardless of publisher or author. If our learner buys a dictionary, it is likely to have IPA transcription. Even so, in a school situation, where contrastivity is so important, the teacher should feel free to adapt the IPA to Hungarian needs, or to keep its use to a minimum. It is more important to teach pronunciation than to teach transcription; the two are not the same.

## PRACTICAL PROBLEMS AND ADVICE ON TRANSCRIPTION

**3.25** Having surveyed the four functions of transcription, let us examine some practical problems of using transcription in teaching. Some teachers of English use transcription too much, and even have their pupils write transcribed words in their copy-books. This is unnecessary and may be confusing. Learners should only have a passive knowledge of transcription and not an active command of it. The IPA system totally disregards the letter-to-sound rules of English, forcing the learner to master an “alternative spelling” — when English spelling itself is difficult enough. For example, the consonant sound of the letter *y* (as in *yet*, *beyond*) is represented in the IPA by /j/; while in English the letter *j* is always regularly pronounced /dʒ/ (as in *jet*, *enjoy*) and never as /j/. Compare the following word pairs, where the transcription of one is dangerously similar to the spelling of the other:

<i>yet</i>	is pronounced	/jet/	but	<i>jet</i>	is pronounced	/dʒet/
<i>loud</i>	”	/laʊd/	but	<i>laud</i>	”	/lɔ:d/
<i>mine</i>	”	/maɪn/	but	<i>main</i>	”	/meɪn/

The two middle columns may cause confusion: /jet/ is not the pronunciation of *jet*, and so on. This is a pity since all the six words (*yet*, *jet*, *loud*, *laud*, *mine*, *main*) are perfectly regular and predictable in their pronunciation.

If learners write transcription at all, they should restrict it to the unpredictable parts of words: it may be useful to write “*broad* /ɔ:/ !” The teacher himself should only produce transcription if he is really in command of it. Nothing is more pointless than faulty transcription

on the blackboard. The energy and time spent on this can be better used on systematic pronunciation practice.

**3.26 Stress.** — Many words are unpredictable only because the stress is in an unexpected place (3.8.e). For example, the word *event* /ɪ'vent/ is mispronounced \*/'i:vnt/ by many learners (probably on the analogy of *even*, *recent*). Here it is not the vowels or the consonants that cause the difficulty. The only thing that needs to be disambiguated in *event* is the place of stress. This may be done in a variety of ways: underlining the stressed vowel (*event*), putting the IPA stress-mark before the stressed syllable in spelling (*e'vent*), or placing an accent-mark above the stressed vowel-letter: *evént*. If the learner stresses the right syllable in this word, the rest will fall in place automatically (initial unstressed *e-* is always /ɪ/).

The accent-mark is a very convenient means of disambiguating unusual stress placement; very often the pronunciation of the word becomes obvious once the stressed syllable is marked, cf. *cháracter*, *paráde*, *invéstigated*, *beginning*, *Septémber*, *Julý*, *cáalendar*, *Japán*, *ma-túre* (cf. *náture*), *a rébel*, *to rebél*, etc. With such words segmental transcription is usually unnecessary, at least at intermediate or higher level.

The only objection to using the accent-mark as a stress-marker might be that in Hungarian spelling it is used as a length mark (*í*, *á*, etc.). It seems, however, that learners quickly get accustomed to the new function of the accent mark in their English studies. (In teaching Russian, Spanish, or Italian, accent-marks are used in the same way to indicate stress, not length, and learners have no difficulty with that either.)

**3.27** The following is some technical advice for the teacher on learning and using the IPA broad transcription.

- Learn the set of symbols like an alphabet (including symbol combinations like /tʃ/). Remember that no other symbols must be used. Do not invent symbols like \*/ʌ:/ or \*/c/ or \*/ɔɔ/; you must stick to the symbol set you have chosen.
- There is no symbol \*/ɪ:/. The “dotless I” is always short!
- IPA transcription does not mirror spelling. Symbols like /j/, /aɪ/, /s/, /g/ must only be used in their IPA value, not in their usual English values of *jet*, *main*, *easy*, *gin*.
- Transcribe phonemes, not letters: *cent*, *sent*, *scent* are all /sent/; *queen*, *kiss*, *cube* all begin with /k-/.
- Whatever is homophonous must be transcribed identically: *missed* = *mist* /mɪst/, *court* = *caught* /kɔ:t/, etc.
- Do not use capitals: *Paul* is /pɔ:l/, not \*/Pɔ:l/.
- Do not use apostrophes or other punctuation marks.
- When teaching, use the type of brackets shown in the coursebook you are teaching from, /.../ or [...] or (...).

• Stress in transcription is always indicated by a vertical line / ' /, not by an apostrophe ( ' ) or an acute accent ( ' ).

**3.28** These are the important points we have touched upon concerning transcription:

**a)** Its chief function is to disambiguate words (*bury* is the same as *berry*) — that is, to support the lexical component of pronunciation, not to teach articulation or perception.

**b)** It is like an ideally regular alphabet, with a closed inventory of symbols. Unfortunately, many of these clash with the use of the same letters in English spelling (/jet/ ≠ *jet*).

**c)** Its representing power is weak: the learner must be taught the subphonemic conventions to “decode” it correctly (e.g. when /l/ is clear or dark).

**d)** It does not systematically contrast English with Hungarian.

**e)** To write it, you must be aware of its analysing function, i.e. what features are ignored (as the length of the *bad*-vowel), and what are shown as distinctive even when they are predictable (as the diphthong in *fury*).

**f)** Use transcription like medicine: take only when really necessary. If used less frequently, it will more easily draw attention to unusual or irregular words. Few words need to be transcribed entirely: often the problematic sound or syllable is enough.

**g)** For many words stress-marking is enough, without transcription (*evént*).

**h)** Do not normally have learners write it, and never set transcription as an exercise.

**i)** Do not believe that by transcribing you have taught pronunciation. I have seen many learners diligently transcribing /θɪŋ/ and happily saying *szing!*

If the textbook you are teaching from uses another type of transcription, follow that: it is not wise to tamper with it (unless it is really inconsistent) or replace it by the more “elegant-looking” Gimsonian system. One transcription is difficult enough for the learners, so it is best to stick to what the textbook has. If it has none, I recommend the Gimson system.

To sum up: the transcription found in EFL materials is a phonemic (“broad”) variety of the IPA. It represents phonemes, and these do not always coincide with sounds. It is a phonemic and not a phonetic transcription (though often so called in everyday life). It works as an ideal alphabet: it has as many symbols as there are phonemes. In publications based on BrE, the variety introduced by A. C. Gimson has the widest currency.

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## QUESTIONS FOR REVISION

1. What is “broad” and “narrow” transcription?
2. What is the IPA and what is its chief advantage?
3. What five factors make English spelling “unphonetic”?
4. When is the pronunciation of a word predictable?

5. What are the four functions of transcription?
6. What ways are there to disambiguate the pronunciation of a word?
7. What can we say about transcribing *choose* as /csúz/?
8. Is the vowel in *bad* short or long?
9. What is meant by the “once a phoneme — always a phoneme” principle?
10. What are the weaknesses of the IPA broad transcription?
11. What is “phonetic spelling”?
12. In what sense are phonetic symbols arbitrary?

## **PART II – THE SOUND SEGMENTS OF ENGLISH**

### **CHAPTER 4**

#### **OBSTRUENT CONSONANTS**

**4.1** Part II of this book discusses the sounds (more technically: the sound segments) of English. First we give a general introduction to sound types and the speech organs (in the first part of Chapter 4), then we treat the consonants (Chapters 4 to 6), and then the vowels (Chapters 7 to 10). The vowels will be given more extensive treatment, partly because they are more different from Hungarian than the consonants, and partly because their spelling (i.e. their letter-to-sound rule system) is much more complicated.

The treatment of the consonants is organized as follows: the second half of Chapter 4 discusses the obstruents, Chapter 5 the sonorants, while Chapter 6, as a kind of appendix, summarizes the consonants by listing them one by one with their characteristic features and spelling equivalents.

**4.2** Our approach will be basically phonemic: we shall describe the phonemes of English, mentioning important allophones on the one hand, and important spelling equivalents on the other. Those interested in a detailed phonetic description of the speech organs and the sounds of English should consult the works in the General Phonetics section of the Bibliography at the beginning of this book.

Furthermore, our treatment will be contrastive: those features that cause difficulty to Hungarians will be discussed in detail, while others will just be mentioned in passing or ignored altogether.

#### **CLASSIFICATION OF CONSONANTS**

**4.3** In all languages, consonants are classified according to two major criteria: manner of articulation and place of articulation. An important sub-criterion of manner is the voiceless/voiced distinction (also called fortis/lenis in English).

We assume that the 24 consonant phonemes of English are those listed on p. 8.

## Manner of Articulation

**4.4** As to their manner of articulation, consonants fall into two large classes: obstruents (H “zörejhangok” or “akadályhangok”) and sonorants (H “zengőhangok”).

### A) OBSTRUENTS

- 1) *Stops*. During their production there is complete closure somewhere in the mouth, i.e. the flow of air is stopped for a moment. (Stops are also called “plosives”.) They are /p b t d k g/.
- 2) *Fricatives*. There is no complete closure, but at some point the speech organs are pressed together so close that the air can only escape with a sound of friction. They are /f v θ ð s z ʃ ʒ h/.
- 3) *Affricates*. A combination of stop + fricative, i.e. there is a momentary stop, which is then released with friction. Affricates are therefore denoted in transcription by digraph symbols composed of a stop plus a fricative: /dʒ/, /tʃ/.

### B) SONORANTS

- 4) *Nasals*. There is complete closure somewhere in the mouth, but the air is allowed to escape through the nose: /m/, /n/, /ŋ/.
- 5) *Liquids*. They allow the air to escape quite freely through the mouth, without friction. They include /l/, where the air flows around the sides of the tongue, and /r/, where the tongue merely approaches the palate (the roof of the mouth) but does not actually touch it.
- 6) *Glides*. They are like vowels, but very short and transitional: the speech organs immediately glide over to the following vowel. Glides (also called semivowels) are /j/, /w/.

English /j/, /w/, and /r/ are also called “approximants”, because during their production the tongue just approaches (“approximates”) the roof of the mouth; they are thus between vowels and consonants from an articulatory point of view.

**4.5 Obstruents and Sonorants Compared.** — Obstruents are consonants in the truest sense of the word: during their articulation the flow of air is obstructed somewhere by the speech organs, e.g. /g/, /f/, /z/, /tʃ/. They are stops, fricatives, or affricates. They may be voiced or voiceless (see 4.8). The sound /h/ is not a proper fricative (it has a much weaker articulation than fricatives), but we class it with the obstruents because it is normally voiceless.

Sonorants (pronounce /'sɒnərənt/) share many properties with vowels: during their articulation the air escapes freely through the mouth or the nose, thus they are very sonorous sounds, e.g. /l/, /m/, /j/, /r/. They are nasals, liquids, or glides. They are normally voiced, and may take over the function of vowels, i.e. they may be syllabic, as the /l/ in *table* /'teɪ.bl/ (the dot shows syllable division).

## Place of Articulation

**4.6** The consonants of English are grouped as follows according to their place of articulation:

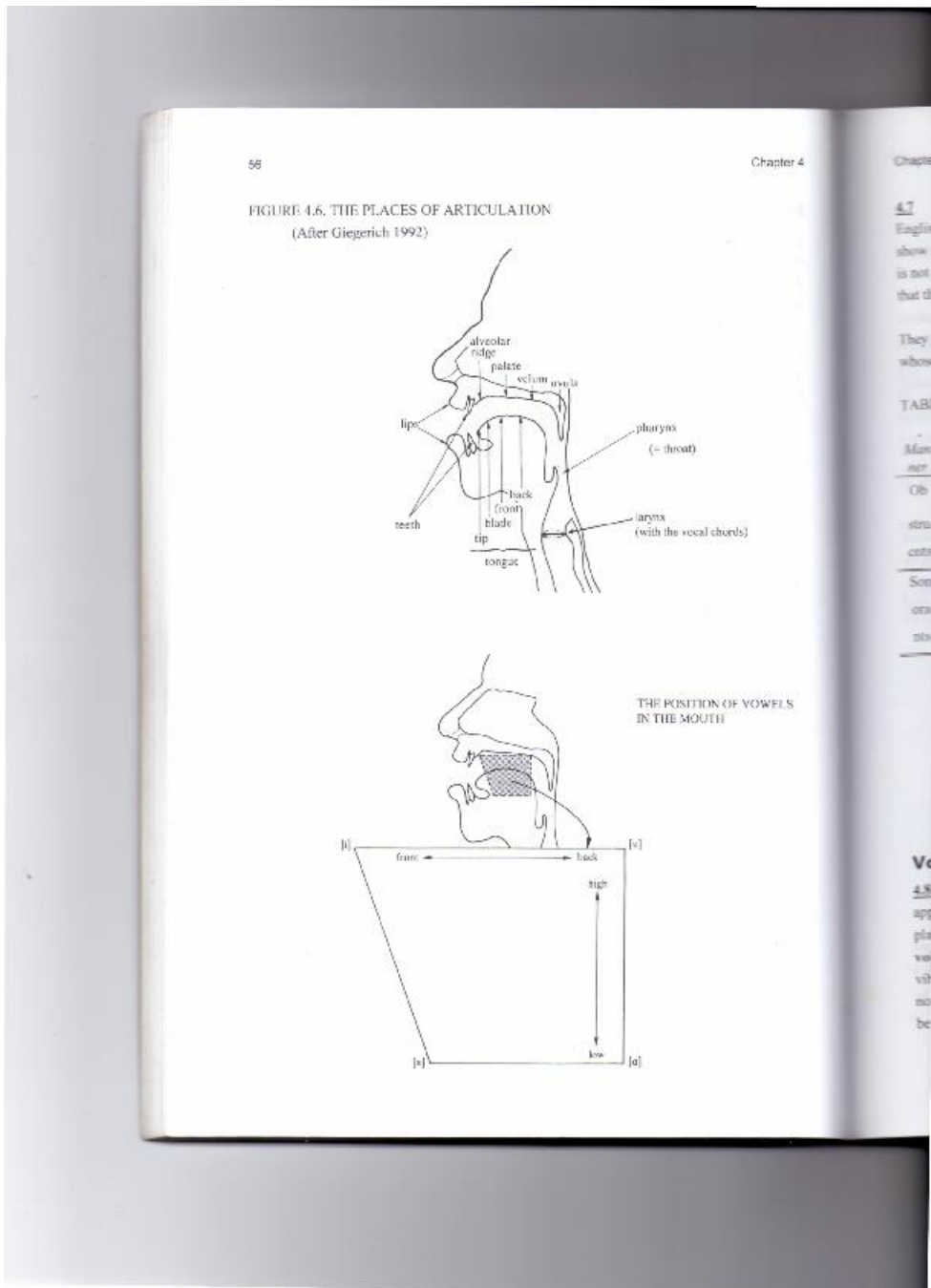
- 1) *Bilabial*. Both lips are involved: /p b m/.
- 2) *Labio-dental*. The lower lip is pressed against the upper teeth: /f v/.
- 3) *Dental*. The tongue touches the upper front teeth. In English only /θ ð/ are dental; in Hungarian, *t, d, n* are dental.
- 4) *Alveolar*. The tongue touches the bone-ridge behind the upper teeth (the alveolar ridge). In English /t d n s z l/ are alveolar.
- 5) *Palato-alveolar*. Slightly more back than the previous, but still produced with the tip of the tongue: /ʃ ʒ ʧ ʤ/. The point approached by the tongue for E /r/ (= [ɹ] in narrow transcription) may also be classified here.
- 6) *Palatal*. The middle of the tongue comes close to the middle of the palate: /j/. In Hungarian, *ty, gy, ny* are also palatal.
- 7) *Velar*. The back of the tongue touches the back area of the palate (called the velum, or soft palate): /k g ŋ/.
- 8) *Glottal*. A glottal sound is not produced in the mouth but down in the larynx (“Adam’s apple”, H *gégefő*). The larynx contains the two muscles called the vocal cords; the slot between these is the glottis. The sound /h/ is glottal, and so is the “glottal stop” (symbolized as [ʔ], 4.14).

We thus have 8 places of articulation for English consonants, of which 7 are in the mouth and one in the larynx. At places 1 to 7 (those in the mouth), one of the lower (active and moveable) speech organs is raised against one of the upper (passive and non-moveable) parts of the mouth.

TABLE 4.6. THE SEVEN PLACES OF ARTICULATION IN THE MOUTH

<i>Upper (passive) organ:</i>	Upper lip		Upper teeth		Teeth-ridge (=alveolar ridge)	Hard palate		Soft palate (=velum)
	1	2	3	4	5	6	7	
<i>NAME:</i>	BILABIAL	LABIO-DENTAL	DENTAL	ALVEOLAR	PALATO-ALVEOLAR	PALATAL	VELAR	
<i>Example:</i>	/p/	/f/	/θ/	/t/, /l/	/ʃ/, /r/	/j/	/k/	
<i>Lower (active) organ:</i>	Lower lip		Tip (and front) of tongue (the “corona”)			Mid of tongue	Back of tongue	

FIGURE 4.6. THE PLACES OF ARTICULATION





**4.7 Manner and place combined.** — The following table shows all 24 consonants of English arranged according to manner and place of articulation. Symbols in round brackets show secondary places of articulation. The glottal stop is shown in square brackets because it is not a phoneme. When two symbols appear side by side, the only difference between them is that the first is voiceless, the second voiced.

The consonants in the shaded area are called **sibilants** (H “sziszegő hangok”). They are a particular combination of manner and place: they are the fricatives and affricates whose place is alveolar or palato-alveolar.

TABLE 4.7. THE CONSONANTS OF ENGLISH: MANNER AND PLACE

<i>Manner</i>	<i>Place:</i>	<b>Bi-labial</b>	<b>Labio-dent.</b>	<b>Dental</b>	<b>Alveolar</b>	<b>Palato-alveol.</b>	<b>Palatal</b>	<b>Velar</b>	<b>Glottal</b>
Obstruents	<b>Stops</b>	p b			t d			k g	[ʔ]
	<b>Fricatives</b>		f v	θ ð	s z	ʃ ʒ			h
	<b>Affricates</b>					tʃ dʒ			
Sonorants	<b>Nasals</b>	m			n			ŋ	
	<b>Liquids</b>				l	r			
	<b>Glides</b>	(w)					j	w	

## OBSTRUENT CONSONANTS

### VOICELESS AND VOICED CONSONANTS

#### Voice

**4.8** As shown in Table 4.7, the obstruents of English (with the exception of glottal ones) appear in pairs, e.g. /p – b/, /f – v/, etc. The members of each pair are produced in the same place and in the same manner; the first one is **voiceless** (also called **fortis**), the second is **voiced** (also called **lenis**, pron. /'li:nɪs/). The phonetic term **voice** (H “zöngé”) refers to the vibration produced in the larynx by the two vocal cords. All vowels and sonorants are normally articulated with “voice”: they are voiced sounds. Obstruents, on the other hand, may be either voiced or voiceless (produced with or without such vibration of the vocal cords).

Let us tabulate these pairs in a more obvious fashion:

	Stops	Fricatives	Affricates
Voiceless	p t k	f θ s ʃ	tʃ
Voiced	b d g	v ð z ʒ	dʒ

**4.9** In Hungarian the only difference between  $p - b$ ,  $f - v$ , etc. is that the first is voiceless, the second voiced. In English this opposition is more complex: we must distinguish phonological (underlying, phonemic) voicing from phonetic (actual, surface) voicing. Phonemically voiceless sounds are always voiceless, but phonemically voiced sounds may lose their voicing and become de-voiced in pronunciation. To put it in another way: the voiced obstruent phonemes of English have de-voiced allophones.

The only position in which voiced obstruents are fully voiced is between voiced sounds, e.g. *reading* [-d-], *reads it* [-dz-], *badly* [-d-], *bigger* [-g-], *big deal* [-gd-], *give it* [-v-].

**4.10** In other positions — namely, next to a pause or next to a voiceless sound — voiced obstruents become **de-voiced**. Such de-voiced sounds are indicated in narrow transcription by a circle under the consonant symbol, thus [ b̥ d̥ ʒ̥ ] etc. Here are a few random examples. The third column is the most difficult as this interferes with the Hungarian rule of Voice Assimilation, 4.18.

<i>De-voiced consonant</i>	<i>initial, after a pause</i>	<i>final, before a pause</i>	<i>before or after a voiceless consonant</i>
[b̥]	<u>B</u> ritish Airways.	Hullo, Rob̥.	match <u>b</u> ox
[d̥]	<u>D</u> ear me!	They are friend <u>s</u> .	bed <u>s</u> ide
[g̥]	<u>G</u> ot it!	Where's the dog?	nice <u>g</u> irl
[dʒ̥]	<u>J</u> ohn's here.	It's huge.	life- <u>j</u> acket
[v̥]	<u>V</u> ery nice!	High above <u>e</u> .	live <u>v</u> show
[ð̥]	<u>T</u> hat's funny!	What <u>w</u> ith?	like <u>t</u> his
[z̥]	<u>Z</u> ebras are wild.	Please!	he's <u>s</u> tired
[ʒ̥]	—	In the garage.	beige curtains

It is important that these de-voiced voiced consonants do not become identical to their voiceless counterparts (i. e. their contrast is not neutralized). A de-voiced /b/ (= [b̥]) is not a /p/. The difference between *live* and *life*, *ridge* and *rich*, *made* and *mate*, etc., must be maintained, especially by shortening the vowel in the second word in each pair (see 4.13).

Initial and final de-voicing (cases 1&2 above) is not found in Hungarian: H *bab* is truly [bob], while English *Bob* is [b̥ɒb̥] (in isolation). Therefore when Hungarians hear English *Bob*, they may perceive it as *pop* because of the relative voicelessness of the consonants; similarly *glue* may sound to them like *clue*, *ridge* like *rich*, *bags* like *backs*, etc.

## Aspiration

**4.11** The voiceless stops (/p t k/) are aspirated whenever they start a stressed syllable, e.g.: *tin*, *compare*, *vacation* have their underlined sounds aspirated. There is, however, no aspiration after /s/, e.g.: *stay*, *despite*, *skin* have their underlined sounds unaspirated. Aspiration is realized in one of two ways:

a) when the following sound is a vowel, aspiration is realized as a short [h] segment: *tin* is pronounced as [t<sup>h</sup>ɪn].

b) when the following sound is a sonorant (/l r j w/), aspiration is realized as the de-voicing of the sonorant, e.g. *play* is [p<sup>h</sup>leɪ] and not [p<sup>h</sup>leɪ] (see 5.2).

Aspiration is a potential of /p t k/ only. All other English sounds are unaspirated.

**4.12** The following table shows the distribution of aspirated and unaspirated allophones of the voiceless stops. (Aspirated stops are shown in **boldface**, unaspirated stops in *italics*.)

	<b>A s p i r a t e d</b>		<b>U n a s p i r a t e d</b>	
	<i>Followed by stressed vowel</i>	<i>Followed by sonorant plus stressed vowel</i>	<i>Preceded by /s/</i>	<i>Elsewhere</i>
/p/	<b>p</b> ig <b>p</b> arody occu <b>p</b> ation comp <b>a</b> re	<b>p</b> lay sup <b>p</b> ly im <b>p</b> ression comp <b>u</b> ter	<i>s</i> peak <i>s</i> pray <i>s</i> plain <i>r</i> esponse	<i>p</i> olice <i>c</i> ompany <i>s</i> imple <i>m</i> ap
/t/	<b>t</b> ime ent <b>i</b> re ret <b>u</b> rn act <b>i</b> ty	<b>t</b> wist bet <b>w</b> een <b>t</b> une at <b>t</b> ract	<i>s</i> tand <i>m</i> istake <i>e</i> xtend <i>s</i> trike	<i>t</i> omorrow <i>l</i> etter <i>s</i> it <i>a</i> ctivity
/k/	<b>k</b> ill <b>ch</b> emist acc <b>o</b> rding enc <b>o</b> urage	<b>c</b> lerk req <b>u</b> est ac <b>o</b> ss <b>c</b> ube	<i>s</i> ky <i>s</i> chool <i>d</i> iscreet <i>e</i> xcuse	<i>l</i> ook <i>o</i> rchestra <i>b</i> anquet <i>c</i> ombine

**Note 1.** Some authors say that there is aspiration (though of a smaller degree) in word-initial stops even if the first syllable is not stressed, e.g. ***p**olice*, ***t**omorrow*, ***c**ombine*.

**Note 2.** In BrE the expression *at all* is pronounced as one word /ə'tɔ:l/, and thus the /t/ is aspirated — exactly as in *a tall man*.

Since aspiration is unknown in Hungarian, learners will tend to use unaspirated stops in all positions. This may mislead the English hearer: to him the absence of aspiration in a stressed-syllable-initial stop means that it is phonemically voiced. If *this pill* is said with unaspirated /p/, it will sound to the English ear as *this bill*.

## Pre-Voiceless Vowel-Shortening

**4.13** All vowels are shortened (“clipped”) before a voiceless consonant (like /p/ /θ/ /tʃ/). This shortening is most clearly observable in long vowels (including diphthongs), and /æ/. The rule is called Pre-Voiceless Vowel-Shortening, and will be discussed in detail in 7.23. For example, the vowel /i:/ is fully long in *see, seed, seen*, where it is actually pronounced [i:] (note the square brackets for narrow, i.e. real phonetic, transcription!); but it is shortened in *seat, seek, beseech*, where it is followed by a voiceless consonant and therefore pronounced [i]. By the same rule, the vowel /ʊ/ in *globe* is longer than in *hope*, longer in *explosion* than in *devotion*.

Pre-Voiceless Vowel-Shortening is important because it helps the listener to distinguish between voiceless and voiced consonants, even when the latter become de-voiced. In pairs like *leaf – leave, price – prize, post – posed, mate – made, rope – robe, a use – to use* the phonetic difference is not really in the voicing of the final consonant, since all obstruents are more or less de-voiced in final position (4.10); the real difference is in vowel length. The vowels in the first member of each pair (*leaf, price, etc.*) are pronounced in a shortened form, while those in the second members (*leave, prize, etc.*) are truly long. Since this is a predictable subphonemic alternation, our transcription does not indicate it:

<u>Spelling</u>	<u>Broad transcr.</u>	<u>Actual pronunciation</u>
leaf	/li:f/	[lif] (shortened vowel + voiceless /f/)
leave	/li:v/	[li:v] (fully long vowel + de-voiced [v])

Pre-Voiceless Vowel-Shortening, then, is an indirect indicator of the underlyingly voiceless character of the following consonant. On the other hand, a fully long vowel tells the listener that the following consonant is underlyingly voiced — even if it happens to be de-voiced on the surface.

## Glottalization

**4.14** Those voiceless consonants that contain a stop element, i.e. the stops and affricates /p t k tʃ/, are often accompanied by a glottal stop when they stand after a vowel. In practice this means that the “voicing” of the preceding vowel ends before the closure is made for the consonant.

<u>Spelling</u>	<u>Broad transcr.</u>	<u>Usually pronounced</u>
sleep	/sli:p/	[sliʔp]
match	/mætʃ/	[mætʃʔ]
bookseller	/'bʊkselə/	['bʊʔkselə]
fatness	/'fætnəs/	['fæʔtnəs]

This is called **pre-glottalization** (or glottal reinforcement). It happens when the consonant in question is final or is followed by another consonant. Glottalization is not obligatory. It need not be imitated by foreign learners, but they should know of its existence. It is another indica-

tor of the voiceless nature of the consonant: *mate* is distinguished from *made* not only in the shortness of the vowel but also in glottalization, which never accompanies voiced consonants.

In colloquial speech a /t/ in such cases may be dropped completely, so that only the glottal stop remains. This is called **glottal replacement**. (In AmE this is less common.)

<u>Spelling</u>	<u>Broad transcr.</u>	<u>Often pronounced</u>
fatness	/'fætnəs/	['fæʔnəs]
not yours	/'nɒt 'jɔ:z/	['nɒʔ 'jɔ:z]
settle	/'setl/	['seʔl]

To the Hungarian ear the glottal stop is “not a proper sound”, so learners tend not to perceive it, and thus they misinterpret what they hear.

<u>Spelling</u>	<u>Colloq. Pron.</u>	<u>Misheard by learner as</u>
sett <u>l</u> e	['seʔl]	“sell”
light <u>l</u> ning	['laɪʔnɪŋ]	“lining”
great <u>l</u> book	['greɪʔ 'bʊk]	“grey book”
might <u>l</u> work	['maɪʔ 'wɜ:k]	“my work”

Note. In less educated speech (not accepted in RP), /t/ may be glottally replaced even between vowels, e.g. *city* ['sɪʔi], *butter* ['bʌʔə].

**4.15 Summary.** — The distinction between voiceless and voiced consonants is achieved by several means, partly depending on their position in the word.

	<b>Voiceless consonants</b> (also called “fortis”)	<b>Voiced consonants</b> (also called “lenis”)
Are they voiced?	never	yes, but may become de-voiced (4.10)
Do they shorten the preceding vowel?	yes (4.13, 7.23)	never
Are they glottalized	stops and affricates, optionally (4.14)	never
Are they aspirated?	stops, at the beginning of stressed sylls (4.11-12)	never

## ASSIMILATIONS

**4.16** Assimilation is the process by which one sound influences another, making it more similar to itself. Many assimilation rules are common to English and Hungarian, e.g. *green peas* is usually pronounced “*greem peas*”, just like H *szénpor* is “*szémpor*”. We shall mention only those cases that are difficult or cause interference.

## Voice-assimilation

**4.17** In Hungarian it is a strict rule that when two or more obstruents come together, the last one determines the voiceless (a) or voiced (b) nature of the preceding ones:

a) Hung. assimilation producing voicelessness, e.g.

háztól /z + t/ → /st/ “háztól”

megfér /g + f/ → /kf/ “megfér”

húzd ki /zd + k/ → /stk/ “húzd ki”

b) Hung. assimilation producing voicedness, e.g.

lesgól /ʃ + g/ → /ʒg/ “lesgól”

szép zöld /p + z/ → /bz/ “szép zöld”

lisztbe /st + b/ → /zdb/ “lisztbe”

This Hungarian rule is called regressive voice-assimilation, since it operates “backwards” (the later consonant influences the earlier one(s)). In English only case (a) is possible, when a voiceless consonant de-voices the preceding voiced consonant (see de-voicing, 4.10). Even so, the underlyingly voiced character of the first consonant is preserved: it will neither shorten the vowel before it nor become glottalized:

he's tired /z + t/ → [z̥ t]

live show /v + ʃ/ → [v ʃ]

This is why *live show* cannot become identical with *life show*, *grade four* with *great four*, or *a cab for you* with *a cap for you*. The phonemic contrast is preserved, the distinction is not neutralized — unlike in Hungarian, where *fogtól* and *foktól* MUST be pronounced the same. Based on these considerations, broad transcription does not indicate this type of assimilation in English.

**4.18** The real problem is with case (b) above, when in Hungarian a voiced consonant makes the preceding consonant voiced. This is not permitted in English; rather, it is the second one that becomes de-voiced, i.e. we get progressive voicelessness rather than regressive voicedness. The following table shows the English phonemic (broad, underlying) transcription, the narrow transcription showing de-voicing, and the typical Hungarian mistake which stems from applying the Hungarian rule 4.17.(b).

Spelling	Broad Transcr.	English pron.	Hung. mistake
matchbox	/'mætʃbɒks/	['mætʃbɒks]	*['mæɟbɒks]
pop group	/'pɒpgru:p/	['pɒpgru:p]	*['pɒbgru:p]
anecdote	/'æniɰdɔʊt/	['æniɰdɔʊt]	*['æniɰɟɔʊt]
both jams	/'boʊθ 'dʒæmz/	['boʊθ 'dʒæmz]	*['boʊθ 'dʒæmz]
what's this	/'wɒts 'ðɪs/	['wɒts ðɪs]	*['wɒdz ðɪs]

The Hungarian-style voicing shown in the right-hand column may lead to misunderstanding, since *write back* and *ride back* must be kept apart. Hungarians tend to say *ride back* even when they mean *write back*!

Note. When speaking Hungarian, it is of course correct to pronounce “*anegdóta*”, “*medzsboksz*”, or even “*magbet*” (*Macbeth*). We are only criticizing the English speech of Hungarians.

## The suffixes **-s** and **-ed**

**4.19** The suffixes *-s* and *-ed* undergo complete voicing assimilation, determined by the last sound of the word they are added to. Their assimilation is progressive, since the earlier (stem-final) sound determines the voiceless/voiced nature of the later (the suffix). This is unusual for Hungarian speakers.

The *-s* suffix has various grammatical functions, and it can coincide with the “weak forms” of *is* or *has*, all of which behave identically from the pronunciation point of view:

– noun plural: <i>two plays</i>	} all = /pleɪz/
– verb third person: <i>he plays</i>	
– possessive of nouns: <i>play’s</i>	
– contracted form of <i>is</i> : <i>The play’s over.</i>	
– contracted form of <i>has</i> : <i>The play’s been performed.</i>	

### **4.20** The pronunciation of *-s*.

(1) Generally, *-s* = /z/

plays /pleɪz/	pens /penz/	digs /dɪgz/
sees /si:z/	comes /kʌmz/	words /wɜ:dz/
Joe’s /dʒoʊz/	Bill’s /bɪlz/	Bob’s /bɒbz/
knows /noʊz/	kings /kɪŋz/	leaves /li:vz/
hears /hɪəz/	files /faɪlz/	clothes /kloʊðz/
cars /kɑ:z/	films /fɪlmz/	pounds /paʊndz/
Peter’s /’pi:təz/	prisons /’prɪznz/	Clive’s /klaɪvz/

(2) After voiceless consonants (except sibilants), *-s* = /s/

caps /kæps/	makes /meɪks/	digraphs /’daɪgrɑ:fs/
hopes /hoʊps/	Jack’s /dʒæks/	laughs /lɑ:fs/
hates /heɪts/	surfs /sɜ:fs/	myths /mɪθs/
hints /hɪnts/	Cliff’s /klɪfs/	Keith’s /ki:θs/

(3) After sibilants (4.7), *-(e)s* = /ɪz/.

kisses, places, Bess’s, prizes, Rose’s, pushes, moustaches, garages, matches, benches, bridges, George’s

### **4.21** The pronunciation of *-ed*.

(1) Generally, *-ed* = /d/

played, used, arranged, lived, robbed, cared, bathed /beɪðd/, loathed

(2) After voiceless consonants (except /t/), *-ed* = /t/.

stopped /stɒpt/	stuffed /stʌft/	pushed /pʊʃt/
wiped /waɪpt/	laughed /lɑ:ft/	finished /’fɪnɪʃt/
backed /bækt/	kissed /kɪst/	watched /wɒtʃt/

liked /laɪkt/

danced /dɑːnst/

approached /ə'prəʊtʃt/

(3) After /t d/, **-ed = /ɪd/**.

wanted, hated, permitted, ended, provided, added

**4.22** Observe that the rules for *-s* and *-ed* are really the same. Both endings have three pronunciations (= three allomorphs).

(1) Generally, they consist of a voiced consonant, namely /-z/ or /-d/.

(2) If the word ends in a voiceless consonant (not similar in place and manner to the consonant of the suffix), the suffix is voiceless, namely /-s/ or /-t/: *stops* /-s/, *stopped* /-t/.

(3) if the word ends in a consonant similar in place and manner to that of the suffix, we insert a linking vowel /-ɪ-/: *kisses* /-ɪz/, *hated* /-ɪd/.

Case (2) is an example of progressive assimilation. We tabulate the rules below to pinpoint the difficulties:

<i>If the word ends in:</i>	(3) a “similar” consonant	(2) any other voiceless sound	(1) any other voiced sound
<i>The suffix is:</i>	connecting /-ɪ-/ plus voiced cons.	voiceless cons.	voiced cons.
-S	/-ɪz/ kisses, bridges	/-s/ stops, makes	/-z/ plays, Bob’s
-ED	/-ɪd/ ended, hated	/-t/ stopped, pushed	/-d/ played, robbed

Only the types in the thick-lined boxes are difficult for Hungarians. The spelling, faithful to the principle of morpheme identity (1.19, 3.3.c), suggests the same ending all through. It suggests voiceless *s* even where voiced /z/ must be pronounced (*plays*, *Bob’s*), and conversely, it suggests voiced *d* even where voiceless /t/ must be pronounced (*stopped*, *pushed*).

The progressive voice-assimilation of the *-s* and *-ed* suffixes is neutralizing, i.e. phonemic, since it converts one phoneme (/z, d/) into another (/s, t/). The following pairs are homophones: *size* = (he) *sighs*, *nose* = (he) *knows*, *past* = (he) *passed*, *pact* = (he) *packed*, etc. This is why the assimilations of the *-s* and *-ed* suffixes must be shown in transcription, even though they are predictable: *knows* /noʊz/, *packed* /pækt/.

**4.23** Not only is progressive voice-assimilation unfamiliar to Hungarian learners, but they actually do the opposite when the stem word ends in an obstruent. This interference is due to the Regressive Voice Assimilation Rule of Hungarian (4.17). Compare the behaviour of suffixed words in Hungarian (*mos*, *fog*) and English (*push*, *dog*):

a) Regressive voicing in H, progressive de-voicing in E:

H *mos* + *d* /ʃ + d/ → regress. assim. /ʒd/ pronounce: /moʒd/ “mozsd”

E *push* + *ed* /ʃ + d/ → progress. assim. /ft/ pronounce: /pʊʃt/



Hung. mistake:\*/pʊzɔd/ “puzsɔd”

b) Regressive de-voicing in H, progressive voicing in E:

H *fog* + *sz* /g + s/ → regress. assim. /ks/ pronounce: /foks/ “foksz”

E *dog* + *s* /g + s/ → progress. assim. /gz/ pronounce: /dɔgz/

Hung. mistake:\*/dɔks/ “doksɔz”

To avoid such mistakes, minimal pairs like *docks* – *dogs*, *lacked* – *lagged* are recommended, which make learners aware of the problem.

## PALATALIZATION

**4.24** The alveolar obstruents (= /s z t d/) may be influenced by a following /j/ and become palato-alveolar (/ʃ ʒ ʧ ʤ/). This phenomenon is called palatalization. It is an instance of assimilation: the palatal /j/ “pulls” the preceding alveolar consonant towards itself, i.e. further back, towards the palatal region (cf. Table 4.7). The /j/ itself normally disappears in this process, e.g. *tension* /ˈtɛnʃn/, which comes from underlying \*/tɛnsjən/, where the /j/ turns the /s/ into /ʃ/, and only the spelling *i* preserves a trace of the original underlying /j/.

There are two cases of palatalization: lexical and occasional. Their results are the same, but they happen in different circumstances.

### Lexical palatalization

**4.25** Lexical palatalization operates within the word, when the alveolar obstruents (spelt with the letters *s x c t d*) are followed by an underlying /j/ (spelt with the letters *i* or *u*). Lexical palatalization is usually obligatory, and is found in all styles of speech, e.g. *tension*, *social*, *measure*, *gradual*.

TABLE 4.25 THE VARIOUS TYPES OF LEXICAL PALATALIZATION.

Letter	Foll. by	<i>Becomes palatalized to</i>			
		/ʃ/	/ʒ/	/tʃ/	/dʒ/
<b>s</b>	<b>+ i</b>	pension contro <u>vs</u> ial mission	vi <u>s</u> ion fu <u>s</u> ion occ <u>as</u> ion		
	<b>+ u</b>	sen <u>s</u> ual cen <u>s</u> ure press <u>u</u> re	vi <u>s</u> ual me <u>as</u> ure		
<b>x</b>	<b>+ i</b>	an <u>x</u> ious conn <u>ex</u> ion	—		
	<b>+ u</b>	lux <u>u</u> ry sex <u>u</u> al	—		
<b>c, sc</b>	<b>+ i</b>	ancient social con <u>sc</u> ious	—		
	<b>+ u</b>	—	—		
<b>t</b>	<b>+ i</b>	na <u>t</u> ion part <u>ial</u>	—	quest <u>ion</u> Christ <u>ian</u>	—
	<b>+ u</b>	—	—	fu <u>t</u> ure punct <u>ual</u>	—
<b>d</b>	<b>+ i</b>	—	—	—	sold <u>ier</u>
	<b>+ u</b>	—	—	—	grad <u>ual</u> educ <u>ate</u>

There are two important restrictions on the operation of lexical palatalization: consonants are not palatalized at the beginning of a word, or before a stressed vowel. (The only exceptions are *sure*, *sugar*, *mature*.) Note that not every *i* or *u* causes palatalization, but only those that represent an underlying /j/. We shall discuss this in the sections below.

The following notes must be made to Table 4.25:

1. “—” means that the type does not exist.
2. /ʒ/ appears only when the letter -s- stands between vowels.
3. /dʒ/ appears only when the spelling has *d*; /tʃ/ appears only when the spelling has *t*.
4. -*ti*- is generally /ʃ/, but -*sti*- is /stʃ/.
5. -*x*- is palatalized to /kʃ/.

**4.26 Palatalization caused by *i*.** — An *i* causes palatalization when it is unstressed and followed by another vowel-letter, e.g. *socIAI*, *occasIOn*. This is called the “CiV” environment

(= Consonant+*i*+Vowel). An *i* in such a position is called **Glide-*i*** (see more in 5.22). Glide-*i* is an underlying element, which may have several pronunciations: it may be

- a vowel /i/, that is, a separate syllable (*aquarium* /-ri.əm/),
- a consonant /j/, that is, a glide (*onion* /'ʌnjən/),
- unpronounced: when it has caused palatalization, it disappears from pronunciation altogether, being absorbed in the resulting palato-alveolar sound (*social* is not \*/'sɔʊʃjəl/ but /'sɔʊʃəl/). This is the case we are examining now. For example:

	Glide- <i>i</i>	
Alveolar (gets palatalized)		Another vowel-letter
	↘ ↓ ↙	
s o <u>c i a</u> l		/'sɔʊʃl/
o c c a <u>s i o</u> n		/ə'keɪʒn/
p a <u>t i e</u> n c e		/'peɪʃns/
... <b>C i v</b> ...		

It follows from the above that there is no palatalization

- a) if the *i* is stressed, e.g. *society* /sə'saɪ-/;
- b) if the *i* is not followed by another vowel, e.g. *native* /-tɪv/.

In these cases the *i* is not a glide but a true syllabic vowel, pronounced /aɪ/ or /ɪ/, and has no effect on the preceding consonant.

The various types of palatalization caused by Glide-*i* can be seen in Table 4.25. Note also *ocean* /'oʊʃn/, where the spelling has -e- rather than -i-. Note also that *d* before *i* is rarely palatalized (as in *soldier* /dʒ/) and usually remains unaffected, e.g. *idiot* /'ɪdʒət ~ 'ɪdiət/ (not \*/'ɪdʒət/); *guardian* /'gɑ:dʒən ~ 'gɑ:diən/ (not \*/-dʒən/).

In some words palatalization is optional, i.e. both the palatalized and the unpalatalized pronunciation is heard. For example:

sociology	/sɔʊsɪ-/	or	/sɔʊʃɪ-/
Christ <u>i</u> an	/-stiən/	or	/-stʃən/
Indone <u>s</u> ia	/-ni:ziə/	or	/-ni:ʒə/

In certain words (usually less frequent ones) only the unpalatalized form is current. For example: *axiom* /'æksiəm/, *patio* /'pætiɔʊ/, *Parisian* /pə'rɪzjən/, *bestial* /'bestjəl/, *gymnasium* /dʒɪm'neɪzjəm/, *bastion* /'bæstjən/.

**4.27 Palatalization caused by *u*.** — A *u* causes palatalization if it is unstressed and has the underlying value of /ju/. This happens in the following cases:

- a) unstressed *u* followed by another vowel-letter, e.g. *vis*U*Al*, *virt*U*E*;
- b) unstressed *u* followed by one consonant-letter plus a vowel-letter, e.g. *for*t*UN**Ate*, *meas*U*RE*, *stat*U*TE*, *lux*U*RY*. (A *u* in such positions is called “graphically free”, 9.10.)

Unstressed “free” <i>u</i>		
Alveolar (gets palatalized)		Another vowel-letter, or cons.-letter + vowel-letter
	↘ ↓ ↙	
v i <u>s</u> u a l		/'vɪʒʊəl/
v i r <u>t</u> u e		/'vɜ:tʃu:/
m e a <u>s</u> u r e		/'meɪə/
f o r <u>t</u> u n a t e		/'fɔ:tʃənət/

It follows from the above that there is no palatalization

- a) if the *u* is stressed: *pursue* /pə'sju:/, *opportunity* /,ɒpə'tju:-/ (exc. *sure*, *sugar*, *mature*);
- b) if the *u* is not “graphically free” but “graphically covered” (see 9.9) — practically, followed by two consonant-letters, e.g. *consuLTation* /-səl-/, or by one consonant-letter at the end of the word, e.g. *statuS* /-təs/.

The various types of palatalization caused by *u* can be seen in Table 4.25. In some words palatalization is optional, both forms being current. For example,

overture	/-tʃʊə/	or	/-tʃə/
educate	/'edʃʊ-/	or	/'edʒʊ-/
issue	/'ɪʃju:/	or	/'ɪʃu:/

In a few words only the unpalatalized form is given in dictionaries, e.g. *module*, *schedule* /'fedju:l/ (but AmE /'skedʒəl/), *intuition*, etc. Other words to be noted here are *grandeur* /'grændʒə/, *amateur* /'æmətʃʊə/ or /-tə/, *luxury* /'lʌkʃəri/, *luxurious* /lʌg'zʊəriəs/.

Note. In *persuade*, *dissuade* the *u* stands for /w/, so there is no room for palatalization: /pə'sweɪd dɪ'sweɪd/.

## Occasional palatalization

**4.28** Occasional palatalization may operate whenever an alveolar obstruent (any /s z t d/, wherever it stands) is followed by a /j/ (whatever the spelling of this /j/ is). Occasional palatalization has a much larger sphere of application than lexical palatalization; on the other hand, occasional palatalization is never obligatory, being characteristic of a faster, colloquial speech style. Let us see examples where a word ends in an alveolar obstruent and the next begins with /j/.

	<i>Unpalatalized</i> ( <i>slow, careful</i> )	<i>Palatalized</i> ( <i>colloquial</i> )	<i>Change</i>
th <u>is</u> year	/'ðɪs jɪə/	/'ðɪʃjɪə/	/s + j > ʃ/
tho <u>se</u> units	/'ðoʊz 'ju:nəts/	/'ðoʊzʃu:nəts/	/z + j > ʒ/
don't <u>u</u> you see	/'doʊnt jʊ 'si:/	/'doʊntʃʊ 'si:/	/t + j > tʃ/

mindu your head      /'maɪnd jə 'hed/      /'maɪndʒə 'hed/      /d + j > dʒ/

In this process the /j/ normally disappears (just as in lexical palatalization); however, after /ʒ/ it may be retained. Thus there are three possibilities when /s z/ is followed by /j/:

	<i>Unpalatalized</i>	<i>P a l a t a l i z e d</i>	
		<i>/j/ retained</i>	<i>/j/ absorbed</i>
this year	/'ðɪsjɪə/	/'ðɪʃjɪə/	/'ðɪʃɪə/
those units	/'ðoʊz'ju:-/	/'ðoʊz'ju:-/	/'ðoʊzɪ:-/

All three forms are equally acceptable: their choice depends on the speaker, the style and the situation.

**4.29** Because Occasional Palatalization is such a general phenomenon, it may also operate within the word, affecting those alveolar obstruents that did not undergo Lexical Palatalization (i.e. whose dictionary form is unpalatalized). In faster, colloquial speech the following may happen:

	<i>Dictionary form</i>	<i>May become palatalized to</i>
Tuesday	/'tju:-/	/'tʃu:-/
intuition	/,ɪntɪʃɪən/	/,ɪntʃɪən/
assume	/ə'sju:m/	/ə'ʃu:m/
guardian	/'dʒɪən/	/'dʒɪən/
gymnasium	/'neɪzjəm/	/'neɪzəm/

Occasional Palatalization is very frequent in natural English speech (and especially so in AmE — though see Yod Dropping 5.24).

**4.30 Summary of palatalization.** — Palatalization affects the alveolar obstruents, /s z t d/. It is caused by a following /j/, which may disappear from the actual pronunciation of the word. Note that /n/ does not get palatalized since it is not an obstruent: *annual* remains /'ænjʊəl/. There is no English sound like H *ny*.

Lexical palatalization is caused by Glide-*i* (*social*) or unstressed “free” *u* (*fortune*). It is usually obligatory, though some words are exceptions to it (*axiom, module*). Word-initial consonants are never palatalized lexically (*Tuesday, tuition*). A *d* usually remains unaffected by *i* (*guardian*), but is palatalized by *u* (*gradual*). A *t* is differently palatalized by *i* and *u* (*action* but *actual*); *sti* gives /stʃ/ (*Christian*).

Occasional palatalization may affect any /s z t d/, including word-initial and word-final, when they are followed by /j/ in the same or the next word (*Tuesday, this unit, don't you*).

Palatalization is more frequent in colloquial than in formal speech. It presents no articulatory difficulty to Hungarian learners, since the resulting sounds, /ʃ ʒ tʃ dʒ/ are easy for Hungarians. Lexical Palatalization is practically a set of letter-to-sound rules, and must be

learnt by everybody. Occasional palatalization need not be learnt actively (though we should encourage its use), but students must be taught to perceive it correctly.

Learners should understand when palatalization works and when it does not, since it follows clear rules. Compare the following words and explain them to your pupils:

<u>No palatalization</u>		<u>Palatalization</u>
un <u>iv</u> ersal	—	controvers <u>ia</u> l
f <u>a</u> tal	—	sp <u>a</u> tial
stat <u>u</u> s	—	stat <u>u</u> e
Christ <u>i</u> ne	—	Christ <u>i</u> an
soci <u>e</u> ty	—	social
T <u>u</u> esday	—	Portug <u>a</u> l

## OBSTRUENTS REQUIRING SPECIAL COMMENT

### The dentals: /θ ð/

**4.31** The dentals are fricatives produced with the tip of the tongue raised against the upper front teeth (see Table 4.6). The tongue tip may even stick out slightly between the teeth, therefore /θ ð/ are also called interdental sounds. Their spelling is always *th*, so we may refer to them as “the TH-sounds”. They occur in relatively few words, but some of those words are extremely frequent, e.g. *think, thing, three* or *the, with, father*. This makes the TH-sounds (especially /ð/) very frequent in English speech.

The dental fricatives are neither sibilants nor alveolar stops, and therefore the suffixes *-s* and *-ed* are added to them without a linking vowel:

Keith's	/ki:θs/	not */-θɪz/	unearthed	/ʌn'ɜ:θt/	not */-θɪd/
clothes	/kloʊðz/	not */-ðɪz/	bathed	/beɪðd/	not */-ðɪd/

**4.32** The dental fricatives are very difficult for Hungarians because Hungarian never combines this place of articulation with this manner of articulation. Hungarian has dental sounds: *t, d, c, dz*, which are not fricatives; and it has fricatives, e.g. *f, v, sz, z*, but they are not dental.

TABLE 4.32. HUNGARIAN CONSONANTS SIMILAR TO /θ ð/

<b>PLACE:</b> <i>MANNER</i>	<b>Labio-dental</b>	<b>Dental</b>	<b>Alveolar</b>
<i>Stops</i>	—	t d	—
<i>Fricatives</i>	f v	/θ ð/	sz z
<i>Affricates</i>	—	c dz	—

The place of the TH-sounds, shown with a double line, is empty in Hungarian, but is surrounded by four pairs of consonants, all more or less similar to /θ ð/. Learners tend to pick one of these as a substitute for the difficult English TH-sounds.

**4.33** It is interesting that on hearing /θ ð/, the beginning student usually perceives them as /f v/. The acoustic difference between /θ – f/ and /ð – v/, respectively, is very small. Even native speakers find it hard to distinguish *three* from *free*, or *lather* /'lɑ:ðə/ from *lava* /'lɑ:və/, when the context does not help and when they cannot see the speaker's mouth.

In production, however, the typical Hungarian mistake is to replace /θ/ by *sz* (less often by *c* or *t*), and to replace /ð/ by *d* (less often by *z* or *dz*) — but very rarely by *f v*. The replacement strategies of Hungarian learners, then, are not parallel in perception and production, nor are they parallel in the voiceless and voiced domains. We summarize this in the table below. The sign > expresses decreasing “popularity”: the first mistake is the most frequent, etc.

<u>Sound</u>	<u>Misperceived as H</u>	<u>Mispronounced as H</u>
/θ/	<b>f</b> > <i>sz</i> > <i>t</i> > ( <i>c</i> )	<b>sz</b> > <i>c</i> > <i>t</i> > ( <i>f</i> )
/ð/	<b>v</b> > <i>d</i> > <i>z</i> > ( <i>dz</i> )	<b>d</b> > <i>z</i> > <i>dz</i> > ( <i>v</i> )

**4.34** To use (inter)dental fricatives in Hungarian counts as a speech defect (“pöszeség”). This fact embarrasses many learners of English: they are inhibited to speak in a way that seems “incorrect” or even “ridiculous” to their Hungarian ears. As a teacher, you must be very tactful and diplomatic, especially with older pupils or adults. Demonstrate and practise the TH-sounds, but if someone is unable (or unwilling) to master them, leave it at that. The most acceptable substitutes in Hungarian cultural tradition are /θ/ → *sz*, /ð/ → *d*, that is, *this method* is acceptably rendered as “*disz meszöd*”.

Minimal pairs are useful in making learners realise that the TH-sounds are phonemes in their own right. However, few word-pairs are distinguished by the opposition of a dental and some other consonant, consequently the non-use of /θ ð/ will rarely cause misunderstanding. Useful contrasts are, for example:

/θ ↔ s/	think – sink myth – miss	/ð ↔ z/	with – whiz breathe – breeze
/θ ↔ t/	theme – team tenth – tent	/ð ↔ d/	they – day southern – sudden
/θ ↔ f/	thought – fought three – free	/ð ↔ v/	that – vat lather – lava

The following eight words are all pronounced differently. Observe their final consonants:

tend – tent – tenth – tense – tens – tents – tends – tenths

/d/ /t/ /θ/ /s/ /z/ /ts/ /dz/ /θs/

It is important that learners should be aware of the difference between such sentences as:

we played **a** song      ↔    we play **the** song  
 you planned **a** trip      ↔    you plan **the** trip  
 I called **a** number      ↔    I call **the** number

In this pattern the /d ↔ ð/ opposition is grammatically highly distinctive.

**4.35** A major difficulty of English articulation comes from the fact that /s z/ do not assimilate in place to a following TH-sound. The sequences /sθ/, /sð/, /zθ/, /zð/ must not be simplified. (De-voicing, of course, is permitted, cf. 4.10.) For example:

nice thing    /naɪs θɪŋ/    not    \*/naɪθ θɪŋ/  
 trace them    /treɪs ðəm/    not    \*/treɪθ ðəm/  
 Joe's theory    /dʒoʊz θɪəri/    not    \*/dʒoʊð θɪəri/  
 he's there    /hi:z ðeə/    not    \*/hi:ð ðeə/

The other alveolars, /t d n l/, are partially assimilated to a following TH-sound: they become (inter-)dentally articulated before the following (inter-)dental /θ/ or /ð/. We can indicate this dentalized articulation by placing [ <sup>☐</sup> ] under the corresponding symbol:

/t/ + dental:      [t<sup>☐</sup>θ] quite thick      [t<sup>☐</sup>ð] I hate them  
 /d/ + dental:      [d<sup>☐</sup>θ] a good thing      [d<sup>☐</sup>ð] we played the song  
 /n/ + dental:      [n<sup>☐</sup>θ] enthusiasm      [n<sup>☐</sup>ð] on the desk  
 /l/ + dental:      [l<sup>☐</sup>θ] healthy      [l<sup>☐</sup>ð] will they?

It is important to teach this to students, for if they do not pronounce the /t d n l/ front enough, they will never get the TH-sound right. Especially /-nð-/ is very frequent and deserves extra practice (*in the, on the, an(d) the, when they, can this*).

**4.36 The grapheme *th*.** — Both dentals are represented by the digraph grapheme *th*.

**a)** *th* = /θ/ in the majority of cases, e.g. *think, bath, warmth, healthy, author*. English often has /θ/ for *th* in internationally used Greek words where other languages pronounce /t/, e.g. *mythology, method, pathetic, theme, synthesis, empathy, Marathon, throne*.

**b)** *th* = /ð/ in a smaller number of words, e.g. *the, this, though, bother, smooth*. There is no rule predicting when *th* is /ð/, except that in Greek-Latin words it is always /θ/ (the only exception is *rhythm* /'rɪðm/).

Note the following voiceless/voiced alternations:

<u>/θ/</u>	<u>/ð/</u>	<u>/θ/</u>	<u>/ð/</u>	<u>/θ/</u>	<u>/ð/</u>
north →	northern	bath →	bathe	cloth →	clothing
south →	southern	breath →	breathe	cloths →	clothes
worth →	worthy				

**c)** *th* = /t/ in a few irregular words (mainly names): *Thames* /temz/, *Thomas, Theresa* /tə'ri:zə/, *thyme, Anthony, Esther, asthma*. Note the form *eighth* /eɪtθ/.

Note. There are, of course, words where *t+h* is not a digraph but two consecutive consonants /-th-/, e.g. *boathouse, pothole, posthumous* /pɒst'hju:məs/.



## The alveolar stops: /t d/

**4.37** English /t d/ have a different place of articulation than H *t, d*. While these Hungarian stops are dental (the tongue touches the inside of the upper teeth), the E /t d/ are produced more back in the mouth: the tongue is retracted and does not touch the teeth but the alveolar ridge (the hard bony ridge behind the teeth, see 4.6). We may note that such English-style alveolar *t, d* are heard in some Hungarian dialects.

Furthermore, E /t d/ are often released somewhat “lazily”, with a slow opening of the stop. This is called **fricative release** because it strikes our ear as a very short [s] or [z], respectively. For example: *too* [t<sup>s</sup>u:], *port* [pɔ:t<sup>s</sup>], *down* [d<sup>z</sup>aʊn], *read* [ri:d<sup>z</sup>]. Thus E /t d/ are often realized as slight affricates, resembling H *c, dz*.

Recall that in certain conditions /t/ is aspirated (4.11) or glottalized (4.14); the two phenomena exclude each other. In certain conditions /d/ is de-voiced (4.10), and in *-ed* it regularly becomes /-t/ (4.21). Both /t/ and /d/ are palatalized in certain conditions (4.24-30).

**4.38 T-Voicing and T/D-flapping.** — In colloquial speech, unaspirated /t/ between vowels or syllabic consonants often becomes /d/, when the syllable after the /t/ is unstressed. This is called T-Voicing. For example,

what’s the <u>ma</u> tt <u>e</u> r	<i>may sound like</i>	“what’s the <u>ma</u> dd <u>e</u> r”
ri <u>gh</u> t away		“ri <u>de</u> away”
no <u>t</u> a joke		“no <u>d</u> a joke”
li <u>tt</u> le boy		“li <u>dd</u> le boy”

Such /d/ sounds, whether they are original (as in *middle*) or produced via T-Voicing (as in *little* → /<sup>l</sup>ldl/), are often articulated so fast that there is no time for the air to stop. The resulting very quick /d/-like sound is called a “**flap**” (or “tap”); its phonetic symbol is [ɾ]. (Some textbooks transcribe it with [D].) Its articulation is the same as the quick *r* in H *harisnya*, *Komárom*: the tongue flaps against the teeth-ridge for a moment. Hungarian learners easily misinterpret this sound as /r/ — but of course E /r/ is quite a different sound (= [ɹ]).

Spelling	Broad transcr.	May become	Sounds to a Hungarian like
matter	/ <sup>l</sup> mætə/	[ <sup>l</sup> mæ ɾ ə]	“ <i>mera</i> ”, “ <i>merör</i> ”
butterfly	/ <sup>l</sup> bʌtəflaɪ/	[ <sup>l</sup> bʌ ɾ əflaɪ]	“ <i>barafláj</i> ”
nobody	/ <sup>l</sup> nɒʊbədi/	[ <sup>l</sup> nɒʊb(ə) ɾ ɪ]	“ <i>nóbari</i> ”, “ <i>nóbrí</i> ”
said it	/ <sup>l</sup> sed ɪt/	[ <sup>l</sup> se ɾ ɪt]	“ <i>szerit</i> ”

T/D-flapping is an optional feature in informal-colloquial BrE, but it is obligatory in all forms of AmE. Thus in AmE pairs like *writer* – *rider*, *writing* – *riding*, *write it* – *ride it* are pronounced the same, all forms having a flap [ɾ] for the intervocalic unaspirated /t/ or /d/: their difference is neutralized in this position. In careful or formal BrE all these pairs are distinguished. This is actually one of the main differences between British and American pro-

nunciation. (Note that *write – ride* or *writes – rides* are different in AmE too, since there the /t d/ are not intervocalic; similarly, *notation – gradation* have different consonants because the following vowel is stressed.)

When such a flapped /t/ or /d/ is preceded by /n/ in AmE, the flap usually disappears, being assimilated and absorbed into the /n/. Examples are *twenty* AmE ['tweni], *candy* AmE ['kæ:ni] (BrE /'twenti/, /'kændi/).

Remember that all phenomena described in this section apply only when /t d/ are followed by a weak vowel (/ə, ɪ, i/).

**4.39 Assimilations of place.** — The stops /t d/ are rather unstable: they easily assimilate in place to a following bilabial or velar consonant. In the examples below we indicate this regressive place-assimilation by means of phonetic spelling.

**a) Labial assimilation:** /t d/ → /p b/ before /p b m/.

/t/ → /p/	hot pudding	<i>usually:</i>	“hop pudding”
	I hate Bill		“I hape Bill”
	not mine		“nop mine”
/d/ → /b/	Hyde Park		“hybe park”
	bad breath		“bab breath”
	good morning		“goob morning”

**b) Velar assimilation:** /t d/ → /k g/ before /k g/.

/t/ → /k/	that car		“thak car”
	a bit grey		“a bik grey”
/d/ → /g/	bad composition		“bag composition”
	second grade		“secong grade”

Note that in cases like *hate Bill*, *Hyde park*, *bit grey*, *bad composition* etc. there is no voice-assimilation (4.17). For dental place-assimilation see 4.35.

**4.40 Dropping of /t d/.** — The stops /t d/ are often dropped (i.e., not pronounced) between two other consonants.

**a) Obligatory (lexicalized) dropping of /t d/.**

- /t/ is silent in: *listen*, *fasten*, *christen*, *hasten*, *moisten*; *soften*, *often*; *castle*, *wrestle*, *whistle*, *mistletoe*, *apostle*, *bustle*; *chestnut*, *mustn't*, *Christmas*, *waistcoat*; *mortgage*.

- /d/ is silent in: *handkerchief*, *handsome*, *grandfather*, *grandmother* (and other *grand-* compounds), *Wednesday*, *sandwich*.

**b) Optional dropping of /t d/.** In colloquial (even natural-speed) speech the middle consonant /t d/ may be dropped whenever three consonants come together:

- /t/ may be dropped in phrases like: *cyclis(t)s*, *it cos(t)s a lot*, *Sain(t) Paul*, *as(th)ma*, *ac(t)s*, *nex(t) time*, *las(t) night*, *you mus(t) come*, *roas(t) beef*, *exac(t)ly*, *perfec(t)ly*, *mos(t)ly*, *I don'(t) care*, *he doesn'(t) like it*, *we couldn'(t) hide*, etc. etc.

- /d/ may be dropped between /n/ and another consonant: *len(d) me, fin(d) one, kin(d)ness, frien(d)s, Jack an(d) Jill, rock an(d) roll, by an(d) large*. (The /d/ in *and* may drop even if a vowel follows (13.17): *Tim an(d) I, cheap an(d) awful*.)
- The /t d/ of the ending *-ed* is usually not dropped, though it may (through place-assimilation, 4.39) change its character; but even in this case it remains present in the form of length (i.e. we lengthen or “hold out” the /t d/ or the preceding consonant).

dropped two	/'drɒpt 'tu:/	/-ptt-/
dropped by	/'drɒpt 'baɪ/	/-ptb-/ > [-ppb-]
begged Daniel	/'bɛgd 'dænjəl/	/-gdd-/
looked good	/'lʊkt 'gʊd/	/-ktg-/ > [-kkg-]
planned nothing	/'plænd 'nʌθɪŋ/	/-ndn-/ > [-nnn-]

Consequently, present–past pairs are distinguished in pronunciation:

you drop by	≠	you dropped <u>ed</u> by
we plan nothing	≠	we planned <u>ed</u> nothing
they change colour	≠	they changed <u>ed</u> colour
we like them	≠	we liked <u>ed</u> them
I miss some fun	≠	I missed <u>ed</u> some fun

But in faster or very informal speech, pairs like the above may also become homophonous.

## The distribution of /h/

**4.41** English /h/ is articulated exactly like H *h*; the only problem is when NOT to pronounce it, since the spelling often retains *h*'s which are no longer pronounced. It is useful to know that the distribution of the consonant /h/ is restricted in English: it can only occur at the beginning of a word, or before a full vowel (i.e. a vowel that carries some amount of stress). Consequently —

(a) *h* is never pronounced at the end of a word: *ah* /ɑ:/, *oh* /oʊ/, *shah* /ʃɑ:/, *Allah* /'ælə/, *Sarah*, *Noah*, etc.

(b) *h* is never pronounced before a consonant: *John*, *Fahrenheit* /'færənhaɪt/.

(c) *h* is never pronounced before a weak vowel (/ə/ or unstressed /ɪ/):

*vehicle* /'vi:ɪkl/, *vehement* /'vi:ɪmənt/, *forehead* %/'fɔ:ɪd/, *shepherd* /'ʃepəd/, *Buddhist* /'bʊdɪst/, *Graham* /'greɪəm/, *Cohen* /'koʊɪn/, *Durham* /'dʌrəm/, *Clapham* /'klæpəm/, *Birmingham*, *Tottenham* (and such names in *-ham*).

When the following vowel is full (not /ə/ or /ɪ/), the /h/ is pronounced: *manhood* /'mænhʊd/, *Stonehenge* /'stoʊnhendʒ/, *Fahrenheit* /'færənhaɪt/, *forehead* %/'fɔ:hed/ (alternative pron.).

**4.42** Case c) above also applies (though not obligatorily) to the *h* in the function words *he-him-his, her, have-has-had*, when they are non-initial in the sentence, and are unstressed. In

normal speech the *h* is dropped in such cases, and the function word attached to the preceding word.:

I met (h)im.	/ˈmet hɪm/	or /ˈmetɪm/
We told (h)er.	/ˈtəʊld hə/	or /ˈtəʊldə/
Who is (h)e?	/ˈɪz hi:/	or /ˈɪzi:/
The shops (h)ave closed.	/ˈʃɒps həv/	or /ˈʃɒpsəv/
Rich (h)as lost (h)is book.	/ˈrɪʃ həz ˈlɒst hɪz/	or /ˈrɪʃəz ˈlɒstɪz/

But the *h* must be pronounced in positions like:

<b>H</b> e slept a lot.	( <i>h</i> is sentence-initial)
The book was <b>h</b> is.	( <i>h</i> stands before a stressed vowel)

**4.43 The letter *h*.** — The letter *h* normally corresponds to /h/. However, it also serves as the second element of the digraphs *ch*, *kh*, *gh*, *ph*, *sh*, *th*, *rh* — these have nothing to do with the sound /h/. (On *wh-*, see 5.27.)

The *h* is unpredictably silent in the following words: *hour*, *heir*, *honour*, *honest* (and their derivatives); *silhouette* /ˌsɪluːˈet/, *perhaps* /præps/ (also regularly /pəˈhæps/); *exhaust* /ɪgˈzɔːst/, *ehxibit* /ɪgˈzɪbət/, *exhibition* /ˌeksɪ-/

Note 1. To drop the *h* in other cases counts as uneducated. “Dropping one’s aitches” is especially widespread in Cockney (London): think of *’Enry ’Iggins* in *Pygmalion*.

Note 2. Hungarian learners should bear in mind that in English *ch* is never pronounced /h/. (On *ch* see 4.52.)

## PRONUNCIATION OF THE LETTER *S* — VOICELESS OR VOICED?

**4.44** The letter *s* has two basic pronunciations: voiceless /s/ and voiced /z/. Both may be palatalized according to the rules treated in 4.24-27.

		Basic	Palatalized
Letter <i>s</i>	Voiceless	/s/ <u>s</u> ide	/ʃ/ ten <u>s</u> ion
	Voiced	/z/ cheese <u>s</u>	/ʒ/ v <u>s</u> ion

The following table should help in choosing between the voiceless (/s ʃ/) and voiced (/z ʒ/) values of the letter *s*. (Stress is shown with an acute accent where necessary.) The shaded areas are irregular or unusual. The table is followed by some remarks.

TABLE 4.44 THE LETTER *S*

<b>s pronounced voiceless</b> <i>/s/ or /ʃ/</i>	<b>s pronounced voiced</b> <i>/z/ or /ʒ/</i>
<b>(1) Word-initial s is always voiceless:</b>	
<i>/s/ sing, select, sanitary...</i> • <i>/ʃ/</i> irregularly in <i>sure, sugar, Sean</i> .	
<b>(2) Double ss is regularly voiceless:</b>	
<i>/s/ message, cassette, assassinate...</i> <i>/ʃ/ mission, pressure...</i>	• But irregularly <i>/z/</i> in <i>posséss /pə'zɛs/, dissólve /dɪ'zɒlv/, dessért /dɪ'zɜ:t/, scissors /'sɪzəz/, Missou<sup>ri</sup> /mɪ'zʊəri/</i> .
<b>(3) The letter s between vowel-letters is normally voiced:</b>	
• But unpredictably voiceless in some words: <i>/s/ philósophy, épi<sup>s</sup>ode, isólate, parasíte, básic, basín, nuisánce, compárison, masochist, Lisá, Jasón, Cáucasus...</i> ; <i>/ʃ/ Asia</i> (but AmE <i>/-z-/!</i> )	<i>/z/ = cou<sup>s</sup>in, mus<sup>i</sup>c, Jes<sup>u</sup>s, des<sup>ert</sup>, eas<sup>y</sup>, dais<sup>y</sup>, peas<sup>ant</sup>, hes<sup>i</sup>tate, chee<sup>s</sup>e, nois<sup>e</sup>...</i> <i>/ʒ/ = vis<sup>i</sup>on, meas<sup>u</sup>re, clos<sup>u</sup>re, confus<sup>i</sup>on...</i>
<b>(4) When some prefixes or suffixes are added, s remains voiceless:</b>	
<i>/s/ be-<sup>s</sup>ide, re-<sup>s</sup>et, re-<sup>s</sup>earch, pró-<sup>s</sup>ecute...            New-<sup>s</sup>on, Harri-<sup>s</sup>on, Lee-<sup>s</sup>on...            dis-<sup>s</sup>appear, dis-<sup>s</sup>order, dis-<sup>s</sup>agree...;            mis-<sup>s</sup>inform, mis-<sup>s</sup>understand...;            cri-<sup>s</sup>is, ba-<sup>s</sup>is, anály-<sup>s</sup>is, díagno-<sup>s</sup>is...;            curiós-<sup>s</sup>ity, generós-<sup>s</sup>ity...;            courtes<sup>y</sup>, fantas<sup>y</sup>, jealou<sup>s</sup>-y...;            decí<sup>s</sup>-ive, explós-<sup>s</sup>-ive, persuas-<sup>s</sup>-ive</i>	• But irregularly <i>/-z-/</i> in <i>presídent, rese<sup>m</sup>ble, désignate, pres<sup>u</sup>me; dis<sup>as</sup>ter, dis<sup>e</sup>ase, mis<sup>er</sup>y, mis<sup>er</sup>able</i> .
<b>(5) Final -se after a vowel is regularly voiced:</b>	
• But irregularly <i>/-s/</i> in about 30 words: <i>/s/ Nouns: bas<sup>e</sup>, cas<sup>e</sup>, chas<sup>e</sup>, dos<sup>e</sup>, us<sup>e</sup>, abus<sup>e</sup>, excus<sup>e</sup>; goos<sup>e</sup>, gees<sup>e</sup>, mous<sup>e</sup>, lous<sup>e</sup>, hous<sup>e</sup>; purpos<sup>e</sup>, premis<sup>e</sup>, Paradis<sup>e</sup>.            Adjectives: loos<sup>e</sup>, clos<sup>e</sup>, precis<sup>e</sup>, concis<sup>e</sup>.            Verbs (also used as nouns with the same pronunciation): promis<sup>e</sup>, purchas<sup>e</sup>, practis<sup>e</sup>, creas<sup>e</sup> (decreas<sup>e</sup>, increas<sup>e</sup>), leas<sup>e</sup> (leas<sup>i</sup>ng, releas<sup>e</sup>).</i>	<i>/z/ chees<sup>e</sup>, nois<sup>e</sup>, confus<sup>e</sup>, phas<sup>e</sup>, díagnos<sup>e</sup>...</i>
<b>(6) The letter -s after the sonorants n, r, l is voiceless:</b>	
<b>-ns-</b> <i>/s/ ins<sup>u</sup>lt, cons<sup>i</sup>st, expens<sup>i</sup>ve, tens<sup>e</sup>, con-<sup>s</sup>equ<sup>e</sup>nce, Johns<sup>on</sup>...;</i> <i>/ʃ/ pens<sup>i</sup>on, sens<sup>u</sup>al...</i> <b>-rs-</b> <i>/s/</i> (the <i>r</i> is of course silent in such a position) <i>pers<sup>o</sup>n, convers<sup>at</sup>ion, vers<sup>e</sup>, cours<sup>e</sup>, ársenic, tor<sup>s</sup>o, univers<sup>i</sup>ty...</i>	• But irregularly <i>/-z-/</i> in: <i>pans<sup>y</sup>, to cleans<sup>e</sup>, to pars<sup>e</sup>, clums<sup>y</sup>, crim<sup>s</sup>on</i> .

/ʃ/ <i>ver<u>s</u>ion, excu<u>r</u>sion, Pers<u>i</u>an...          -<b>ls-</b> /s/ <i>el<u>s</u>e, fals<u>e</u>, El<u>s</u>a, pul<u>s</u>e, Chel<u>s</u>ea...;          /ʃ/ <i>expul<u>s</u>ion, revul<u>s</u>ion...</i> </i></i>	
<b>(7) The letter -s in word-final position</b> is normally voiceless:	
/s/ <i>ga<u>s</u>, thi<u>s</u>, famou<u>s</u>, dangerou<u>s</u>, walru<u>s</u>,          Harri<u>s</u>, Jesu<u>s</u>, atlas...       </i>	<ul style="list-style-type: none"> <li>• But irregularly voiced in about 20 words (mostly function words or names):</li> </ul> /z/ <i>is, was, his, as, cos (= because), lens, Ms, Mrs, Charles, James, Wales, Jones, Burns, Dickens, Thames /temz/, Mars, Les (= Leslie), Santa Claus, Moses /'mouziz/</i>
<b>(8) Final -es (when not the usual suffix)</b> is usually /-i:z/:	
	/i:z/ <i>herpes /'hɜ:pi:z/, species /'spi:ʃi:z/, series /'siəri:z/, Ulysses /ju'ltsi:z/, Mercedes /mɜ:'seidi:z/...</i> Here belong the Latin/Greek -es plural forms of words whose singular ends in -is: sing. <i>crisis /'kraɪsɪs/</i> – pl. <i>crises /-si:z/</i> ; <i>oases, analyses...</i>
<b>(9) When final -s is the usual suffix (plural, etc.), or the contraction of <i>is</i> or <i>has</i>,</b> its pronunciation is basically /z/, which may change to /s/ or /ɪz/ according to the rules given in 4.20.	

**4.45** Let us add a few notes to the table above.

Note to (3). In this respect English is less regular than German or French or Latin, where any intervocalic -s- is traditionally pronounced /-z-/. Hungarian words borrowed from these languages also have -z-, e.g. *filozófia, precízió, mazochista, krízis*. By analogy, E *leasing* /'li:ʃɪŋ/ is pronounced *lizing* in Hungarian.

Note to (5). In a few words -se is /z/ when they are verbs: *to use, to abuse, to close, to refuse, to house*; but /s/ otherwise: *the use*, etc. Observe especially *house* /-s/, *house's* /-sɪz/ *houses* /-zɪz/, *to house* /-z/, *housing* /-z-/.

Note to (6). In Hungarian words borrowed from German and Latin, s becomes z between a sonorant and a vowel: *inzultál, kurzus, Elza*. In English this is forbidden by the rule above: *insult, course, Elsa* etc. have /s/. Compare *Johnson* as pronounced in E /'dʒɒnsn/ and H *dzsonzon*.

## Pronunciation of the letter x

**4.46** The letter *x* behaves as if composed of *k* + *s*.

- *x* is generally pronounced /ks/: *Saxon, oxygen, box, approximate, extra, exercise, Exeter...*
- when the rules of palatalization apply, we get /kʃ/: *anxious, connexion, luxury, sexual...*

Note the exceptional word *luxurious* /lʌg'zʊəriəs/.

- word-initial *x*- is /z-/: *Xerox* /'zɪrɒks/, *xenophobia* /,zenə-/ , *Xerxes* /'zɜ:ksi:z/...
- the *x* of the prefix *ex*- shows the following behaviour:
  - it is generally /ks/: *expóse, éxercise, éxecute, èxécution, èxhibition...*;
  - but when immediately followed by a stressed vowel, it becomes voiced, so the prefix becomes /ɪg'z-/: *exámple, exótic, exécutive, exámine, exhibit, exháusted* (in these last two the *h* is silent!), etc.

## PRONUNCIATION OF THE LETTERS C AND G: SOFT OR HARD?

**4.47 C/G Softening.** — The letters *c*, *g* both have two basic pronunciations, traditionally called “soft” and “hard”. Their soft sounds are sibilants (which appear in the names of these letters: *c* = /si:/, *g* = /dʒi:/). Their hard sounds are the velar stops /k g/. The soft *c*, like any other /s/ sound, may become palatalized to /ʃ/.

	“Soft” (= sibilant)	“Hard” (= velar stop)
<i>Letter c</i>	/s/ <u>ci</u> ty, ra <u>ce</u> , fa <u>nc</u> y /ʃ/ a <u>nc</u> ient, so <u>ci</u> al	/k/ <u>ca</u> t, ba <u>cc</u> on, a <u>cc</u> t, mu <u>si</u> c
<i>Letter g</i>	/dʒ/ <u>gi</u> n, hu <u>gg</u> e, cl <u>er</u> gy	/g/ <u>g</u> o, be <u>gg</u> ar, u <u>gg</u> ly, le <u>g</u>

**(1) The C/G Softening Rule:** the letters *c*, *g* are “soft” when followed by the letters *e*, *i*, *y*. We list a few examples for each case.

*c* = /s/ *cell, century, centaur* /'sentɔ:/, *face, force...*; *city, cider, precise, cigarette...*;  
*cycle, Cyril, cynical, Cyprus* /'saɪ-/ , *fancy, mercy...*

*c* = /ʃ/ *ocean, ancient, musician, precious...*

*g* = /dʒ/ *gentle, gesture, George, algebra, angel, oxygen, surgeon...*; *privilege, singe* /sɪndʒ/, *badge, fidget...*; *gin, ginger, giraffe, frigid, Belgium, longitude...*; *gym, Egypt, geology, orgy, dingy* ‘dirty’, *stingy* ‘mean’, *spongy* ‘like a sponge’...

The C/G Softening Rule (also called Velar Softening) is an entirely graphic (“visual”) rule: it does not depend on how the *e*, *i*, *y* is pronounced (or is silent, as in *face, edge* — the rule still works). This rule refers to letters and not to sounds, thus it is a letter-to-sound rule and not a true phonological rule.

- **Irregular words**, where *c*, *g* fail to soften before *e*, *i*, *y*:

*c* = irregularly hard /k/ in *Celtic*, *soccer* /'sɒkə/, *sceptical* /sk-/.

*g* = irregularly hard /g/ in the following words:

*get*, *gear*, *geese*, *Gertrude*, *Gershwin*, *Getty*; *eager*, *tiger*, *lager*, *target*, *together*;

*anger*, *finger*, *linger*, *hunger*, (*fish*-)monger;

*give*, *gift*, *giggle*, *begin*, *giddy*, *gimmick*, *gild*, *girl*, *Gilbert*, *Gimson*, *fungi* /'fʌŋgaɪ/;

*boogie*, *Carnegie*; *gynaecology* /,ɡaɪnə'kɒlədʒi/, *Porgy* /-gi/.

(2) **Subrule:** final *g* is not softened when a regular suffix is added: *strong-er* /'strɒŋgə/, *big(g)-est* /'bɪgəst/, *hug(g)-ing* /'hʌgɪŋ/. (On final *c*, see 4.50.) — Words in *-ng* = /ŋ/, with the *g* silent: *thing-y* /'θɪŋi/, *slang-y* /'slæŋi/, *tang-y*. (For words like *singer*, see 5.5.)

**4.48** In all other positions (before *a*, *o*, *u*, or consonant, or nothing), *c* *g* are hard. For example:

*c* = /k/ *cat*, *cure*, *rescue*, *excuse* /ɪk'sk-/, *act*, *accident*, *success*; *music*, *doc*, *lilac*...

*g* = /g/ *gate*, *gun*, *tango*, *figure*, *angular*, *bargain*, *guest*, *vigour*, *Edgar*, *gorgeous* /'gɔ:ʤəs/...; *Gwyn*, *wrangler* /'ræŋglə/, *fragment*, *vague* /veɪg/, *frog*, *iceberg*...

In some words the hardness of the *g* is indicated by placing a silent *u* after it: *guest*, *vague*, *guide* (see 4.51). — Names like *McEnroe* /'mæknrɒʊ/, *McIntosh* (also spelt *Mackintosh*) count as compounds, so the *c* of the prefix *M(a)c-* is not softened and remains /k/.

- Irregular words, where *c* *g* are soft though not followed by *e*, *i*, *y*: *Caesar* /'si:zə/, *gaol* /ʤeɪl/ (= *jail*), *margarine* /,mɑ:ʤə'ri:n/, *veg* /vedʒ/ (for *vegetable*).

#### 4.49 Consonant + *c*, *g*

• **cc**, **sc**, **xc**. — These combinations are not digraphs but sequences of two separate letters, of which the second *c* may be soft or hard, according to the rule above, and the first letter remains silent if it would have the same sound as the *c*. The resulting pronunciations are, as expected:

	<i>Soft (before e, i, y)</i>	<i>Hard (elsewhere)</i>
<b>cc</b>	/ks/ <i>su<u>cc</u>ess</i> , <i>acc<u>id</u>ent</i> , <i>ecc<u>en</u>tric</i>	/k/ <i>to<u>ba</u>cco</i> , <i>acc<u>u</u>se</i> , <i>Re<u>be</u>cca</i>
<b>sc</b>	/s/ <i>sc<u>i</u>ence</i> , <i>cr<u>es</u>cent</i> , <i>asc<u>e</u>tic</i> /ə'setɪk/ /ʃ/ <i>con<u>s</u>ci<u>o</u>us</i>	/sk/ <i>disc</i> , <i>mas<u>cu</u>line</i> , <i>vis<u>cu</u>ous</i>
<b>xc</b>	/ks/ <i>exc<u>i</u>te</i> , <i>exc<u>e</u>llent</i>	/ksk/ <i>exc<u>u</u>se</i> , <i>exc<u>l</u>amation</i>

- **dg**. — This combination is /dʒ/ when followed by *e*, *i*, *y*: *badge*, *pidgin*, *edgy*; otherwise it is /dg/: *Edgar*, *Trudgill*. (Note the word *judgment* /dʒ/, also spelt *judgement*.)



- **gg.** — This is a digraph, always pronounced hard /g/: *egg, bigger, baggy, Maggie*. There are two exceptional words where *gg* = /dʒ/: *suggest* /səˈdʒest/ (but AmE /sægˈdʒest/!), and *exaggerate* /ɪgˈzædʒəreɪt/.

**4.50 Hard/soft alternation and preservation.** — In certain stems a final *c* or *g* alternates between its hard and soft pronunciations, namely /k ~ s (ʃ)/ and /g ~ dʒ/, respectively (compare H *publikál* – *publiĉista*). This is due to C/G Softening (4.47). Examples:

/k/	~	/s/ (/ʃ/)	/g/	~	/dʒ/
electric <u>ĉ</u>		electric <u>ĉ</u> ity, electric <u>ĉ</u> ian	analog <u>g</u> ous		analog <u>g</u> y
public <u>ĉ</u>		public <u>ĉ</u> ize	mag <u>g</u> us		mag <u>g</u> ic
reduc <u>ĉ</u> tion		reduc <u>ĉ</u> e			
signific <u>ĉ</u> ant		magnific <u>ĉ</u> ent			

However, when the endings *-ed, -er, -ing, -y* (adjective or diminutive), *-able, -ous* are added, the last sound must not change, that is, no alternation occurs; rather, we adjust the spelling to “preserve” the hard or soft nature of the last *c* or *g*.

- To preserve the hard pronunciation, final *c* is re-spelt *ck* before *-ed, -er, -ing, -y*:

<i>panic<u>ĉ</u></i> + <i>ed</i> → <i>panic<u>ck</u>ed</i>	<i>mimic<u>ĉ</u></i> + <i>ing</i> → <i>mimic<u>ck</u>ing</i>
<i>picnic<u>ĉ</u></i> + <i>er</i> → <i>picnic<u>ck</u>er</i>	<i>garlic<u>ĉ</u></i> + <i>y</i> → <i>garlic<u>ck</u>y</i>

There is no similar spelling change with final *g*: *strong+er, slang+y* (see 4.47(2)).

- To preserve the soft pronunciation in final *-ce, -ge*, the silent *-e-* must be kept before *-able, -ous*:

<i>trace<u>ĉ</u></i> + <i>able</i> → <i>trace<u>ĉ</u>able</i>	<i>change<u>g</u></i> + <i>able</i> → <i>change<u>g</u>able</i>
<i>service<u>ĉ</u></i> + <i>able</i> → <i>service<u>ĉ</u>able</i>	<i>outrage<u>g</u></i> + <i>ous</i> → <i>outrage<u>g</u>ous</i>

#### 4.51 Further remarks on the letters *c, g, qu, gu.*

- **c** = /tʃ/ in a few words of Italian origin: *cello* /ˈtʃeləʊ/, *concerto* /kənˈtʃeətəʊ/, etc.
- **g** = /ʒ/ in some words of recent French origin: *sabotage* /ˈsæbətə:ʒ/, *rouge* /ru:ʒ/, *genre* /ˈʒɑ:nrə/, *régime* /reɪˈʒi:m/, etc.
- **gn** — in this combination *g* is silent in initial position: *gnaw* /nɔ:/; as well as in final position (or when followed by inflexional suffixes): *sign* /saɪn/, *signing* /ˈsaɪnɪŋ/, *champagne* /ʃæmˈpeɪn/, *reign(ed)* /reɪn(d)/, *campaign* /-ˈpeɪn/, *Charlemagne* /ˈʃɑ:ləmeɪn/. — Note the word *poignant* /ˈpɔɪnjənt/.

But otherwise between vowels *-gn-* is pronounced /-gn-/: *signal* /ˈsɪgnəl/, *signature, magnet, malignant, resignation*...

- **ng** — in this combination *g* is silent finally (or when followed by suffixes): *hang* /hæŋ/, *hang-er* /ˈhæŋə/, etc. (see 5.5).
- **qu** — this combination is regularly /kw/, e.g. *queen, request, conquest, antiquity, Banquo* /ˈbæŋkwəʊ/...

But final *-que* = /-k/, e.g. *cheque, antique*...

Irregular words, where *qu* = /k/: *quay* /ki:/, *conquer*, *-or* /'kɒŋkə, -rə/, *queue* /kju:/, *ex-chequer* /ɪks'tʃekə/, *liqueur* /lɪ'kjʊə/ “likör”, *liquor* /'lɪkə/ “folyadék”, *cheque* /tʃek/, *tequila* /tə'ki:lə/.

Note furthermore: *biscuit* /'bɪskɪt/.

- **gu** — this combination is regularly /g/: *guard*, *guarantee*. The letter *u* is silent as it only serves to ensure the hard pronunciation of the *g*: *guest*, *guide*, *guy*, *league*, *vague* /veɪg/, *prologue* /'prɒlɒg/, *plague* /pleɪg/, *plaguy* /'pleɪgi/...

Compare *colleague* /-g/ with *college* /-dʒ/. — Note *tongue* /tʌŋ/ (5.4).

In the combination *-ngu-*, we do pronounce a /w/: *language* /'læŋgwɪdʒ/, *distinguish*.

In some words *gu* is pronounced as *g+u* /gju:, gju:/: *jaguar* /'dʒæɡjuə/, *Nicaragua* /,nɪkə'ræɡjuə/, *ambiguous* /æm'bɪɡjuəs/, *ambiguity* /,æmbɪ'ɡju:ətɪ/, *argue* /'ɑ:gju:/, *ague* /'eɪɡju:/, *Montague* /'mɒntəɡju:/.

## PRONUNCIATION OF THE DIGRAPHS *CH* AND *GH*

**4.52** The digraph *ch* has three pronunciations: its regular sound is /tʃ/, but we also find /k/ and /ʃ/ in a number of words.

- *ch* = regularly /tʃ/ in the largest number of words: *cherry*, *church*, *bachelor*, *orchard*, *duchess*, *archbishop*, *macho*, *Rachel*, *Richard*, etc. Note that *tch* is equally pronounced /tʃ/: *kitchen*, *match*, etc.
- *ch* = /k/ in many words, mostly of Greek-Latin origin. Examples include: *scheme* /sk-/ , *ache*, *archives* /'ɑ:kɑɪvz/, *archaic* /ɑ:'keɪɪk/, *technical* /'tek-/ , *anarchy* /'ænəki/, *echo*, *masochist* /'mæsəkɪst/, *psychology* /saɪ'kɒlədʒi/, *drachma*, *Munich* /'mju:nɪk/, *orchid*, *machination* /,mæki-/ , *Czech*, *Petrarch*, etc.

Hungarian learners should bear in mind that in English *ch* is never pronounced /h/. Those international words in which *ch* is pronounced /h/ in Hungarian (e.g. H *mechanikus* = “*mehanikus*”) have /k/ in English: *mechanical* /mɪ'kæniɪkl/. In Hungarian it is not considered elegant to use /k/ in such words (“*drakma*, *teknika*”), but in English this is the only possible pronunciation.

- *ch* = /ʃ/ in a few words of recent French origin, e.g.: *champagne* /ʃæm'peɪn/, *chauffeur* /'ʃɒfə/, *chauvinism* /'ʃɒv-/ , *chef*, *chic*, *machine*, *brochure* /'brɒʃə/, *parachute*, *attaché* /ə'tæʃeɪ/, *cliché* /'kli:ʃeɪ/, *moustache* /mə'stɑ:ʃ/, etc., as well as in the names *Chicago* /ʃɪ'kɑ:gɒʃ/, *Michigan*, *Chevrolet* /'ʃevrəleɪ/.

The trigraph **sch** is rare. In some words it is /sk/, e.g. *school*, *scheme*, *schizophrenia* /,skɪtsɒ'fri:nɪə/; in others it is /ʃ/: *Schweppes*, *schwa*, *schedule* /'ʃedju:l/ (but AmE /'skedʒəl/).

#### 4.53 The digraph *gh* has three pronunciations, none of which can really be called regular.

- *gh* is normally silent, serving to indicate the length of the preceding vowel:
  - /aɪ/ all words with *igh*, e.g. *high*, *sigh*, *bright*, *Dwight*...; also *height*.
  - /eɪ/ *eight*, *weigh(t)*, *freight*, *neighbour*, *sleigh*; *straight*.
  - /aʊ/ *bough* “branch”, *plough*, *drought* /draʊt/ “dry weather”.
  - /oʊ/ (*al*)*though*, *dough*.
  - /ɔ:/ all other words with *-ought*, *-aught* e.g. *bought*, *nought*; *caught*, *daughter*, *naughty*, *Maugham* /mɔ:m/...
  - /u:/ *through*.
  - /ju:/ *Hugh*, *Hughes*.
  - /ə/ *thorough* /'θʌrə/, *borough* /'bʌrə/, *Edinburgh* /'edɪnbərə/.
- *gh* = /f/ in a few words:
  - /ɑ:f/ *laugh(ter)*, *draught* “current of air; fresh beer”.
  - /ʌf/ *enough*, *rough*, *tough*.
  - /ɒf/ *cough*.
- *gh* = /g/ before a vowel: *ghost*, *gherkin*, *ghetto*...; *spaghetti*, *dinghy*, *yoghurt* /'jɒgət/...

— o —

### QUESTIONS FOR REVISION

1. What are the 24 consonant phonemes of English?
2. What are the differences between obstruents and sonorants?
3. Which of these is produced furthest front, and which furthest back, in the mouth: /s f t ʃ θ/?
4. What are affricates and how are they symbolized in transcription?
5. Which sounds are aspirated and when?
6. Are *feet* and *feed* homophones? If not, how do they differ?
7. Explain the pronunciation of the underlined letters in *face*, *facial*, *confuse*, *confusion*, *tense*, *tension*.
8. What changes may affect the /t/ in *that boy*? What may NOT happen to it in English?
9. Why do learners often think that *Paradise* ends in /-z/?
10. When are /t d/ “flapped”, and which H sound does the flap resemble?
11. Give the places of articulation of /v t ʃ g h/.
12. What are the typical H mistakes in pronouncing the *-s* and *-ed* suffixes in English?
13. Explain the pronunciation /dɪdʒu/ of *did you*.
14. What are the pronunciations of the grapheme *ch* in English? What sound does it never have?
15. Compare and explain the pronunciation of the *t* in *Christian*, *nation*, *nature*, *lotus*.

## CHAPTER 5

### SONORANT CONSONANTS

**5.1** This chapter will treat the remaining large group of consonants: the sonorants. The English sonorants are:

- the nasals: /m, n, ŋ/
- the liquids: /l, r/
- the glides: /j, w/.

Sonorants do not take part in the voiceless–voiced opposition; all sonorants are voiced (though they may become de-voiced in one case). As pointed out in 4.5–6, the sonorants — especially the liquids and the glides — are very vowel-like in their articulation. As a result, the liquids and glides often influence the vowels in their neighbourhood (or even combine with them) in ways that would be impossible for obstruents. Compare *pant* with *want*, or *hen* with *her* — the differences in vowel quality are due to the effect of the sonorants /w/, /r/.

#### De-voicing of sonorants

**5.2** There is one environment where sonorants must become de-voiced: when they stand after an aspirated stop (/p t k/ — see 4.11). Examples:

	<i>Voiced sonorant</i>		<i>De-voiced sonorant</i>	
/l/	blame	[blɛɪm]	play	[p ɛɪ]
	simply	[ˈsɪmplɪ]	simplicity	[sɪmˈp ɪsəti]
/r/	address	[əˈdres]	attract	[əˈtɹækt]
/w/	banquet	[ˈbæŋkwɪt]	queen	[kwɪ:n]
/j/	beauty	[ˈbju:tɪ]	cube	[kju:b]

(Nasals do not occur in such a position.)

De-voiced sonorants are difficult for Hungarians. The only such sound used in the Hungarian language is the *j* in forms like *rakj*, *lopj*. This de-voiced [ j ] may, both in English and in Hungarian, become a voiceless palatal fricative, whose phonetic symbol is [ç]. This is the sound heard in German *ich*, *München*, Hungarian *rakj* [røkç], and English *cube* /kju:b/, actually [kçu:b]. Though Hungarian does have this sound, it only occurs at the end of a word,

whereas in English it always occurs before the vowel /u:/ — an environment not found in Hungarian. The other de-voiced sonorants are even less familiar; de-voiced [w̥] is somewhat like [f] (5.26), and de-voiced [ɾ̥] resembles the sound of [ʃ] (5.13).

## NASALS

**5.3** Of the three nasals, /m/ and /n/ present no problems. Still, we may note some minor points concerning the behaviour of /n/.

Just as in Hungarian, /n/ easily assimilates in place to a following stop, e.g.: *green peas* /-np-/ → /-mp-/, *raincoat* /-nk-/ → /-ŋk-/, and so on. This assimilation is usually not indicated in transcription, nor does it cause any difficulty.

There is one point, however, where the /n/'s of the two languages behave differently. In colloquial Hungarian, when *n* is followed by a consonant other than a stop (i.e. in combinations of *n* + fricative or *l*, *r*, *j*), the alveolar closure for *n* is omitted (i.e. no real consonant [n] is articulated), and at the same time the preceding vowel is nasalized and lengthened in compensation. In IPA transcription the nasalization of a vowel is indicated by a tilde [ ~ ] above the vowel. This is especially frequent in the French language, e.g.: *Jean* /ʒɑ̃/. The Hungarian behaviour of *n* before non-stop consonants is very similar:

	Careful, formal	Colloquial, natural
vénség	[ve:nʃe:g]	[vẽ:ʃe:g]
benn járt	[bɛnʃa:rt]	[bẽ:ʃa:rt]
kazánház	[kɔza:nha:z]	[kɔzã:ha:z]

This nasalization must not be transferred to English. In all these positions E /n/ remains consonantal alveolar [n]: *mention*, *one year*, *manhood*, *sunrise*, etc. Actually, *mention* has a /-nʃ-/ sequence which is almost /-nʃ̥-/, i.e. *mention* is almost pronounced “*menchon*”. The opposite is true for Hungarian, as in *jelenség*, whose /-nʃ-/ is more like /-ʃ-/ (i.e. *jelẽ:ség*, but never *jelencség*). If a Hungarian is unaware of this, he will pronounce *Henry* (correctly /'henri/) as \*/hẽ:ri/ — which to the English ear sounds like *Harry*!

**5.4** The velar nasal /ŋ/, as in *ink*, *hunger*, is the same as in H *tank*, *tenger*. The distribution of E /ŋ/, however, is different: at the end of the word the *g* of *ng* is not pronounced and thus /ŋ/ occupies final position, e.g. *sing* /sɪŋ/. This can never happen in Hungarian, where /ŋ/ is always followed by a velar stop *k* or *g*.

In English there are minimal pairs like *sin* /sɪn/ – *sing* /sɪŋ/, or *ton* /tʌn/ – *tongue* /tʌŋ/. This fact led linguists to conclude that /ŋ/ is a separate phoneme in English; therefore the IPA transcription requires — at least in principle — that every English velar nasal should

be transcribed as /ŋ/, even if it stands before /k/ or /g/, where its appearance is entirely predictable: *ink* /ɪŋk/, *hunger* /'hʌŋgə/.

At the production level the typical Hungarian mistake is to pronounce final *-ng* as [-ŋg], that is, to pronounce the unnecessary *g*. At the perception level the danger is that learners will perceive final /-ŋ/ as /-n/, mistaking *sing* for *sin*, or *kingship* for *kinship*, since for them the absence of a [g] sound suggests that the nasal must be a [n]. Use minimal pairs like the following to make learners aware of the problem:

<u>/n/ ↔ /ŋ/</u>		<u>/n/ ↔ /ŋ/ ↔ /ŋk/</u>
run – rung		sin – sing – sink
sinner – singer		son – sung – sunk
kinship – kingship		
hand – handed		
banned – banged		

Practise /ŋ/ especially before vowels: *we sang it*, *King Arthur*, *youngish*, *hanging up*, *prolong our stay*, etc. In all these phrases students must learn not to pronounce any [g] sound.

Note. In substandard speech the suffix *-ing* is pronounced /-ɪn/, which can be represented in phonetic respelling as *-in'* (as if the *g* was dropped from the end), e.g.: *lookin'*, *goin'*.

**5.5** We oversimplified matters in the previous section when we said that *g* is silent “in word-final *-ng*”. The truth is that the *g* is silent whenever *ng* stands at the end of a morpheme (this, of course, includes the end of a word). For example, in *singer* /'sɪŋə/ the *g* is silent because *sing* is a morpheme (a meaningful element, see 1.13), and so is the suffix *-er*; so this word has the components *sing-er*. But when *ng* is within the morpheme (morpheme-medial), the *g* is sounded just as in Hungarian. In *anger* /'æŋgə/ the *g* is sounded because *ang-* is not a morpheme, nor is *-er* a meaningful suffix in this word. We can analyse *singer* as *sing-er*, but we cannot analyse *anger* as \**ang-er*. Compare the following examples:

<b><u>g silent</u></b>	<b><u>/g/ sounded</u></b>
<b><u>Morpheme-final ng = /ŋ/</u></b>	<b><u>Morpheme-medial ng = /ŋg/</u></b>
hang /hæŋ/	anger /'æŋgə/
tongue /tʌŋ/	finger /'fɪŋgə/
sing-er /'sɪŋə/	single /'sɪŋgl/
wrong-ly /'rɒŋlɪ/	hungr-y /'hʌŋgrɪ/
belong-d /br'lɒŋd/	language /'læŋgwɪdʒ/
long-ish /'lɒŋɪʃ/	bungalow /'bʌŋgələʊ/
hang + ing /'hæŋɪŋ/	Hungary /'hʌŋgəri/

Note. The comparative (*-er*) and superlative (*-est*) forms of the adjectives *long*, *young* and *strong* are exceptionally pronounced with /ŋg/, e.g.: *longer* /'lɒŋgə/, *strongest* /'strɒŋgəst/.

**5.6 The combination *mb*.** — Exactly the same rule applies to *mb* as to *ng*. In word- (or morpheme-) final position the *b* of *mb* is silent, e.g.: *bomb* /bɒm/, *bombing* /'bɒmɪŋ/; but it must be pronounced in morpheme-medial position, as in *number* /'nʌmbə/, which cannot be analysed as \**numb|er*. (Actually, when *number* is the comparative of the adjective *numb*, it is grammatically *numb|er* = ‘more numb’, pronounced /'nʌmə/, as the rule predicts!) For this reason *b* is silent in *comb*, *plumber*, *climbing*, but pronounced in *amber*, *timber*, *jumble*, *scramble*, *jumbo*.

We can sum up the behaviour of *ng* and *mb* as follows: morpheme-final *g* and *b* must be silent after a nasal. Consequently — and this is important — no English word may end in /-ŋg/ or /-mb/ in pronunciation.

## LIQUIDS

### The phoneme /l/: Clear-L and Dark-L

**5.7** The phoneme /l/ has two chief allophones, traditionally called “Clear-L” and “Dark-L”. The two are in complementary distribution, i.e. they are mechanically predictable from the phonetic environment. The “clear” or “dark” nature of /l/ does not depend on whether the spelling has single or double *l*.

Clear-L is the same as H *l*, and presents no difficulties.

Dark-L is unknown in Hungarian. It is a strongly velarized *l*-sound: while the tip of the tongue articulates an [l] in the usual manner, the back of the tongue is raised towards the back part of the palate (the velum), as if producing an [ɔ] or an [o]. Thus Dark-L can be said to be “an *l* with *o*-colouring”. The end of E *feel* sounds more like H *dió* or *fiú* than *nyíl*: its actual pronunciation is [fi:ɔl] or [fi:ol] (or even [fi:o], see 5.9). The acoustic effect of Dark-L is so similar to a back vowel that a beginning student will perceive needles /'ni:dɪz/, phonetically ['ni:dɪz] as “*nídóz*” rather than “*nídlz*” or “*nídölz*”.

The phonetic symbol for Dark-L is [ɫ], but it is not indicated in IPA broad transcription, as it is merely an allophone. This is logical, but the two L-sounds are so different (and Dark-L is so difficult) that it may be advisable to indicate it with a separate symbol when teaching Hungarians learners, and in textbooks prepared for them. You may use [ɫ] or [ɬ] or [ɮ] or something of the sort. See 3.14 for a discussion of sound representation.

Note. Those who speak Russian will note that English Dark-L is similar to Russian “hard L”, while English Clear-L (and Hungarian *l*) is like Russian “soft L”.

### 5.8 Distribution of Clear vs. Dark L.

(1) Clear-L occurs before vowels or /j/. E.g.: *leaf*, *line*, *lodging*, *legality*, *glad*, *sleep*, *flower*, *splash*, *play*, *apply*, *placebo*, *valid*, *follow*, *Italy*, *illiterate*... – Before /j/: *schoolyard*, *value*, *million*, *Italian*...

Clear-L is de-voiced by rule after aspirated stops (5.2).

- (2) Dark-L occurs in all other positions, i.e. before consonants (other than /j/) and word-finally. E.g.: *help, fills, old, Belgium, Elvis, filter, penalty, alphabet, peeled, rolled, wholesome, miles...* – Word-finally: *feel, expel, mill, girl, pale, module, fatal, single...*
- (3) Final L becomes clear if it is immediately followed by a word beginning with a vowel or /j/. Compare the following:

<u>Dark-L</u>	<u>Clear-L</u>	<u>Dark-L</u>	<u>Clear-L</u>
feel	feel at home	schoolbook	schoolyard
spell	spelling	fool	foolish
kill	kill you	pile	a pile of rubbish
smile	smile again		

This shows that the darkness of /l/ is not a property of this or that word, but a consequence of the environment.

- (4) When /l/ is syllabic (see 5.18), it always remains dark, no matter what follows it. In transcription such a syllabic /l/ — if it is not at the end of a word — may be separated from the following vowel by a hyphen, to show that they belong to two different syllables:

<u>Dark-L</u>	
travel	= traveller /'trævl-ə/
fatal	= fatally /'fɛtl-ɪ/
final	= final exam /'faɪnl ɪg'zæm/
Marble	= Marble Arch /'mɑ:bl 'ɑ:tʃ/
civil	= civilize /'sɪvl-aɪz/

Note. In AmE the /l/ is usually dark in all positions.

**5.9 Vocalization of Dark-L and influence on preceding vowel.** — Dark-L is often articulated as an [o]-like vowel, e.g.: *milk* [mɪok], *shelf* [ʃeɒf], *bulb* [baob], *feel* [fi:ɔ], *fall* [fɔ:ɔ], and especially when syllabic, e.g.: *middle* ['mɪdo], *final* ['faɪno], *apple juice* ['æpɒdʒʊs]. This phenomenon is called **L-vocalization**: the velar component of the Dark-L predominates to such an extent that the consonantal (alveolar) component of its articulation is abandoned, that is, the tongue-tip does not touch the alveolar ridge, and so the consonant becomes a vowel (this is why we call this “vocalization”). The resulting sound is nothing but a back vowel [o]. This pronunciation is becoming more and more frequent in England.

Dark-L influences the quality of the preceding vowel to a greater or lesser degree. Most vowels are articulated more open and more back before Dark-L. For example, the *e* in *shed* is phonetically [e], very much like H *é*, but that in *shelf* is phonetically [ɛ], like H *e*. If you pronounce English well, don't be surprised if your students perceive your *spill* as *spell*, or your *full* as *fall*; this is because *spill*, *full* have more open vowels than usual. Such regressive Dark-L-influence is subphonemic and therefore never shown in transcription. It need not be taught actively, but teachers should be aware of it as a potential source of misperception.

Note. The same influence has caused, historically, the *a* of words like *call*, *bald* to change from /æ/ to /ɔ:/. See 8.14.



**5.10 Silent L.** — In some words, where *l* stands after the letters *a*, *o*, or *ou*, it is silent, e.g.: *talk* /tɔ:k/. In such cases L-vocalization (as well as its influence on the preceding vowel) has become historically established: the *l* has been absorbed in the preceding vowel. The following are the words with silent *l*:

- al-     /ɑ:/   half, halves, calf, calves; calm, balm, palm, psalm /sɑ:m/, almond  
          /ɔ:/   talk, walk, chalk, stalk  
          /æ/   salmon /'sæmən/
- ol-     /ɒʊ/   folk, yolk, Holmes, Stockholm /'stɒkhoʊm/, Holborn /'hoʊbən/  
          /ə/   Norfolk, Suffolk, Lincoln /'lɪŋkən/  
          /ɜ:/   colonel /'kɜ:nl/
- oul-    /ʊ/    could, should, would
- aul-    /ɔ:/    Faulkner

Note. The name *Ralph* is /rælf/ or /reɪf/.

## The consonant /r/

**5.11 Articulation.** — The usual form of E /r/ is a palato-alveolar approximant: the tongue approaches the roof of the mouth at (or just behind) the teeth ridge, but does not touch it, e.g.: *rain*, *arrive*, *carol*. The proper phonetic symbol for this sound is [ɹ], but because in English it is not opposed to a “real” [r]-sound, we transcribe it simply as /r/ (but see 3.23). English /r/ is very vowel-like since there is no closure or friction during its production. Some textbooks call it a “frictionless continuant” sound. It is often labialized, i.e. accompanied by a rounding of the lips as for /w/ or /u:/. This becomes clearly apparent when you pronounce *read* and compare it with H *rím*, where there is no such lip activity.

When articulating E /r/ (actually, [ɹ]), the tongue tip approaches the same point where alveolar /t, d/ are produced, but it is slightly curled back towards the palate (or, in other terms, cupped, i.e. shaped like a cup or spoon). This is why [ɹ] is really palato-alveolar. In AmE this curling back is very marked, e.g.: *bird* AmE [bɪd], also transcribed as [bəɖ]. This variety is called “retroflex *r*”.

**5.12** Hungarian *r* is different in that the tip of the tongue either makes one quick tap (a “flap”) against the teeth-ridge (phonetic symbol [ɾ], see 4.38), or — especially in slow or careful Hungarian speech — there may be two or three such rapid taps: *rrépa*, *rrreték*. This is called a “rolled” or trilled *r* (phonetic symbol [r̄]), which is also found in Italian, Swedish, Russian, etc.

Despite all differences, E /r/ is not a difficult sound for Hungarians to acquire. (Learners usually have much more trouble with Dark-L!) Lip-rounding may also help in producing a

more English-sounding /r/. English speakers have no difficulty in identifying a H [r] as a kind of *r*, and vice versa, Hungarian learners also easily perceive E [ɹ] as a kind of *r* (cf. 2.17).

**5.13 Allophones.** — /r/ becomes voiceless after aspirated stops /p t k/ (5.2). In such cases it is not “frictionless” any more: the tongue comes closer to the palate, and the resulting sound is a fricative, e.g.: *press, attract, cry*. This allophone of /r/, phonetically [ɹ], is very similar to /ʃ/, so *press* sounds almost [pʃes], etc.

When /r/ stands after /t d/, it combines with them to produce affricate-like sequences /tr/ and /dr/, e.g.: *train, attract, dry, Andrew*. In these combinations the /r/ has become a fricative, voiceless in /tr/ and voiced in /dr/. To the Hungarian ear /tr dr/ sound very similar to /tʃ dʒ/. Learners easily confuse *train – chain* or *drain – Jane* in perception. Some authors actually consider /tr dr/ as separate affricate-phonemes of English. When /r/ is after /b d g/, it actually resembles H *zs* /ʒ/.

**5.14 Distribution of /r/.** — In BrE the sound /r/ can only be pronounced before a vowel sound (= in prevocalic position). The rule is phonetically based, so silent vowels or silent *h*'s do not count; nor does it matter whether the spelling has single or double *r*.

(a) /r/ is pronounced before a vowel: *rain, remind, wrong, rhyme, brown, agree, laundry, scenery, borrow, virus, wearing, dearest, dangerous...*

(b) The letter *r* is silent in all other positions:

– *fork, course, party, urgent, hazard, modern, effort, energy...*

– *tired, occurred, stores, careful...*

– finally, when the next word does not begin with a vowel: *store, pure, theatre, centre, bizarre /bɪ'zɑ:/, bar, sailor, her, colour...*

Group (b) above shows the working of the **R-Dropping Rule**: /r/ must be dropped in all non-prevocalic environments. No such rule exists in AmE, where *r* is pronounced in all positions. Note that *r*, whether pronounced or not, usually influences the preceding vowel: compare *pony* /-oʊ-/ with *story* /-ɔ:/ (see 8.6-13).

Note. The *r* is exceptionally silent in *iron* /'aɪən/.

**5.15** A practical consequence of the R-Dropping Rule is that many pairs of words, one with *r* and the other without *r*, are homophones in BrE. For example:

sore = saw	/sɔ:/	aren't = aunt	/ɑ:nt/
court = caught	/kɔ:t/	farther = father	/'fɑ:ðə/
source = sauce	/sɔ:s/	kernel = colonel	/'kɜ:nəl/
roar = raw	/rɔ:/	tuner = tuna	/'tju:nə/
pour = paw	/pɔ:/	peninsular = peninsula	/pə'nɪnsjʊlə/

As can be seen, this happens most frequently when the pronunciation is /ɔ:/. Similarly, the function words *a, are, her* may all sound /ə/ in unstressed position (i.e. their weak forms may be identical, see 13.15): *My friend's a /ə/ doctor.* — *My friends are /ə/ doctors.* Unstressed

*their* and introductory *there* often sound the same as *the* — all three are pronounced /ðə/: *They washed their /ðə/ faces. There /ðə/ wasn't anything in the /ðə/ box.* This must be borne in mind when teaching beginners, since these frequent homophones make it more difficult to understand BrE speech.

Failure to drop the *r*'s in non-prevocalic positions will make your speech sound un-British, but not un-English, since AmE (and some other varieties of English) retain the *r* in all positions. It is therefore not a major mistake to pronounce all *r*'s, and it actually facilitates understanding.

**5.16 Linking-R.** — Word-final *r* is pronounced when the immediately following word begins with a vowel. This *r* is then in prevocalic position: it serves as a link between the two words, and is therefore called “Linking-R”. It may be hinted at by drawing an arc ( ) between the two words. Compare:

<u><i>r</i> silent</u>	<u><i>r</i> pronounced</u>	<u><i>r</i> silent</u>	<u><i>r</i> pronounced</u>
fair play	fair <u> </u> amount	more careful	more <u> </u> interesting
I prefer Liz	I prefer <u> </u> Ann	far behind	far <u> </u> away
there wasn't	there <u> </u> isn't	Mr. Benson	Mr. <u> </u> Ellis

It follows from this that in BrE all words whose last letter is *r* (with or without a silent *-e* after it) have two pronunciations, one without /-r/ and one with /-r/. E.g.:

	<u>before a cons. or pause</u>	<u>before a vowel</u>
fair	/feə/	/feər/
more	/mɔ:/	/mɔ:r/
prefer	/prɪ'fɜ:/	/prɪ'fɜ:r/
centre	/'sentə/	/'sentər/

Word-final *r* may be called “potential *r*” (or “underlying *r*”), whose actual appearance in pronunciation (“on the surface”) is conditioned by the following word. Dictionaries use various methods to show this economically and avoid giving both pronunciations. They indicate potential *r* by some abbreviatory convention, usually one of these three:

*more* /mɔ:\*/ = /mɔ:/ = /mɔ:(r)/

Each of these means the same: namely, that *more* has two pronunciations: /mɔ:/ and /mɔ:r/. I recommend the third method — (r) in round brackets — since it is most self-evident and is easy to use in handwriting too (if we need to show this at all).

**5.17 Intrusive-R.** — On the analogy of linking-R, speakers of BrE often insert an /r/ even when the word does not end in the letter *r*. For example, *visa application* is often pronounced /'vi:zə'ræplɪ'keɪʃn/. This phenomenon is called “Intrusive-R”, because the /r/ “intrudes” between the two words. It is used by most speakers after words ending in /-ə -ɑ: -ɔ:/, eg:

/-ə/ (spelt *-a*): *visa* /r/ *application*, *vanilla* /r/ *ice-cream*, *the idea* /r/ *of death*,  
*Vienna* /r/ *in autumn*

/-ɑ:/ (spelt *-a*, *-ah*): the Shah /r/ of Persia, schwa /r/ is difficult, a spa /r/ in France

/-ɔ:/ (spelt *-aw*): law /r/ and order, the jaw /r/ opens

Intrusive-R never appears if the word ends in an /i/ or /u/ type vowel, namely /i: i eɪ aɪ ɔɪ/ or /u: ʊ ʌʊ/. Intrusive-R only appears after vowels where linking-R would be possible.

Linking-R and intrusive-R are phonetically the same sound. Since, however, intrusive-R is not “justified” by the orthography, many educated speakers consider it an incorrect and unpleasant feature of speech. Some people never use it; others claim not to use it but in fact do so in spontaneous conversation without being aware of it. Foreign learners do not need to use it actively, but they must be prepared to perceive it correctly — otherwise they will be baffled by these unexpected /r/ sounds and misinterpret what they hear, thinking that *vanilla ice* is made of rice!

## SYLLABIC CONSONANTS

**5.18** In the sequence “consonant + /ə/ + /n/ or /l/”, the /ə/ often drops out and the /n/ or /l/ takes over the function of syllabic element. This is possible because these consonants are sonorants. For example, *table* and *button* can be /'teɪbəl/ and /'bʌtən/, but they are more often /'teɪb/ and /'bʌtn/. In the syllables /-b/ and /-tn/ there is no vowel: instead, the sonorant is syllabic. In narrow transcription this may be indicated with a [ , ] sign under the consonant: [ˈteɪb̩], [ˈbʌtn̩]. (Remember that /l/ in this function is always “dark”, see 5.9.)

The replacing of /ən əl/ by syllabic /ŋ l/ usually takes place in the last (or second-last) syllable of the word, e.g.:

table	/'teɪbəl/	or	/'teɪb/	final	/'faɪnəl/	or	/'faɪnl/
faculty	/'fækəltɪ/	or	/'fækltɪ/	button	/'bʌtən/	or	/'bʌtn/
chosen	/'tʃoʊzən/	or	/'tʃoʊzn/	patience	/'peɪʃəns/	or	/'peɪʃns/
national	/'næʃənəl/	or	/'næʃnəl/ or /-ʃnl/				

Syllabic consonants occur most frequently after a consonant word-finally (*table*, *button*) or between two consonants (*faculty*, *patience* — here the *i* is silent!). In these cases their syllabic character is not indicated in “broad” transcription.

**5.19** Syllabic /n l/ may stand before a vowel when we attach a suffix beginning with a vowel to a word ending in syllabic consonant. For example (the dots indicate syllable division):

button	/'bʌ.tn/	→	button-ing	/'bʌ.tn.ɪŋ/
listen	/'lɪ.sn/	→	listen-er	/'lɪ.sn.ə/
final	/'faɪ.n/	→	final-ly	/'faɪ.nlɪ/
civil	/'sɪ.v/	→	civil-ize	/'sɪ.vl.aɪz/

(In *finally*, as in all words in *-al+ly*, the /l/ of *-ly* is dropped, so only one /l/ is pronounced.) Of course, in all such words the syllabic /n/ or /l/ has a free variant pronunciation with /ən, əl/: /'bʌtənɪŋ/, /'lɪsənə/, /'faɪnəlɪ/, /'sɪvələɪz/.

Word pairs like *finally* (=final+ly) and *finely* (=fine+ly) are different in pronunciation: the first is 3 syllables, with a syllabic Dark-L; the second is only 2 syllables, with a non-syllabic Clear-L: *finally* /'faɪ.nɪ.lɪ/ ≠ *finely* /'faɪn.lɪ/. When a syllabic consonant stands before a vowel, as in *finally*, it must always be indicated in transcription, either with a line under it /'faɪnɪɪ/, or with a dot or hyphen after it /'faɪnɪ.lɪ/, /'faɪnɪ-ɪ/; otherwise it could not be distinguished from *finely* /'faɪnɪɪ/.

**5.20** Syllabic consonants, like all types of weak syllable, are unknown in Hungarian. They are fairly difficult for Hungarian learners, who tend to insert a vowel before or after them: *isn't* /'ɪznt/ tends to be rendered as “*izönt, izint, iznöt, iznit*”; *faculty* /'fækltɪ/ as “*fekülti, fekölti, feklöti, fekliti*”. Of these, the insertion of *ö* before *n, l* (“*izönt, fekölti*”) is the most acceptable, since it is similar to the E free variant with /ə/. However, natural contemporary E speech (especially in BrE) has a strong tendency to use syllabic /n, l/ wherever possible. The left-hand column in [5.18](#) is now old-fashioned or pedantic. Therefore Hungarian learners ought to master the syllabic consonants actively. Since these may only occur after a consonant, they can be practised in sequences like [tnnn, snnn, jnnn] or [blll, fill, klll]. Insist on the “darkness” of the /l/ here: *channel* should sound more like H “*cseńó*” or “*cseńol*” than like “*cseńöl*”, “*cseńel*” or “*cseńl*”.

When using a dictionary, remember that in transcription any /n/ or /l/ that does not stand next to a vowel must be syllabic. In some dictionaries an italicized /ə/ before /n/ or /l/ shows that the sonorant may be syllabic: /'teɪbəl/.

## GLIDES

**5.21** English has two glide consonants: /j/ and /w/. Glides are very vowel-like sounds: /j/ is like a short and quick /i/, and /w/ is like a short and quick /u/. For this reason glides are also called semivowels. They only occur before a vowel. They are transitional sounds: the speech organs immediately glide over to the following vowel.

At the beginning of a word, or before a stressed vowel, glides always function as consonants: *yes* /jes/, *beyond* /bɪ'jɒnd/, *unit* /'ju:nɪt/, *cube* /kju:b/, *win* /wɪn/, *away* /ə'weɪ/, *request* /rɪ'kwɛst/. Like all sonorants, glides are voiced, but become de-voiced after aspirated stops ([5.2](#)).

**5.22 Glide-i and Glide-u.** — Before a weak vowel (that is, before /ə/ or /ɪ/) the glides /j w/ are in free variation with /i u/. They may be pronounced either nonsyllabic (/j w/) or syllabic (/i u/). The choice depends on style or speed:

		<u>syllabic (vowel)</u>	or	<u>nonsyllabic (glide)</u>
Glide-i = /i ~ j/	prev <u>i</u> ous	/'pri:viəs/	or	/'pri:vjəs/
	craz <u>i</u> er	/'kreɪziə/	or	/'kreɪzjə/
	ar <u>e</u> a	/'eəriə/	or	/'eəɹjə/
Glide-u = /u ~ w/	us <u>u</u> al	/'ju:zuəl/	or	/'ju:zwəl/
	grad <u>u</u> ate	/'grædzuət/	or	/'grædzwət/
	ann <u>u</u> al	/'ænjuəl/	or	/'ænjwəl/

Glide-i is spelt *-i-* (or rarely *-e-*), Glide-u is spelt *-u-*. As these segments have two pronunciations: syllabic (= vowel /i u/) or non-syllabic (= consonant /j w/), they may be called “half-syllabic”. Any unstressed letter *i* (*e*) or *u* followed by a weak vowel (/ə/ or /ɪ/) will be termed Glide-i and Glide-u respectively. Glide-u often has a /j/ before it, as in *annual*.

## The consonant /j/

**5.23** English /j/ (called “yod” in phonetics, not “jay”!) is the same sound as H *j* (or *ly*). In English /j/ can only appear before a vowel. It functions in three different ways, distinguished in spelling:

- (a) Consonant, always word or morpheme initial (spelt *y*): *yes, beyond, courtyard, yoghurt*.
- (b) First part of the complex vowel /ju:/ (spelt *u, ue, ui, eu, ew*, 8.2): *cube /kju:b/, unit, nuisance, feudal, dew*, including Glide-u: *annual*.
- (c) Glide-i (spelt *i* or *e*, pronounced /i/ or /j/): *previous, idiot, crazier, onion, Italiian, hideous /'hɪdjəs/*.

When /j/ stands after /s, z, t, d/, it may cause palatalization as described in 4.24–30. In this process the /j/ will normally disappear from pronunciation (“be absorbed”), as in *mature /mə'tʃʊə/ → /mə'tʃʊə/*.

**5.24 Yod Dropping.** — We call the sound-combination /ju:/ a “complex vowel” (see 8.2 for discussion). We assume that a word has this complex vowel /ju:/ (at least underlyingly) whenever the spelling has *u, ue, ui, eu, ew*. This complex vowel /ju:/ has two surface alternants: /jʊə/ and /jʊ/, depending on the environment, but that does not concern our present discussion. *Cube /ju:/, cure /jʊə/, and fabulous /jʊ/* all derive from the same underlying complex vowel /ju:/. What we need to examine now is when the /j/ is actually pronounced and when it is not. Compare the underlined vowels in the following pairs:

<u>yod pronounced</u>		<u>yod dropped</u>
<u>c</u> ube /ju:/	—	<u>r</u> ude /u:/
<u>n</u> ew /ju:/	—	<u>bl</u> ew /u:/
<u>f</u> ury /jʊə/	—	<u>j</u> ury /ʊə/
<u>f</u> ab <u>u</u> lous /jʊ/	—	<u>P</u> ó <u>r</u> tugal /ʊ/

All these words have underlying /ju:/, but in the right-hand column the /j/ it is not pronounced: we call this /j/-dropping, or with its traditional name, **Yod Dropping**. Under this rule the underlying complex vowel /ju:/ (including its variants /jʊə/, /jʊ/) loses its /j/ element – the “yod” – after certain consonants. Yod Dropping has two types:

- **Obligatory Yod Dropping** must take place after palatals (/tʃ, dʒ, ʃ, ʒ/), after /r/, and after consonant + /l/.
- **Optional Yod Dropping** may take place after “lone /l/” (i.e. an /l/ not preceded by a consonant), and after /s, z/. Optional Yod Dropping is very widespread in present-day BrE: forms like /r'lʊ:zŋ, 'su:pə, su:t/ are more current than /r'lju:zŋ, 'sju:pə, sju:t/, though both are equally acceptable. However, in unstressed syllables optional Yod Dropping is not permitted, and the /j/ must be retained: *value* /'vælju:/ (not \*/-lu:/), *Jesuit* /'dʒeɪzjʊɪt/ (not \*/-zɪt/). Remember that after /s z/ palatalization may take place, which results in /ʃ ʒ/, which in turn require obligatory Yod Dropping, as in the variant pronunciations of *educate* /'edʒʊkɪt/ or *Jesuit* /'dʒeɪzɪt/ (cf. 4.27).

We never pronounce a /j/ when the spelling is *o, oo, ou*, e.g. *move, spoon, zoo, coupon* /'ku:pən/, *tourist* /'tʊə-, etc. Exceptions are *Houston* /hju:-/ (city in Texas), and *Home* /hju:m/ (Scottish name).

Note 1. In AmE Yod Dropping is more extensive: it is obligatory after all dental and alveolar consonants in stressed syllables, including /t, d, n/. So in AmE *tube* is /tu:b/, *during* is /'du:rɪŋ/, *new* is /nu:/, but *value, menu* retain the /j/.

Note 2. In the following words there is no /j/: *lettuce* /-tɪs/, *minute* /-rɪt/, *insulate* /-səl-, *figure* /-gə/ (but AmE /'fɪgjər/).

TABLE 5.24. YOD DROPPING

	After	Examples
Obligatory Yod Dropping	/ʃ/	ins <u>u</u> rance /ɪn'ʃʊərəns/, parach <u>u</u> te /'pærəʃu:t/
	/ʒ/	vis <u>u</u> al /'vɪʒʊəl/, meas <u>u</u> re /'meɪʒə/
	/tʃ/	ch <u>e</u> w /tʃu:/, mat <u>u</u> re /mə'tʃʊə/
	/dʒ/	J <u>u</u> ne /dʒu:n/, j <u>u</u> ice /dʒu:s/
	/r/	r <u>u</u> de /ru:d/, Andr <u>e</u> w /'ændru:/, rh <u>e</u> umatism /'ru:mətɪzəm/
	cons.+/l/	fl <u>u</u> /flu:/, bl <u>e</u> w /blu:/, infl <u>u</u> ence, /'ɪnflʊəns/
Optional	lone /l/	l <u>u</u> kewarm /'lu:k- ~ 'lju:k-/; ill <u>u</u> sion /ɪ'lu:ʒn ~ ɪ'lju:-/
Yod	/s/	s <u>u</u> per /'su:pə ~ 'sju:-/, s <u>u</u> it /su:t ~ sju:t/
Dropping	/z/	res <u>u</u> me /rɪ'zu:m ~ -'zju:m/

## The consonant /w/

**5.25** English /w/ is a labio-velar glide. The speech organs take up the same positions as for /u/. The back of the tongue is raised towards the soft palate (the velum), and the lips are rounded — but the articulation immediately glides on to the following vowel. In English /w/ can only appear before a vowel.

/w/ is difficult for Hungarian learners, since there is no such sound in Hungarian. The closest Hungarian sounds are *u* (but this is always a syllabic vowel, never a glide consonant), and *v* (but this is a fricative consonant, same as E /v/). As the standard Hungarian mistake is to pronounce /v/ instead of /w/, it will be useful to compare the two sounds:

<u>features of /v/</u>	↔	<u>features of /w/</u>
obstruent	—	sonorant
fricative	—	glide (semivowel)
teeth involved	—	teeth not involved
lips not rounded	—	lips rounded
no [u] colouring	—	has [u] colouring (is velar)
can occur anywhere	—	only occurs before vowels
spelt <i>v</i>	—	spelt <i>w</i> or <i>u</i> (rarely <i>o</i> )

**5.26** It helps Hungarian learners if we remind them that /w/ is “a kind of *u*” rather than “a kind of *v*”. Even the name of the letter *w* is “double U” in English, indicating that it is similar to /u/ (at least before vowels), while in Hungarian the letter *w* is called “dupla V” and is pronounced /v/, e.g.: *watt* “vatt”, *cowboy* “kovboj”. English spelling is a good guide in distinguishing /v/ and /w/, since the former is always spelt *v*, the latter never is. Minimal pairs are useful to make learners aware of the phonemic distinction in E.: *verse* – *worse*, *veal* – *we'll*, *via* – *wire*, *invite* – *in white*, etc.



De-voiced /w/ (phonetically [w̥]) appears after aspirated /t/ or /k/ (5.2), e.g.: *twist*, *quarter*. This allophone of /w/ is almost like [f], except that the upper teeth are not involved; it is like the noise you make when blowing out a candle.

**5.27 The combination *wh*.** — This is pronounced /w/ in RP, e.g. *what*, *wheel*, *overwhelming* /ˌoʊvəˈwelmɪŋ/, etc. Originally *wh* was pronounced /hw/, and this is still used in AmE and some areas of Britain, e.g. *what* /hwɒt/, *wheel* /hwi:l/, *overwhelming* /-ˈhwelmɪŋ/. Thus in these varieties of English two words like *which* and *witch* form a minimal pair, since they are pronounced with this one difference.

In the following words *wh-* is pronounced /h/: *who* (*whom*, *whose*), *whole*, *whoop* /hu:p/, *whore* /hɔ:/.

— o —

## QUESTIONS FOR REVISION

1. Which consonants only occur before vowels?
2. Which sonorants get de-voiced and when? Compare with the de-voicing of obstruents.
3. Why is E /ŋ/ difficult if it also occurs in Hungarian?
4. Compare the behaviour of word final *-l* and *-r*.
5. Which of these *l*'s is dark and why: *smile*, *smiled*, *smiling*, *control*, *controlled*, *controlling*.
6. What is the articulatory difference between E and H *r* ?
7. What similarity and difference is there between linking-R and intrusive-R?
8. What is the meaning of a word final asterisk /\*/ in the transcription system of some dictionaries?
9. How many syllables can *national* have? And how many vowels?
10. When is Yod Dropping optional?
11. What are Glide-i, Glide-u? How are they spelt? Why can we call them “half-syllabic”?
12. List as many differences between /v/ and /w/ as you can.
13. Compare *conquest* and *to conquer*. Which is pronounced exceptionally?
14. Where does /j/ occur in English? What are its spellings?

## CHAPTER 6

### THE ENGLISH CONSONANTS ONE BY ONE (CHECKLIST)

This chapter is simply a checklist, grouping under each consonant all the information given in Chapters 4 and 5, plus the spelling equivalents of each consonant.

*General remark on “double” consonants.* — English pronunciation permits no double (= long) consonants within the simple word. Compare H *Ella* with E *Ella* /'elə/. English only has double consonants when two identical consonants meet at word- (or morpheme-) boundary, e.g.: *bookcase* /'bʊkkeɪs/, *soulless* /'sʊlləs/, *unnatural* /ʌn'nætʃərəl/. Orthographic double consonants are frequent, but they serve to indicate the shorter (“lax”) pronunciation of the preceding vowel (e.g.: *later* but *latter*, see 9.14), not the length of the consonant.

## OBSTRUENTS

### Stops

**/p/**

Voiceless bilabial stop. Same as H *p*, but subject to Aspiration (4.11) and Glottalization (4.14).

- SPELLING: *p* – *pen, hope, supper*.

Exceptional: *hiccup* may also be spelt *hiccough*.

- SILENT: The letter *p* is silent

– in initial *pn-*, *ps-*: *pneumonia* /nju:'mʊʊnjə/, *psychology* /saɪ'kɒ-/...

– in a few other words: *receipt* /-i:t/, *cupboard* /'kʌbəd/, *raspberry* /'rɑ:zbɪɹ/, *coup* /ku:/, *corps* ‘organization’ /kɔ: (but *corpse* ‘dead body’ is /'kɔ:ps/).

**/b/**

Underlyingly voiced bilabial stop. Same as H *b*, but subject to De-voicing (4.10).

- SPELLING: *b* – *bear, tube, hobby*.

- SILENT: The letter *b* is silent:

– in morpheme-final *-mb*: *bomb* /bɒm/, *bombing* (5.6)

– in *bt*: *debt, debtor* /'detə/, *doubt* /daʊt/, *subtle* /'sʌtl/.

**/t/**

Voiceless alveolar stop. Different from H *t*, which is dental. Subject to Aspiration (4.11), Glottalization (4.14), Palatalization (4.24-30), intervocalic voicing and flapping (4.38), fricative release (4.37), and is easily assimilated (4.35, 4.39) or dropped (4.40).

- SPELLING: *t* – *time, stone, matter*  
           *-ed* – *kissed, hoped* (4.21)

Exceptional: *th* in a few words, e.g.: *Thames* (4.36/c)

- SILENT: The letter *t* is silent:

- in some consonant groups, e.g.: *Christmas* (4.40)  
 - in some French words, especially in final *-et*: *ballet* /'bæleɪ/, *buffet* /'bʊfeɪ/, *Chevrolet* /'ʃevrəleɪ/, *bouquet* /bu'ʊ'keɪ, bu:-/, *cabaret* /'kæbəreɪ/, *beret* /'berɪ/, *depot* /'depoʊ/, etc.

**/d/**

Underlyingly voiced alveolar stop. Different from H *d*, which is dental. Subject to De-voicing (4.10), Palatalization (4.24-30), Flapping (4.38), fricative release (4.37), and is easily assimilated (4.35, 4.39) or dropped (4.40).

- SPELLING: *d* – *deep, made, sudden, killed*

- SILENT: The letter *d* is silent in some consonant groups, e.g.: *grandmother* (4.40).

**/k/**

Voiceless velar stop. Same as H *k*, but subject to Aspiration (4.11) and Glottalization (4.14).

- SPELLING: *k* – *keep, bake*  
           *ck* – *back, reckon, panicking* (4.50)  
           *c* – *come, accuse, succeed* (4.49)  
           *q* – *queen, antique* (4.51)  
           *ch* – *chaos, echo* (4.52)  
           *x* – *box, exercise* /ks/; *anxious, luxury* /kʃ/ (4.46)

- SILENT: The letter *k* is regularly silent in initial *kn-*, e.g.: *knife*; and occasionally in the word *asked* /ɑ:skt ~ ɑ:st/.

The letter *c* is silent in a few words: *muscle* /'mʌsl/ (but *muscular* /-skjʊ-), *indict(ment)* /ɪn'daɪt(mənt)/, *Connecticut* /-'netɪ-/.

**/g/**

Underlyingly voiced velar stop. Same as H *g*, but subject to de-voicing (4.10).

- SPELLING: *g* – (“hard”, 4.47-49): *go, figure, baggy, get*  
           *ex-* – *example* /gz/ (4.46)

Exceptional: *gh* in a few words, e.g.: *ghost* (4.53)

- SILENT: The letter *g* is silent:

- in morpheme-final *-ng*, e.g.: *sing, singer, tongue* (5.4-5)

- in *gn* word-initially and word/morpheme-finally, e.g.: *gnaw*, *sign...* (4.51)

## Affricates

**/tʃ/**

Voiceless palato-alveolar affricate. Sibilant. Same as H *cs*, but subject to Glottalization (4.14).

- SPELLING: *ch* – *chip*, *rich*, *archbishop*, *Rachel*  
*tch* – *match*, *kitchen*  
*t* – (palatalized) *nature*, *question* (4.25)

Exceptional: *cello* /'tʃelɒ/, *concerto*, *Czech* /tʃek/, *czardas* /'tʃɑ:dæs/.

**/dʒ/**

Underlyingly voiced palato-alveolar affricate. Sibilant. Same as H *dʒs*, but subject to De-voicing (4.10)

- SPELLING: *j* – *jam*, *injection*, *major*  
*g* – (“soft” before *e*, *i*, *y*) *huge*, *gin*, *engineer*, *singe*, *pigeon*, *gym* (4.47)  
*dg* – *bridge*, *edge*  
*d* – (palatalized) *gradual*, *procedure*, *soldier* (4.25)

Exceptional: *gg* in *exaggerate*, *suggest* (4.49).

## Fricatives

**/f/**

Voiceless labio-dental fricative. Same as H *f*.

- SPELLING: *f* – *fire*, *life*, *suffer*, *off*  
*ph* – *physics*, *cipher*, *nymph*

Exceptional: *gh* finally in a few words, e.g.: *laugh* (4.53).

Note also *lieutenant* /lef'tenənt/.

**/v/**

Underlyingly voiced labio-dental fricative. Same as H *v*, but subject to De-voicing (4.10).

- SPELLING: *v* – *very*, *give*, *invite*

Exceptional: *of* /ɒv, əv/, *Stephen* (= *Steven*), *nephew* /'nefju:, -vju:/.

**/θ/**

Voiceless dental (interdental) fricative. Not found in H. Different from H *sz*, *f*, *t*, *c* (4.31-35).

- SPELLING: *th* – *thin*, *bath*, *fifth* (4.36)

**/ð/**

Underlyingly voiced dental (interdental) fricative. Not found in H. Different from H *d*, *dʒ*, *z*, *v* (4.31-35).

- SPELLING: *th* – *the, bathe, mother* (4.36)

### /s/

Voiceless alveolar fricative. Sibilant. Same as H *sz*. Subject to palatalization (4.24-30).

- SPELLING: *s* – *see, message, gas, disappear* (4.44-45)  
*c, sc* – (“soft” before *e, i, y*) *cent, Nancy, science* (4.47-49)  
*x* – *box, extra*  
*xc* (before *e, i, y*) *excited, excellent* (4.49)
- SILENT: The letter *s* is silent in a few words:
  - before a consonant: *isle* /aɪl/, *island* /'aɪlənd/, *aisle* /aɪl/, *viscount* /'vaɪkaʊnt/
  - finally: *debris* /'debri:/, *précis* /'preɪsi:/, *chamois* /'ʃæmwa:/, *fracas* /'fræka:/.

### /z/

Underlyingly voiced alveolar fricative. Sibilant. Same as H *z*, but subject to De-voicing (4.10), and Palatalization (4.24-30).

- SPELLING: *z* – *zoo, prize, buzz*  
*s* – *cheese, reason, position* (4.44-45), *dogs* (4.20)  
*ex* – (followed by stressed vowel) *example* /gz/ (4.46)
- Exceptional: *scissors, possess, dissolve, dessert; czar* /zɑ:/, *Xerox* /'zɪrɒks/.

### /ʃ/

Voiceless palato-alveolar fricative. Sibilant. Same as H *s*.

- SPELLING: *sh* – *ship, rush*  
*s* – (palatalized by *-i-* or *-u-*) *tension, sensual* (4.25)  
*x* – (palatalized by *-i-* or *-u-*) /kʃ/ *anxious, luxury* (4.25, 4.46)  
*c, sc* – (palatalized by *-i-*) *social, conscious* (4.25, 4.47)  
*t* – (palatalized by *-i-*) *action* (4.25)  
*ch* – *machine, moustache* (4.52)

Exceptional: *sure, sugar, schedule* /'ʃedju:l/ (but AmE /'skedʒəl/), *Sean* /ʃɔ:n/ (a name of Irish origin).

### /ʒ/

Underlyingly voiced palato-alveolar fricative. Sibilant. Same as H *ʒs*. In E /ʒ/ is rare, and normally only appears between vowels, as the result of the palatalization of /z/.

- SPELLING: *s* – *vision, usual* (4.24-30, 4.44-45)  
*g* – *garage, régime* (4.51)

### /h/

Voiceless glottal fricative. Same as H *h*. Only occurs initially or before a stressed vowel (4.41).

- SPELLING: *h* – *hate, behind, historical*

Exceptional: *wh* in a few words, e.g.: *who* (5.27)

- SILENT: The letter *h* is silent regularly in certain positions, e.g.: *vehicle* (4.41)
  - irregularly in a few words, e.g.: *hour* (4.43)

## S O N O R A N T S

### Nasals

/m/

Bilabial nasal. Same as H *m*.

- SPELLING: *m* – *most, hammer*.

/n/

Alveolar nasal. Practically the same as H *n*, but has no tendency to drop out before consonants (5.3). Often syllabic in unstressed position after a consonant (5.18-20).

- SPELLING: *n* – *note, manner*
- SILENT: The letter *n* is silent in final *-mn*, e.g.: *autumn, damn(ed)* /dæm(d)/

/ŋ/

Velar nasal. Same as H *n* in *munka*, but may occur in final position or before suffixes (5.4-5).

- SPELLING: *n* – *ink, banquet, hunger, tango, angry*  
*ng* – (word/morpheme-finally) *sing, singer, hanged* (5.5)

### Liquids

/l/

Liquid, with two chief allophones: an ordinary [l] (Clear-L) and a velarized [ɫ] (Dark-L). Clear-L is the same as H *l*, but Dark-L is not found in H (5.7-10). Dark-L is often syllabic in unstressed syllables (5.18-20), and subject to L-vocalization (5.9). De-voicing (5.2) applies to Clear-L only.

- SPELLING: *l* – *life, belly, salad, fill, tale, felt* (Clear/Dark L are not distinguished in spelling)
- SILENT: The letter *l* is silent in a few words, e.g.: *half* (5.10).

/r/

Palato-alveolar approximant liquid (5.11). Different from H *r*, which is flapped or rolled; E /r/ is more like a semivowel. Only occurs before vowels. Subject to De-voicing (5.2), and R-Dropping (5.14). Final *-r* is used as linking-R (5.16), and a similar /r/ may be inserted as intrusive-R (5.17). In the combinations /tr, dr/ the /r/ forms an affricate-like sound with the preceding stop (5.13).

- SPELLING: *r* – *red, very, borrow, write, central, hearing*  
*rh* – *rhythm, rhino*.
- SILENT: The letter *r* is regularly silent in BrE when NOT followed by a pronounced vowel,  
e.g.: *car, hard, cares, centre*.  
Exceptionally silent in: *iron* /'aɪən/.

## Glides

### /j/

Palatal glide. Same as H *j*. Only occurs before vowels (5.21). Alternates with /i/ before an unstressed vowel (Glide-i 5.22). Subject to De-voicing (5.2). Causes palatalization (4.24-30), and may disappear in this process. Forms part of the complex vowel /ju:/ (5.23), also in Glide-u (5.22), but is subject to Yod Dropping (5.24).

- SPELLING: *y* – (before a stressed vowel) *yes, beyond, courtyard*.  
*i* – (Glide-i) *previous, onion, Italian, medium*.  
*e* – (Glide-i) *Napoleon*  
*u, ui, eu, ew* – (when representing /ju:/) *cube, nuisance, few; annual*

Note. When the letters *y, i* stand AFTER a vowel-letter, they usually form a digraph with it, e.g.: *play, receive*. This belongs to the spelling of vowels (9.2).

### /w/

Labio-velar glide (5.25). Different from H (or E) *v*. Not found in Hungarian. Only occurs before vowels. Subject to De-voicing (5.2). When spelt *u*, /w/ alternates with /u/ before unstressed vowels (Glide-u 5.22).

- SPELLING: *w* – (before a vowel): *win, away, swore, Edward*, etc.  
*wh* – *what, wheel, overwhelming*, etc. (see 5.27)  
*u* – (in the combinations *qu, ngu, su*): *question* /'kwɛstʃən/, *acquainted* /ə'kweɪntɪd/, *banquet* /'bæŋkwɪt/, *squat* /skwɒt/, *conquest* /'kɒŋkwɛst/; *penguin* /'pɛŋgwɪn/, *language* /'læŋgwɪdʒ/; *persuade* /pə'sweɪd/, *suite* /swi:t/ etc.  
*u* – (“Glide-u”) *usual, continuing* (5.22)  
*o* – Exceptionally, /w/ is represented by *o* in a few words: *one* /wʌn/, *once* /wʌns/, *choir* /'kwɔɪə/, and in French words with the ending *-oir, -ois* e.g. *memoirs* /'memwɑ:z/, *bourgeois* /'bʊəʒwɑ:z/.

Note. When the letters *u, w* stand AFTER a vowel-letter, they usually form a digraph with it, e.g.: *round, lawn, new, fault*. This belongs to the spelling of vowels (9.2).

- SILENT:
  - *w* is regularly silent in *wr-*, e.g. *write, wrong*, etc.
  - *w* is irregularly silent in: *two* /tu:/, *answer* /'ɑ:nʒə/, *sword* /sɔ:d/, *Warwick* /'wɔ:ɪk/, *Harwich* /'hæɪɪtʃ/, *Greenwich* /'ɡri:nɪdʒ/; and in the following words, where *wh-* = /h/:  
*who* (*whom, whose*), *whole, whoop, whore*.

On silent *u* in *qu, gu*, see 4. 51.

## CHAPTER 7

### VOWELS I: ARTICULATORY CLASSIFICATION

**7.1** This and the following three chapters will deal with the vowels of English. Chapter 7 describes the articulation of vowels, while Chapter 8 will describe their behaviour: where they can occur (their distribution), and the chief rules that apply to them. Chapter 9 will describe the vowels from the point of view of spelling (or rather, reading): how the vowel-graphemes are pronounced in various positions (the letter-to-sound rules). Chapter 10 will list the vowels one by one, with their articulation and spelling, including exceptional words.

Where appropriate, suggestions will be made for teaching strategies to avoid typical Hungarian mistakes. Let us again remind the reader that our treatment is simplified and practically-oriented. We felt it our duty to be selective.

**7.2** The articulation of vowels, like that of consonants, can be described in terms of place and manner. These categories, however, are less clear-cut for vowels than for consonants. We will often rely on impressionistic judgments as to where and how a vowel is produced, rather than giving its exact location in the mouth. Often we shall compare an English vowel to the nearest Hungarian vowel and use that as a point of reference.

In the present chapter, we first describe Manner of Articulation (7.3-7), then Place of Articulation (7.8-11), then deal with the three classes of full vowels: Short Vowels, Long Vowels, and Diphthongs.

Finally we discuss the articulation of the weak vowels /ə i u/.

### MANNER OF ARTICULATION OF VOWELS

**7.3 Monophthongs and Diphthongs.** — English vowels fall into two big groups: monophthongs and diphthongs.

**Monophthongs** (also called “simple” or “pure” vowels) are characterized by a stable articulation: the speech organs maintain the same position throughout the duration of the vowel. To put it simply: the end of a monophthong is the same as its beginning. Monophthongs are transcribed with one symbol (plus a possible length mark), e.g. *ten* /e/, *bag* /æ/,



*heart* /ɑː/, *call* /ɔː/. (The name “monophthong” /'mɒnəfθɒŋ/ is composed of Greek *mono-* “one, single” and *phthong(os)* “voice, sound”.)

All Hungarian vowels are monophthongs, e.g. *nap* /ɒ/, *kincs* /i/, *szép* /eː/, *gyón* /oː/.

**7.4 Diphthongs** are vowels during which the speech organs change their position: the end of a diphthong is different from its beginning. Diphthongs are transcribed with two symbols, e.g. *time* /aɪ/, *most* /oʊ/, *jury* /ʊə/, *main* /eɪ/. The name “diphthong” /'dɪfθɒŋ/ is composed of Greek *di-* “twice, double” and *phthong(os)*: this reflects the traditional view that a diphthong is a combination of two vowels in one syllable. Since a diphthong always has the value of one syllable, it is better to consider it as one vowel rather than a combination of two. Some authors analyse diphthongs as consisting of a vowel plus a glide.

In English it is even possible for a vowel to have three components (a diphthong plus schwa), as in the first syllable of *virus* /'vɪərəs/. There are two such “triphthongs”: /aɪə/ and /aʊə/, but in normal speech they are often simplified to a monophthong or diphthong (8.27).

Hungarian has no diphthongs, except perhaps in a few words like *augusztus*.

**7.5 Long and short vowels.** — English vowels may also be classified into short and long. We call long vowels those that are marked with a colon /:/ in transcription, e.g. *more* /ɔː/, *demand* /ɑː/, *flu* /uː/. Diphthongs also count as long vowels. Short vowels are those that are neither diphthongs, nor have a colon in transcription. There are six full vowels in English which we classify as “short”: /ɪ/ *kit*, /ʊ/ *put*, /e/ *ten*, /æ/ *bag*, /ʌ/ *cup*, /ɒ/ *lot*. (Weak vowels are, of course, also short.)

Length is a feature of Hungarian vowels as well, but its operation is different from that in English. We shall treat vowel length in more detail in 7.19. Remember, however, that in English actual phonetic length greatly varies, depending on the following sound.

**7.6 Full and weak vowels.** — It is characteristic of English that the vowels of unstressed syllables usually become weak: their articulation is short, neutral, indeterminate, usually schwa (/ə/), weak /i/, /ɪ/, or weak /u/, /ʊ/. Weak vowels are also called “reduced” vowels. Examples for weak vowels (for details see 8.28):

*ago* /ə/, *method* /ə/, *matter* /ə/

*create* /i/, *pocket* /ɪ/, *bargain* /ə/ or /ɪ/, *lady* /i/

*evaluation* /-ju-/ , *fabulous* /-jʊ-/ , *Portugal* /'pɔːtʃʊgl/

All other vowels — including /ɪ/ and /ʊ/ when they are stressed, as in *kit*, *put* — are full vowels. Note that /ɪ/ and /ʊ/ play a double role in English: they act as weak vowels when they occur in an unstressed syllable (*pocket* /'pɒkɪt/, *fabulous* /'fæbjʊləs/), but they act as full vowels when they occur in a stressed syllable, e.g. *kit* /kɪt/, *convince* /kən'vɪns/, *push* /pʊʃ/, *butcher* /'bʊtʃə/. Phonetically, weak /ɪ ʊ/ are the same sounds as full /ɪ ʊ/, this is why they appear in brackets in the table below (cf. 8.31-33).

**7.7** The following table sums up the manner of articulation of English vowels.

		Monophthongs ("pure" vowels)	Diphthongs
<b>Full vowels</b>	<b>Long</b>	i: u: ɑ: ɔ: ɜ:	eɪ aɪ ɔɪ oʊ aʊ ɪə eə ʊə
	<b>Short</b>	ɪ e æ ʌ ɒ ʊ	– –
<b>Weak ("reduced") vowels</b>		ə ɪ (ɪ) ʊ (ʊ)	– –

### PLACE OF ARTICULATION OF VOWELS

**7.8 Tongue position.** — In describing the place of articulation of a vowel, the most important feature is the position of the tongue. The tongue can move in two directions:

- Horizontally: front (palatal), central, back (velar) position.
- Vertically: close (high), half-close, half-open, open (low) position.

Note. Hungarian terminology is different from English. The equivalences are:

front	=	palatal	=	<i>elülső</i>	=	"magas"
back	=	velar	=	<i>hátsó</i>	=	"mély"
close	=	high	=	<i>zárt</i>	=	<i>felső nyelvéllású</i>
		mid	=	<i>középzárt</i>	=	<i>középső nyelvéllású</i>
open	=	low	=	<i>nyílt</i>	=	<i>alsó nyelvéllású</i>

TABLE 7.8. PLACE OF ARTICULATION OF ENGLISH MONOPHTHONGS

	<i>Front</i>	<i>Central</i>	<i>Back</i>
<i>Close</i>	/i:/ seem	—	/u:/ moon
<i>Half-close</i>	/ɪ/ big	/ə/ <u>a</u> way /ɜ:/ turn	/ʊ/ put
<i>Half-open</i>	/e/ ten		/ɔ:/ port
<i>Open</i>	/æ/ jam	/ʌ/ up	/ɒ/ dog /ɑ:/ park

If you pronounce /i: – ɪ – e – æ/ or /u: – ʊ – ɔ: – ɑ:/ you will feel your tongue travelling vertically downwards and your mouth becoming more and more open. If you pronounce /i: – u:/ or /e – ɜ: – ɔ:/ or /æ – ʌ – ɑ:/ you will feel your tongue travelling horizontally towards the back of your mouth.

**7.9 Lip position.** — A secondary place of articulation for vowels is the lips: these may be rounded, as for /u:/, or unrounded, as for /i:/. In English, front and central vowels are unrounded; back vowels are more or less rounded, with the exception of /ɑ:/ *park*. This vowel is a back, open, unrounded vowel; this last feature helps to distinguish it from /ɒ/ *dog*, which is a back, open, rounded vowel. These two vowels (as seen in Table 7.8) have the same place of articulation.

In Hungarian, lip position is a more important distinctive feature, for it distinguishes *í* from *û*, *i* from *ü*, and *é* from *ő*.

**7.10 Hungarian vowels.** — For the sake of comparison, let us tabulate the vowels of Standard Budapest Hungarian in the same framework:

TABLE 7.10. HUNGARIAN VOWELS

	<i>Front</i> (=“ <i>magas</i> ”)	<i>Central</i>	<i>Back</i> (=“ <i>mély</i> ”)
<i>Close</i>	/i/ nincs /i:/ híd /y/ ül /y:/ fűt	—	/u/ csuk /u:/ kút
<i>Half-close</i>	/e:/ kép /ø/ tör /ø:/ sőt	—	/o/ rozs /o:/ lóg
<i>Half-open</i>	/ɛ/ vet	—	—
<i>Open</i>	—	/a:/ láb	/ɒ/ csak

**7.11 Summary of the Places of Articulation.** — In Table 7.8 we showed the place of articulation of monophthongs; now it is time to complete the table with the inclusion of diphthongs. These are not so easy to accommodate in the table since their end-point is different from their starting-point. We shall classify them according to their first element, since in English the first element of diphthongs is always more important than the second (the glide). It might be interesting to compare the table below with the Manner-of-Articulation classification in Table 7.7.

TABLE 7.11. PLACE OF ARTICULATION OF ALL ENGLISH VOWELS  
(Diphthongs are represented according to their starting-point)

	<i>Front</i>	<i>Central</i>	<i>Back</i>
<i>Close</i>	/i:/ seem	—	/u:/ moon
<i>Half-close</i>	/ɪ/ big /ɪə/ beer	/ə/ a <u>way</u> /ɜ:/ turn	/ʊ/ put /ʊə/ jury /oʊ/ home
<i>Half-open</i>	/e/ ten /eɪ/ name /eə/ care		/ɔ:/ port /ɔɪ/ join
<i>Open</i>	/æ/ jam	/ʌ/ up /aɪ/ five /aʊ/ town	/ɒ/ dog /ɑ:/ park

Note. The weak vowels /ɪ u/ have the same place of articulation as /i: u:/.

## SHORT VOWELS

### The vowels /ɪ/ and /ʊ/

**7.12** The English short /ɪ ʊ/ are not identical with H short *i, u*, because these English sounds are half-close, while the Hungarian ones are close. In other words, E /ɪ ʊ/ are more open than H *i, u*; to the Hungarian ear E *sin* /sɪn/ is almost like H *szén*, and E *took* /tʊk/ is almost like H *tok*.

Another difference is that E /ɪ ʊ/ are produced with lax articulation, while the corresponding Hungarian sounds are tense (as are E /i: u:/). This laxness of /ɪ ʊ/ results in a more “central” tongue position: the tongue comes quite near to the /ə/ position. It is this centralization that gives /ɪ ʊ/ their slightly indeterminate character.

Note. /ɪ ʊ/ are also used as weak vowels in unstressed syllables before a consonant, e.g. *music, depend; fabulous, Portugal*. On these see 8.31-33.

**7.13** Hungarians usually make the mistake of believing that the main difference between /i:/ and /ɪ/ (*seen – sin*), or /u:/ and /ʊ/ (*pool – pull*), is length. This is not true. Length in English is not a stable reliable feature, since “long” vowels may get shortened (4.13), and the “short” vowels are pronounced fairly long when stressed and followed by a voiced consonant. The chief distinctive feature between *seen-sin, pool-pull* (and especially between *beat-bit, Luke-look*, where the voiceless consonant shortens the “long” vowel) is the difference in quality,

namely that /ɪ ʊ/ are opener and laxer than /i: u:/ or H *i, u*. Vowel quality is different in all the word pairs below:

<u>Hung. – English</u>	<u>Eng. “long” – Eng. “short”</u>
<i>szid</i> /i/ – Sid /ɪ/	seen /i:/ – sin /ɪ/
<i>hisz</i> /i/ – hiss /ɪ/	beat /i(:)/ – bit /ɪ/
<i>luk</i> /u/ – look /ʊ/	pool /u:/ – pull /ʊ/
<i>fut</i> /u/ – foot /ʊ/	Luke /u(:)/ – look /ʊ/

The English ear interprets H short *i, u* as /i:/ and /u:/ because they are close and uncanceled. Hungarian *szid* sounds like *seed* to the English ear, not *Sid*, and H *luk* sounds like *Luke*, not *look*. The English ear does not judge by the length of the vowel, but by the quality of its articulation.

It may help learners if you describe E /ɪ/ and /ʊ/ as “imperfect approximations” of H *i, u*. You may also say that E /ɪ/ is half-way between H *i* and *é*, and E /ʊ/ is half-way between H *u* and *o*. The transcription symbols /ɪ ʊ/ are good because they remind the learner of the un-Hungarian quality of these vowels.

## The vowels /e/ and /æ/

**7.14** English /e/ and /æ/ are very hard for Hungarians to produce and distinguish. This is one of the major difficulties of teaching English pronunciation to Hungarians.

E. /e/, as in *ten*, is different from H *e* and more similar to H *é* (apart from its length, of course). The English name *Ken* /ken/ is half-way between H *ken* and *kén*. In fact E /e/ is like the pronunciation of the letter *e* in most foreign languages (e.g. German *sechs*, Italian *nesso*). The tongue position is half-open, slightly raised towards the half-close position. Note that some books use the symbol /ɛ/ instead of /e/.

E. /æ/, as in *bag*, is almost fully open. Thus it is much opener than H *e* in *dzsem* (compare Tables 7.8 and 7.10). English *sad* /sæd/ is more similar to H *szád* than to *szed!* The symbol /æ/ aims at expressing this: it shows that the sound has /a/-like and /e/-like qualities at the same time. Note also that /æ/ tends to be much longer than /e/ (see the discussion in 3.20).

Note. Some people transcribe the *bag*-vowel as /ae/. This practice is misleading and should not be followed, see 3.20.

**7.15** As pointed out in 2.21, Hungarians feel both /e/ and /æ/ to be “variants of the same sound”. They mispronounce — and misperceive — both as a single *e*-type sound. You must point out that in English these sounds distinguish the meanings of words (i.e. they are different phonemes). Minimal pairs are the best method to bring this home to the students. For example:

<u>/e/</u>	<u>/æ/</u>	<u>/e/</u>	<u>/æ/</u>	<u>/e/</u>	<u>/æ/</u>
send	– sand	head	– had	mention	– mansion
shell	– shall	fellow	– fallow	phonetics	– fanatics
bed	– bad	said	– sad	expensive	– expansive
merry	– marry	sex	– sacks	together	– to gather

You should call learners' attention to the regular difference in spelling: while /æ/ is always spelt with a single *a*, /e/ is spelt *e* or *ea*.

Tell learners that /e/ is a short variety of H *é*, e.g. E *men* has the “same vowel as H *mén* but very short”. On the other hand, you may say that /æ/ is “nothing but a H *á* with *e*-like colouring” (witness the spelling!), and not a kind of *e*. The mouth is as fully open for /æ/ as it is for H *á*.

## The vowels /ʌ/ and /ɒ/

**7.16** English /ʌ/ and /ɒ/ are not so dangerously similar for the Hungarian ear (or mouth). However, in this case other factors like spelling may confuse the learner.

The sound /ʌ/, as in *cup*, is similar to a short H *á* (which may be symbolized as /a/). Such a short *a* is not a standard sound in Hungarian, but is widely used by Hungarians when pronouncing foreign names, like /ʒakk/ for French *Jacques*. Admittedly, H *á* (and *a*) are more open than E /ʌ/, but this is negligible in this case since it can cause no interference. Thus E *sunk* /sʌŋk/ is like H *szánk* pronounced with a short vowel.

The sound /ɒ/, as in *lot*, is similar to H *a* as in *csak*, since both are back, open, rounded vowels. The only difference is that E /ɒ/ is more rounded, which makes it somewhat similar to H *o*. For example, E *cost* /kɒst/ is almost like H *kaszt*, and — to a lesser degree — like H *koszt*. Gimson's symbol /ɒ/ is meant to evoke “o” and “ɔ” at the same time. Note also that E /ɒ/ tends to be fairly long before voiced consonants, e.g. *job*, *dog*, *bomb*.

**7.17** Thus /ʌ/ and /ɒ/ are quite well distinguishable phonetically: the first is like H *á*, the second like H *a*. Still, Hungarians tend to confuse them, but this is largely due to nonphonetic factors.

**a)** The “foreign *a*” attitude. — Most Hungarians, at least above the age of 12, are aware that the sound of H *csak*, *kalap* is not used in foreign languages, but must be replaced by *á*. They know that French *Jacques* is not “zsakk” but “zsákk” or German *Salz* (‘salt’) is not “zalc” but “zálc”. Consequently they wish to pronounce E *sock*, *lot* /sɒk lɒt/ as “szák, lát” because this sounds more properly foreign to them than “szak, lat” — though the latter would be closer to the actual English vowel sound! Point out to your students that, contrary to expectations, English does have a sound like H *a*.

**b)** The confusing effect of spelling. — The sound /ɒ/ is normally spelt with *o*, e.g. *lot*, *modern*, *opera*, or *a* (after /w/), e.g. *watch*, *quality*, *swan*. The sound /ʌ/ is normally spelt

with *u*, e.g. *cup*, *funny*, *public*, *hurry*. Unfortunately there are a number of words in which the letter *o* is pronounced /ʌ/: these are called LOVE-words, e.g. *love*, *comfort*, *money* (listed in 9.32) This easily confuses the learner, who concludes that *o* is pronounced as “some *á*-like sound” in such words. The teacher must understand (and somehow teach) that the LOVE-words are a well-defined minority, a set of about 50 exceptions which must be memorized. Practically all other words with short *o* have regularly /ɒ/, and there are thousands of them.

c) The interference of American. — In AmE /ɒ/ is replaced by a longish /ɑ:/ in most positions. For example, AmE has *bottom* /'bɑ:dəm/, *everybody* /'evrəbɑ:di/, *common* /'kɑ:mən/, *John* /dʒɑ:n/. As learners hear a good deal of AmE, this may interfere with their pronunciation. (Needless to say, this — like so much else in this book — is a problem only if you teach British pronunciation.) Point out to learners that AmE and BrE differ in this point, and that it is better to stick to one accent consistently. A pronunciation like /pɑ:t/ means *pot* to speakers of American but *part* to speakers of British English!

**7.18** For the practical purposes of teaching, E /ʌ/ is like H *á* (but short), while /ɒ/ is like H *a*. Minimal pairs are useful in this case too, not so much to distinguish the two sounds (since their difference is easy to hear and produce) but to demonstrate which words have /ʌ/ and which have /ɒ/. This, as we saw in 1.9, is a question of lexical knowledge. For example:

/ʌ/ – /ɒ/	/ʌ/ – /ɒ/
l <u>u</u> ck – l <u>o</u> ck	col <u>o</u> ur – col <u>l</u> ar
n <u>u</u> t – n <u>o</u> t	d <u>o</u> ne – d <u>o</u> n
s <u>u</u> ng – s <u>o</u> ng	w <u>o</u> nder – w <u>a</u> nder
d <u>u</u> ll – d <u>o</u> ll	g <u>u</u> n – g <u>o</u> ne
m <u>u</u> ddle – m <u>o</u> del	c <u>u</u> ff – c <u>o</u> ugh

The following table sets out the graphemes that are pronounced /ʌ/ or /ɒ/ (for more detail see 9.30-31).

TABLE 7.18. /ʌ/ OR /ɒ/?

Letter	Pronounced as	
	/ʌ/	/ɒ/
<b>a</b>	NEVER	watch, what, quality, squat <i>(after /w/)</i>
<b>o</b>	l <u>o</u> ve, c <u>o</u> me, am <u>o</u> ng, col <u>o</u> ur <i>(50 words)</i>	d <u>o</u> g, b <u>o</u> ttom, op <u>o</u> ra, s <u>o</u> ck <i>(regular)</i>
<b>u</b>	up, funny, cut, hurry, public <i>(regular)</i>	NEVER
<b>ou</b>	double, country <i>(12 words)</i>	NEVER
<b>oo</b>	blood, flood <i>(2 words)</i>	NEVER

Students occasionally confuse /ʌ/ and /æ/, especially in perception, taking *luck* to be *lack* or vice versa. This contrast may be practised too (*butter* – *batter*, *funny* – *Fanny*, etc.), but on the whole it does not cause too much interference.

In older BrE, the /ʌ/ had an /ə/-like colouring (as it still does in AmE): *much* sounded like /mætʃ/, *worry* like /'wəri/. This is why the older generations on the continent replaced it by *ö*, e.g. *bluff* became H *blöff*, *dumper* became H *dömper*, etc.

## LONG VOWELS

**7.19** There are two types of long vowel in English: long monophthongs (or “pure” long vowels), and diphthongs. In the following sections we shall deal with the long monophthongs, and we will simply refer to them as “long vowels”. They are the ones that have a colon in transcription:

/i:/	seem	/ɑ:/	park, ask, calm
/u:/	moon, cube	/ɔ:/	port, call, sauce
		/ɜ:/	turn

The function of length is different in English and Hungarian. Hungarian has pairs of vowels that are articulated more or less identically and differ only in length, e.g. /i/ – /i:/ *mivelünk* – *mívelünk*, or /o/ – /o:/ *sokat* – *sókat*. In such Hungarian pairs the length difference is phonemic (2.4), since it alone is able to distinguish one word from another.

**7.20.** In English there are no such short-long pairs: besides the difference in quantity (length), there is always an important difference in quality (tongue position). The only exception is the pair /ɜ:/ – /ə/; these two have the same tongue position, but in their case it is the full–weak difference (7.6) that justifies a distinction beyond pure length; namely, /ə/ appears only in unstressed syllables, /ɜ:/ only in stressed ones.

Let us list the five long vowels with their most similar short counterparts:

<i>Short vowel</i>	/ɪ/ sin	/ʊ/ pull	/ɒ/ pot	/ʌ/ hum	/ə/ an
<i>Long vowel</i>	/i:/ seen	/u:/ pool	/ɔ:/ port	/ɑ:/ harm	/ɜ:/ earn

The pairs above (except for /ə/ and /ɜ:/) behave somewhat like H *a-á* or *e-é*, which also differ in quality as well as length.

**7.21 Length in other transcription systems.** — Textbooks and dictionaries using a “very broad” transcription symbolize the pairs above as the short and long version of the same vowel (though not for /ʌ/-/ɑ:/). That is, they use the same symbol with and without a colon:



“VERY BROAD” TRANSCRIPTION (shows only length difference)

<i>Short vowel</i>	/ɪ/ sin	/ʊ/ pull	/ɔ/ pot	(/ʌ/ hum)	/ə/ an
<i>Long vowel</i>	/i:/ seen	/u:/ pool	/ɔ:/ port	(/ɑ:/ harm)	/ə:/ earn

This is a logical simplification, but dangerous for Hungarian learners, who will readily assume that *sin*–*seen* etc. differ only in length, just like H *i*–*i*, etc.

Another version of the IPA, which we might call “very narrow”, does just the opposite: it uses no colons, and distinguishes the vowels only by means of different symbols:

“VERY NARROW” TRANSCRIPTION (shows only quality difference)

<i>Short vowel</i>	/ɪ/ sin	/ʊ/ pull	/ɒ/ pot	/ʌ/ hum	/ə/ an
<i>Long vowel</i>	/i/ seen	/u/ pool	/ɔ/ port	/ɑ/ harm	/ɜ/ earn

This system draws the learner’s attention to the quality differences and ignores length as a subphonemic difference. It is linguistically correct, but the symbols are easy to confuse.

Note. Observe that symbols \*/ɪ:/ or \*/ʊ:/ do NOT exist in any transcription system, since they would contradict all principles!

**7.22** Gimson’s system, as you can see, is a compromise. It accepts the important principle that, because of the quality difference, the symbol for a short vowel should never be the same as that for a long vowel, i.e. there should be no real short–long vowel-pairs. On the other hand, Gimson’s system sticks to the use of the colon (besides the difference in symbol!) to increase the visual distinction between the two members of each pair.

Some books use a mixture of the above systems. For example, Országh’s “Concise English-Hungarian Dictionary” (Kéziszótár, 10th edition, 1981) used /ɪ - i:/, /ʊ - u:/, and /ʌ - ɑ:/ in accordance with Gimson, but /ɔ - ɔ:/ and /ə - ə:/ in accordance with Jones.

Other books (mainly those for native users) ignore the IPA and use a different system, in which there are marks (“accents”) above the vowel-letters to express length and quality. Examples from one such “length-mark” system:

“LENGTH-MARK” TRANSCRIPTION (uses accent marks to show difference)

<i>Short vowel</i>	[ ǐ ] sin	[ ǒǒ ] pull	[ ǒ ] pot	[ ǔ ] hum	[ uh ] an
<i>Long vowel</i>	[ ē ] seen	[ ǒǒ ] pool	[ ô ] port	[ â ] harm	[ û ] earn

Marking pronunciation in this way will be discussed in [9.5](#).

**7.23 Shortened (“Clipped”) Long Vowels.** — As explained in [4.13](#), all long vowels, whether monophthongs or diphthongs, are shortened before voiceless consonants by the rule of **Pre-Voiceless Vowel Shortening**. This shortening (also called “clipping”) does not affect the quality (place or manner of articulation) of the vowel, just its physical length. Vowel-length in English is not a stable feature as in Hungarian; English long vowels should properly

be called “potentially long” vowels. They are underlyingly long, but may get shortened in actual pronunciation. The Gimson-style IPA transcription does not indicate shortening on the ground that it is allophonic, i.e. positionally conditioned and automatic. The colon / : / in our transcription is thus not a real length mark, but a sign of the vowel’s tendency (or “potentiality”) to be long. Compare this with a more phonetic transcription, shown in square brackets, where the colon appears only when the vowel is actually pronounced as long:

<i>Vowel phoneme</i>	<i>Actual Pronunciation</i>	
	<u><i>Fully long</i></u>	<u><i>Shortened</i></u>
/i:/	[i:] be, seed, easy	[i] beat, week, piece
/ɜ:/	[ɜ:] prefer, word	[ɜ] work, first, hurt
/eɪ/	[e:ɪ] play, made, lazy	[eɪ] place, make, waiting
/aʊ/	[a:ʊ] now, town, loud	[aʊ] out, mouse, counting

TABLE 7.23. FULLY LONG, SHORTENED LONG, AND SHORT VOWELS

“Long” vowels		Short vowels
<i>Fully long</i>	<i>Shortened</i>	<i>Short</i>
/i:/ seen	/i:/ = [i] seek	/ɪ/ sin, sick
/u:/ pool	/u:/ = [u] Luke	/ʊ/ pull, look
/ɔ:/ born	/ɔ:/ = [ɔ] port	/ɒ/ bomb, pot
/ɑ:/ harm	/ɑ:/ = [ɑ] park	/ʌ/ sum, luck
/ɜ:/ earn	/ɜ:/ = [ɜ] hurt	/ə/* ago, at
<i>identical in quality</i>		
<i>identical in length (all short)</i>		

\* Note. /ə/ is short, but its category is “weak vowel” since it is always unstressed.

Before voiceless consonants the long vowels become as short as the “real” short ones, e.g. *seek* /si:k/ is pronounced as short as *sick* /sɪk/ — but it still sounds a different vowel! It is vowel quality, not length, that prevents the two words from becoming homophonous. The shortening also takes place if there is a sonorant between the vowel and the voiceless consonant, e.g. *dance* /dɑ:ns/ has a shortened vowel because of the /s/, and the sonorant /n/ does not block this process. In *pens* /penz/ the vowel and the /n/ are longer than in *pence* /pens/. The glottalization of voiceless consonants (4.14) is also a feature that contributes to the shortening of the preceding vowel.

Diphthongs undergo shortening in the same way as “pure” long vowels, e.g. *mate* has a shorter /eɪ/ than *made*.

## The vowels /i:/ and /u:/

**7.24** The vowels /i:/ and /u:/ may be similar to H *í, ú*. They also have a more modern (and more colloquial) pronunciation: they may be slightly diphthongal. Thus /i:/ may be pronounced [ɪi], e.g. *see* [sɪi], which is something like H *szíj*. Even more frequent is the diphthongization of /u:/ into [ɔu] or [ɔw], where the tongue moves from half-close to close position, and the lip-rounding increases during the vowel. For example, *Sue* may be [sɔu, sɔw] — or, of course, more conservatively [su:] (= H *szú*). Because most speakers today pronounce /i:/ and /u:/ as slight diphthongs, some authors call these only “relatively pure” vowels.

Hungarians generally pronounce H *í, ú* for E /i:, u:/. This is quite acceptable. In perception, however, Hungarians easily confuse /i:, u:/ (especially when shortened) with /ɪ ʊ/, for which see [7.13](#).

## The vowel /ɔ:/

**7.25** The vowel /ɔ:/, as in *port, call, sauce*, is very similar to H *ó*. The difference is that E /ɔ:/ is more open: its tongue position is actually that of H short *o*. If you pronounce H *fok* and hold out the vowel: *fook* (not *fók!*), you will get E *fork* /fɔ:k/. In practice H *ó* is an acceptable substitute. The real danger is not in mispronouncing /ɔ:/ but in confusing it with /oʊ/, e.g. *hall – hole*, for which see [7.33](#).

The sound /ɔ:/ has an unusually wide variety of spellings in RP, because three sounds that were originally different have fallen together and are now pronounced identically. They are the following (for the meaning of tense/lax, cf. [8.1](#)):

/ɔ:/<sup>1</sup>, R-less lax vowel (see [8.14](#)), spelt *a* plus something (but not *-r*), or *ough*:

– *au, aw, augh, ough*, e.g. *Paul, law, daughter, thought*.

– *a* plus *-l-* (plus cons.), e.g. *fall, bald, talk, Gibraltar*.

/ɔ:/<sup>2</sup>, R-influenced lax vowel, spelt *o, a*, plus *-r* plus cons. or nothing,

e.g. *lord, horse, war, quarter*.

/ɔ:/<sup>3</sup>, R-influenced tense vowel, spelt *o, oa, oo, ou*, plus *-r-*,

e.g. *more, story, soar, door, source*.

**Note 1.** In AmE /ɔ:/<sup>1</sup> is pronounced like RP /ɑ:/, e.g. *call* /kɑ:l/, *daughter* /'dɑ:dəɹ/. Some AmE speakers distinguish /ɔ:/<sup>2</sup> from /ɔ:/<sup>3</sup>, thus for them the vowel of *lord* /lɔ:rd/ is different from *more* /mɔ:r/; others pronounce these the same.

**Note 2.** The word *drawer* is /drɔ:/.

## The vowel /ɑ:/

**7.26** The vowel /ɑ:/ as in *park, ask, calm*, is different from H *á* in *pánt, ág*, because E /ɑ:/ is a back vowel while H *á* is central (see [7.10](#)). The quality of E /ɑ:/ is therefore more similar

to H *a* in *csak, kalap*; however, H *a* is lip-rounded while E /ɑ:/ is not. Still, the best approximation is to say that E /ɑ:/ is like a lengthened H *a*. If you say *Megvártuk az A-t* ('We waited for bus A'), the last word, *A-t*, will sound fairly similar to E *art* /ɑ:t/ — certainly more similar than H *át* would be. The IPA symbol [ɑ] rather than [a] aims at expressing this difference. Compare:

H <i>át</i>	[a:t]	open central unrounded vowel
E <i>art</i>	[ɑ:t]	open back unrounded vowel
H <i>A-t</i>	[ɔ:t]	open back rounded vowel

Note also that /ʌ – ɑ:/, as in *shunt – shan't*, are not simply a long–short pair, but differ considerably in quality, somewhat like H *bánt – lant*. We may say that E *shunt* is like a shortened H *bánt*, while E *shan't* is like a lengthened H *lant*.

The sound /ɑ:/ appears in two groups of words, whose sounds were originally different but have fallen together in RP, partly assisted by R-dropping. They are:

/ɑ:/<sup>1</sup>, R-less lax vowel (see 8.14), spelt *a* (not followed by *-r*),

e.g. *ask, dance, example, calm, drama, father*.

/ɑ:/<sup>2</sup>, R-influenced lax vowel, spelt *a* (rarely *e, ea*) plus *-r* plus cons. or nothing,

e.g. *hard, car, pharmacy, cigar, sergeant, heart*.

Note. In AmE /ɑ:/<sup>2</sup> is like that in RP, e.g. *hard* /hard/, *sergeant* /'sɜ:dʒənt/; but /ɑ:/<sup>1</sup> is mostly pronounced as /æ/, e.g. *ask* /æsk/, *dance* /dæns/ (see 8.14).

## The vowel /ɜ:/

**7.27** The vowel /ɜ:/, as in *hurt, term, girl*, is a half-open, central, unrounded, potentially long vowel. It is really a lengthened /ə/. Some older works transcribe it as /ə:/, but it is better to reserve the schwa-symbol /ə/ for unstressed syllables. The vowel /ɜ:/ typically occurs in stressed syllables.

/ɜ:/ does not occur in any Hungarian word, but is used by Hungarians when hesitating or looking for the next word, e.g. *és...ööö...amikor...* The hesitating sound is represented in Hungarian spelling by *ööö*, in English by *er*: *And...er...when...* /ænd ɜ: wen/. The Hungarian ear finds short *ö* the nearest substitute for /ɜ:/ — however, H *ö* is lip-rounded, while E /ɜ:/ is not. Although all Hungarians can hesitate, many find it difficult to actually employ this sound as a regular phoneme, a proper sound segment.

The vowel /ɜ:/ is always followed by *r* in spelling, but this *r* is always silent (*her* /hɜ:/, *hurt* /hɜ:t/, *preferred* /prɪ'fɜ:d/), except when sounded as linking-R before a suffix or another word: *preferring* /prɪ'fɜ:rɪŋ/, *stir it* /'stɜ:r ɪt/. Most learners find it easier to produce /ɜ:/ if they pronounce a slight /r/ after it, as is done in AmE, e.g. *hurt* /hɜrt/. Though this is not correct from a strictly RP point of view, it may be accepted as it causes no interference.

Note. The only word where /ɜ:/ occurs without *r* in the spelling is *colonel* /'kɜ:nl/.

## DIPHTHONGS

**7.28** As pointed out in 7.4, during the production of a diphthong the tongue makes some movement. If this movement is made “vertically” upwards, towards the roof of the mouth, then the sound is a closing diphthong. If the tongue moves from the front or back of the mouth towards a central position (that is, towards /ə/), then the sound is a centring diphthong. Closing diphthongs end in /ɪ/ or /ʊ/, centring diphthongs end in /ə/.

Closing diphthongs can be further classified into “narrow” and “wide”. A diphthong is **narrow** if there is little space between its starting-point and end-point, i.e. if the tongue travels only a short distance during the sound (e.g. /eɪ/); a diphthong is **wide** if this distance is large (e.g. /aɪ/). Centring diphthongs may be regarded as narrow for our purposes. The diphthongs of English are the following:

TABLE 7.28. DIPHTHONGS

	Closing Diphthongs		Centring Dipth's (end in /-ə/)
	fronting (end in /-ɪ/)	backing (end in /-ʊ/)	
Narrow	/eɪ/ name	/oʊ/ home	/ɪə/ here /eə/ care /ʊə/ poor
Wide	/aɪ/ five /ɔɪ/ join	/aʊ/ town	—

English is very rich in diphthongs. As a general observation we may say that the wide diphthongs are easier for Hungarians to pronounce; narrow diphthongs are difficult and tend to be replaced by monophthongs in the speech of Hungarians. For example, /aɪ/ is easy, but /eɪ/ is difficult. Remember that /i:/, u:/ are often pronounced in English as “very narrow” diphthongs, as discussed in 7.24.

Diphthongs count as long vowels. They are shortened before voiceless consonants like all long vowels (7.23).

**7.29 Diphthong and digraph.** — In English we must distinguish diphthongs from digraphs. A **digraph** is a combination of two letters to express a single sound, e.g. E *sh* in *ship*, *ow* in *town*, or H *ny* in *lány*, or German *oe* in *Goethe*. It is a grapheme consisting of two letters. English uses many vowel-digraphs, but they do not necessarily represent diphthongs (*great* /eɪ/ but *head* /e/), and vice versa: a single vowel-letter is not necessarily pronounced as a monophthong (*mad* /æ/ but *made* /eɪ/). All possibilities exist, as the following examples show:

Spelling	Pronunciation	
	Monophthong	Diphthong
Single vowel-letter	it, mad, much, very, rule, recent, story	made, go, fine, typist, parents, jury, serious
Vowel-digraph	head, trouble, look, sauce, keep, board	great, house, load, tourist, fairy, clear

### The wide diphthongs: /aɪ aʊ ɔɪ/

**7.30** The wide diphthongs are not really problematic for Hungarians, and we shall only treat them in passing.

The vowel /aɪ/, as in *five, cry*, is the same as H *áj/ály* in *háj, fájt, mályva*.

The vowel /aʊ/, as in *town, out*, is different from H *au* in *autó, fauna*, because E /aʊ/ starts from the same point as E /aɪ/, that is, the first component is a sound like H *á* and not H *a*. For example, E *round* /raʊnd/ is similar to H *ráun*, and *owl* /aʊl/ sounds like the end of H *kutyául*. With younger English speakers the starting point of /aʊ/ is even more fronted, as far as /æ/, so that *bound* /baʊnd/ becomes [bæʊnd], which sounds quite similar to *band*; in fact *loud* and *lad, couch* and *catch* sound quite similar to the untrained Hungarian ear. At any rate, tell students to begin /aʊ/ with H *á*; point out that the starting point of the vowel in *down* is the same as for *dine*, but very different from *dance* /ɑː/.

The vowel /ɔɪ/, as in *join, boy*, is similar to H *oj/oly* in *rojt, folyvást, boly*.

### The narrow closing diphthongs: /eɪ oʊ/

**7.31** The two narrow closing diphthongs of English, /eɪ/ and /oʊ/, are very difficult for Hungarian learners.

The vowel /eɪ/, as in *name, stay*, is the same as H *éj/ély* in *kéj, veszély, mélység*. The problem is that in Hungarian this sound is rare, especially before consonants. Hungarians therefore replace /eɪ/ by *é*, which is a long monophthong (phonetically [e:]), e.g. *cape* becomes “*kép*”, *paint* “*pént*”, *great* “*grét*”; also — though less often — in final position, e.g. *grey* “*gré*”, *display* “*diszplé*”.

Tell learners not to “swallow” the second half of the diphthong. Refer to the transcription, which — in this case — is very helpful, since it expresses visually that this vowel has a second element /ɪ/. It is also useful to contrast /eɪ/ with /e/ in minimal pairs, e.g. *mate* – *met*, *waste* – *west*, *later* – *letter*.

**Note.** We must not object to *bébi, lézer, szpré, plébek* when used in Hungarian speech, since that conforms to the requirements of Hungarian phonology. See our note to [4.18](#).

**7.32** The vowel /oʊ/, as in *go*, *low*, begins with [o] (= H *ó*) in most varieties of English (including AmE), and glides towards /ʊ/, a half-close, fairly back end-point. The second half of the diphthong is slightly rounded (not as much as H *u*). E *low* sounds like the beginning of H *lóugrás*. The spelling, which for this sound is always *o* or some combination of it (*o*, *oa*, *ou*, *ow*), also seems to justify an /oʊ/-like pronunciation.

In RP, however, this vowel begins with [ə] (or [ɜ]), so that *go* is pronounced [gəʊ]; it starts much like *girl*, and similarly *low* starts like *learn*. We say that in RP the starting point of the diphthong is strongly centralized. For this reason many authors transcribe it as /əʊ/.

Hungarians usually replace /oʊ/ with *ó*, a long back monophthong (phonetically [o:]). They do this partly under the influence of spelling, partly because there is no better substitute in Hungarian. The starting point and endpoint of the diphthong are too close to each other: the diphthong is too “narrow”. Thus they pronounce *no* /noʊ/ as “nó”, *own* /oʊn/ as “ón”, *roast* /roʊst/ as “rószt”. It is easier if we “widen” the diphthong, as is done in RP. Tell students to start from H short *ö* (not *ó!*), and insist on the second element /ʊ/. This is not entirely correct, since *ö* is rounded and /ə/ (the starting point of the diphthong in RP) is not, but it is better than nothing. You may say that *own* begins like H *ön* and then goes to /ʊ/. The RP pronunciation of *soul* [səʊl] is not very far from the Hungarian pronunciation of the Korean city: *Szöul*. But, all in all, /oʊ/ must be learnt by listening and practising because it is so different from anything in Hungarian.

**7.33** The replacement of /oʊ/ by *ó* results in its confusion with /ɔ:/, which is also pronounced *ó* by most Hungarians (7.25). For example, both *hole* /oʊ/ and *hall* /ɔ:/ are often pronounced identically: “hól”. You must point out to learners that these two sounds distinguish the meanings of many words, especially because the *r* after /ɔ:/ is often silent. Some minimal pairs:

<u>/oʊ/</u>	↔	<u>/ɔ:/</u>	<u>/oʊ/</u>	↔	<u>/ɔ:/</u>	<u>/oʊ/</u>	↔	<u>/ɔ:/</u>
<u>b</u> one	–	<u>b</u> orn	<u>s</u> o	–	<u>s</u> aw	<u>sh</u> ow	–	<u>sh</u> ore
<u>q</u> uota	–	<u>q</u> uarter	<u>c</u> oat	–	<u>c</u> aught	<u>w</u> oke	–	<u>w</u> alk
<u>m</u> oaning	–	<u>m</u> orning	<u>l</u> ow	–	<u>l</u> aw	<u>h</u> ole	–	<u>h</u> all
<u>e</u> xplode	–	<u>e</u> xplo <u>r</u> ed	<u>f</u> olk	–	<u>f</u> ork	<u>c</u> old	–	<u>c</u> alled

If you are in doubt whether to pronounce /oʊ/ or /ɔ:/ in a given word, the spelling is a reliable guide. When the spelling is (or begins with) *o*, we pronounce /oʊ/, except when the next letter is *r*, in which case we pronounce /ɔ:/. When the spelling is (or begins with) *a*, we always pronounce /ɔ:/.

TABLE 7.33. /oʊ/ OR /ɔ:/?

Spelling	Pronunciation	
	not before <u>r</u>	before <u>r</u>
<b>o</b> =	/oʊ/ note, local	/ɔ:/ more, form, story
<b>oa</b> =	soap	board
<b>ou, ow</b> =	soul, blow	source
<b>a</b> =	/ɔ:/ hall, salt, talk	/ɔ:/ war, quarter
<b>au, aw</b> =	sauce, caught, law	aura, dinosaur

### The centring diphthongs: /ɪə ʊə eə/

**7.34** The centring diphthongs all end in the central vowel /ə/. They are, with a few exceptions, always followed by *r* (which may be silent): actually, they owe their existence to the influence of *r* (see Pre-R Breaking, 8.7).

The vowel /ɪə/, as in *here, cheers, hero*, starts from lax /ɪ/, not /i:/ or H *i*. This means that the beginning of *ink* /ɪŋk/ and *ear* /ɪə/ is identical, and different from *eat* /i:t/.

Similarly, the vowel /ʊə/, as in *poor, jury, tourist*, starts from lax /ʊ/, not /u:/ or H *u*. This means that the beginning of *put* /pʊt/ and *poor* /pʊə/ is identical, and different from *pool* /pu:l/. In many words /ʊə/ can be replaced by /ɔ:/, e.g. *sure* /ʃʊə/ or /ʃɔ:/, *cure* /kjʊə/ or /kjɔ:/, *poor* /pʊə/ or /pɔ:/, *tourist* /'tʊərɪst/ or /'tɔ:rɪst/. In current speech *your* and *you're* are both /jɔ:/ when in a stressed position.

The vowel /eə/, as in *care, chair, parents* /'peərənts/, starts from /e/ as in *kept*. This starting vowel may be slightly lower, like H *e* (= phonetically [ɛ]): this is why some authors transcribe this diphthong as /ɛə/. The glide towards /ə/ is extremely short, so this is a very narrow diphthong — so narrow, indeed, that it may sound almost like a long monophthong (phonetically [ɛ:]), like H *fölszálltunk az E-re* ('we took bus E'). You will hear *stairs* /steəz/ pronounced [stɛ:z], almost to rhyme with *jazz* /dʒæz/!

**7.35** Hungarians find all centring diphthongs difficult, partly because they are fairly narrow diphthongs, and partly because their second element, the /ə/, is missing in Hungarian. As the centring diphthongs are nearly always followed by *r*, the typical Hungarian mistake is to replace them by long monophthong + /r/, e.g. *here* "hír", *poor* "púr", *chair* "cseer" or "csér". This certainly sounds un-RP, but does not lead to confusion, since these diphthongs cannot be in contrast with /i: u: eɪ/ before *r* (see 3.21). In perception, however, learners must be taught to identify these sounds for what they are. For example, *fury* /'fjʊəri/ and *theory* /'θɪəri/ sound disturbingly similar to the Hungarian ear.

**Note.** The centring diphthongs are not used in general AmE, where *here* = /hɪr/, *poor* = /pʊr/, *chair* = /tʃɪr/.



## WEAK VOWELS

### Schwa: /ə/

**7.36** The most frequent vowel in English speech is /ə/, the “neutral vowel”, traditionally called schwa (pron. /ʃwɑ:/). There is no such vowel in Hungarian; the hesitating ...*ööö*... is a good approximation (just as for long /ɜ:/, 7.27), but English /ə/ is always very short. The typical mistake with beginners is to pronounce H *ö*, e.g. *salad* “szelöd”, *water* “vótör”; the difference is that H *ö* is lip-rounded, while E /ə/ is not. Hungarians learn to articulate /ə/ fairly easily — the problem is that they use it much less frequently than necessary. Since weakening is not natural in Hungarian, they are inclined to pronounce some full vowel (usually that suggested by the spelling) in place of /ə/: *absolute* “epszolút”, *silent* “szájlent”. It is useful to collect words where different vowel-letters are all pronounced /ə/, as in *melody*, *enemy*, *comopany*, *jealousy*, *anarchy*, *energy*; or *ballad*, *method*, *drunkard*, *shepherd*, *cupboard*; or *teacher*, *doctor*, *beggar*, *colour*, *visa*, *Sarah*.

To help students pronounce /ə/ between consonants, you may even suggest that they should “swallow the vowel” altogether. Show this with an apostrophe in a few examples: *p'tato*, *b'nana*, *p'ticular*, *mel'dy*, *en'my*, *en'rgy*, *ball'd*, *meth'd*, etc. Since to Hungarians /ə/ is “not a proper vowel”, they will tend to pronounce schwa in place of the apostrophe.

**7.37** Word-final /ə/ is especially common in RP because the *-r* is silent in this position. *Miner* /'maɪnə/, *minor* /'maɪnə/ and *china* /'tʃaɪnə/ are perfect rhymes in RP. The articulation of final /ə/ is opener than elsewhere, and resembles /ʌ/ (has a slight colouring of H *a* or *á*). In all these examples /ə/ is exactly the same vowel sound despite the differences in spelling:

water /'wɔ:tə/	met <u>r</u> e /'mi:tə/	chin <u>a</u> /'tʃaɪnə/	burgl <u>a</u> r /'bɜ:glə/
doct <u>o</u> r /'dɒktə/	Arthur /'ɑ:θə/	Sar <u>a</u> h /'seərə/	marty <u>r</u> /'mɑ:tə/
col <u>o</u> ur /'kʌlə/	mixt <u>u</u> re /'mɪkstʃə/	thor <u>o</u> ugh /'θʌrə/	th <u>e</u> /ðə/

Most schwa-ending words end in *-r*, *-re* or *-a* in spelling. If the next word begins with a vowel, the *r* is pronounced, e.g. *Peter asked* /'pi:tər 'ɑ:skt/ (Linking-R, 5.16). Most British speakers insert an /r/ even when the final schwa is spelt *-a*, e.g. *Linda asked* /'lɪndər 'ɑ:skt/ (Intrusive-R, 5.17).

Word-initial /ə/ is always spelt *a-* or *o-*: *again*, *oppose*.

Weakening to schwa is especially important in the so-called “weak forms” of function-words (pronouns, auxiliaries, etc.; see 13.15-21). So for example the words *are*, *at*, *us* are rarely pronounced /ɑ:, æt, ʌs/; they are much more frequently pronounced in their weak forms /ə, ət, əs/, as in *The girls are meeting us at seven*. /ðə 'gɜ:lz ə 'mi:tɪŋ əs ət 'sevn/.

In some weak forms the vowel is completely lost (e.g. *have* → 've), and occasionally consonants are dropped too (e.g. *and* → 'n').

**7.38** The other weak vowels of English are /i ɪ u ʊ/. Their articulation does not present any particular difficulty. It is their behaviour (occurrence, alternants, dropping, etc.) which requires attention. We shall therefore treat them in Chapter 8 (8.28 and further sections).

— o —

### QUESTIONS FOR REVISION

1. Where does the spelling confuse the learner, with /e - æ/ or with /ʌ - ɒ/? Why?
2. What are the dangers of transcribing *sit*, *book* as /sit, buk/?
3. What are wide and narrow diphthongs, and which are more difficult for Hungarians?
4. What are the central vowels of English and Hungarian?
5. What are the problems with “long” vowels in English? What is phonetic (= actual) length, and what is phonemic (= potential, underlying) length?
6. Which English vowels do Hungarians usually confuse, pronouncing the same sound for both?
7. What clues are there in spelling to decide whether /oʊ/ or /ɔ:/ is to be pronounced?
8. What tongue positions are there for vowels? Give an example for each in English and Hungarian (if applicable).
9. Which Hungarian sounds are /ʌ/ and /ɒ/ most similar to?
10. What leads learners to pronounce *not* as \*/nʌt/, *gone* as \*/gʌn/, *dollar* as \*/dʌlə/?
11. What are the “pure” long vowels, and how pure are they?
12. What is Gimson’s principle in choosing the transcription symbols for long and short vowels?
13. What is the difference between diphthong and digraph?

## CHAPTER 8

### VOWELS II: FUNCTIONAL CLASSIFICATION

#### TENSE AND LAX VOWELS

**8.1** The previous chapter described the articulation of vowels, i.e. how they are produced. This chapter will look at their function: we will ask “what they do”, i.e. where they can stand, what rules affect them, and how they influence each other and the neighbouring consonants. In other words, this chapter deals with the phonological behaviour of vowels. This behaviour cannot always be explained with their articulation: we need a separate, “functional” classification to account for the different behaviour of different groups of vowels.

The most useful functional classification of English full vowels is to group them into tense and lax vowels (tense = H ‘feszes’, lax = H ‘laza’). The tense-lax division coincides partly with the diphthong-monophthong division, partly with the long-short division, but is not identical with either of these. All diphthongs count as tense; all short vowels count as lax; the “pure” long vowels (long monophthongs), however, are divided by this classification, namely /i: u:/ are tense, /ɑ: ɜ:/ are lax, while /ɔ:/ may function both as tense and lax.

The “tense/lax” classification of the full vowels is shown below. Note that if a vowel is short, it must be lax; if it is a diphthong, it must be tense — but the reverse is not true.

Function	A r t i c u l a t i o n		
	Short Vowels (short monoph's)	Long Monophthongs	Diphthongs (incl. Triphthongs)
Lax Vowels	æ e ɪ ɒ ʌ ʊ	ɑ: ɜ: ɔ: <sup>1,2</sup>	---
Tense Vowels	---	i: u: ɔ: <sup>3</sup>	eɪ aɪ ɔɪ oʊ aʊ ɪə eə ʊə aɪə aʊə

Note 1. In RP /ɔ:/<sup>1</sup>, /ɔ:/<sup>2</sup> and /ɔ:/<sup>3</sup> is the same sound (7.25). We treat these as different phonological units because they behave differently. See 8.8.

Note 2. The weak vowels do not take part in this classification. See 8.28.

TABLE 8.1. FUNCTIONAL CLASSIFICATION OF ENGLISH FULL VOWELS

<b>TENSE VOWELS</b>		<u>Usual Spellings</u>
<b>Plain-Tense Vowels</b>		
/i:/	scene, sweet, cheat, field, machine	<i>e, ee, ea, i</i>
/u:/	– /u:/ moon, prove, June, chew – /ju:/ cube, new, feudal	<i>oo, o, ou, u, ew u, ue, ui, eu, ew</i>
/eɪ/	cape, range, rain, stay, obey	<i>a, ai, ay, ey</i>
/aɪ/	five, cycle, might	<i>i, y, igh</i>
/ɔɪ/	boil, toy	<i>oi, oy</i>
/oʊ/	home, post, road, shoulder, low	<i>o, oa, ou, ow</i>
/aʊ/	loud, now	<i>ou, ow</i>
<b>Broken-Tense Vowels</b>		
/ɪə/	here, beer, appear, tier	<i>eR, eeR, eaR, ieR</i>
/eə/	care, parents, hair, swear	<i>aR, aiR, eaR</i>
/ʊə/	– /ʊə/ poor, sure, jury – /jʊə/ cure, fury, Europe	<i>ooR, uR uR, euR</i>
/ɔ:/ <sup>3</sup>	more, glory, board, course, door	<i>oR, oaR, ouR, ooR</i>
/aɪə/	fire, tiring, tyrant	<i>iR, yR</i>
/aʊə/	sour, tower	<i>ouR, oweR</i>
<b>LAX VOWELS</b>		
<b>Plain-Lax Vowels</b>		
/ɪ/	hit, mirror, myth, syrup	<i>i, y</i>
/e/	yes, very, head	<i>e, ea</i>
/æ/	cap, carrot	<i>a</i>
/ʌ/	cup, hurry, love, trouble	<i>u, o, ou</i>
/ɒ/	lock, sorry, want	<i>o, a</i>
/ʊ/	put, cushion, book	<i>u, oo</i>
<b>Broad-Lax Vowels</b>		
/ɑ:/ <sup>1</sup>	ask, dance, half, banana	<i>a</i>
/ɑ:/ <sup>2</sup>	car, hard	<i>aR</i>
/ɔ:/ <sup>1</sup>	cause, law, tall, fought	<i>au, aw, aL, oughT</i>
/ɔ:/ <sup>2</sup>	form, north, war, quarter	<i>oR, aR</i>
/ɜ:/	term, girl, turn, heard	<i>eR, iR, uR, eaR</i>

Note 1. In the Spellings column, *R* means that the pronunciation only occurs before *r*.

Note 2. The table lists 24 vowels but in actual pronunciation there are only 21 types because /ɑ:/ appears twice and /ɔ:/ three times.

The tense or lax nature of a vowel is usually shown by the spelling, though often in an indirect fashion. Tense vowels are often spelt with a digraph (compare tense *meet*, *road*, *pear* with lax *met*, *rod*, *car*); tense vowels are normally suggested by a final silent *-e* (compare tense *cape*, *wipe*, *insure* with lax *cap*, *tip*, *occur*); tense vowels are usually followed by only one consonant-letter (compare tense *later*, *hiding*, *donor*, *parent* with lax *latter*, *kidding*, *doctor*, *partner*). We shall treat the spelling of vowels in Chapter 9, where the tense/lax distinction will prove extremely useful.

The following diagram compares the phonetic (articulatory) and phonological (functional) classification of English vowels:

(1) **Phonetically** (how they are articulated):      (2) **Phonologically** (how they behave):



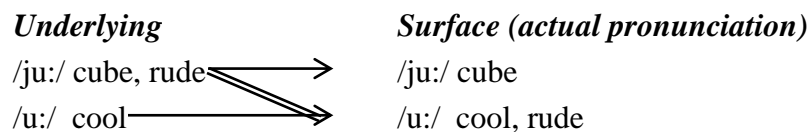
**8.2 The problem of /ju:/. —** The letter *u* in *cube* /kju:b/, *tuna* /tju:nə/, *puberty* /'pju:bəti/, represents /ju:/, a sequence of two sounds. These two sounds, /j/ and /u:/, are phonemes of English, occurring in many other environments (*yes*, *young*, *onion*; *cool*, *move*, *June*). This seems to show that *cube* is made up of four phonemes (or segments): /k+j+u:+b/. (Compare *cape*, which is three segments: /k+eɪ+p/, because a diphthong like /eɪ/ is indivisible.) The /u:/ element of /ju:/ — like any other /u:/ — becomes /ʊə/ before *r* (*during* /'dʒʊəriŋ/). These considerations would speak against regarding /ju:/ as some kind of unit. Indeed, the standard list of English phonemes does not include /ju:/ as a separate element.

However, in its phonological behaviour /ju:/ often acts as a single unit. First of all, the /j/ in /ju:/ behaves peculiarly: it is subject to the rule of Yod Dropping (5.24). It can stand after an initial consonant (*puberty* /pj-/), and become de-voiced (5.2). Other /j/'s do not behave in this way. Furthermore — as we shall see in this chapter — there are environments where /ju:/ can occur but the other tense vowels cannot. Then, there are alternations like *reduce* /ju:/ — *reduction* /ʌ/, which show that /ju:/ behaves like one complex vowel, alternating with some other vowel. Again, /ju:/ in a weak syllable weakens to /ju/ (*evacuate* /ɪ'vækjuet/ — this is Glide-u) or to /jʊ/ (*fabulous* /'fæbjʊləs/). In this sense, then, /ju:/ can be regarded as a “complex vowel”, which is pronounced as two segments: a consonant plus a vowel (unless Yod Dropping deletes the /j/).

Another reason to regard /ju:/ as a complex vowel is its spelling. In English, /ju:/ is always represented by a unitary grapheme (mostly *u*, but also *ue*, *ui*, *eu*, *ew*), e.g. *cube*, *due*, *nuisance*, *neutral*, *few*; the /j/ element is never shown separately in spelling. This shows that

English spelling treats /ju:/ as one element. Admittedly, this is not a phonological argument, since spelling never proves anything in phonology, but it is useful in practical language teaching.

When Yod Dropping takes place and deletes the /j/ from pronunciation, the remaining sound is the same as any other /u:/, e.g. *chews* = *choose* /tʃu:z/, *rude* = *rood* /ru:d/. Thus Yod Dropping causes neutralization (as explained in 3.21): two underlyingly different elements, /ju:/ and /u:/, turn up as identical on the surface. (This is why *through* /θru:/ can be phonetically re-spelt as *thru*.) In the following diagram the double line shows Yod Dropping: *rude* is underlyingly like *cube* (since it is also spelt with *u*), but turns up on the surface “yodless”, with the same vowel as *cool*.



To sum up: for functional (i.e. phonological) reasons — when appropriate — we may consider /ju:/ to be underlyingly one element: a complex vowel.

## Trisyllabic Laxing

**8.3** If the stress is on the third-last syllable of the word (= the third syllable from the end, also called the “antepenult”), this vowel is normally lax. This is the rule of **Trisyllabic Laxing** (pron. /,traɪsɪl'æbɪk/). The spelling does not specifically show this. In the following examples the underlined stressed vowel is in the third-last syllable and consequently lax. Syllable boundaries are shown with a dot:

<u>a</u> .ni.mal /æ/	he. <u>si</u> .tate /e/	phi. <u>lo</u> .so.phy /ɒ/
f <u>a</u> n.ta.sy /æ/	per.ma. <u>ne</u> nt /ɜ:/	<u>o</u> .ri.gin /ɒ/
h <u>a</u> r.mo.ny /ɑ:/	a.bi.li. <u>ty</u> /ɪ/	P <u>o</u> r.tu.gal /ɔ:/ (= /ɔ:/ <sup>2</sup> )
in.s <u>a</u> .ni.ty /æ/	<u>i</u> .rri.tate /ɪ/	m <u>u</u> s.cu.lar /ʌ/

The rule also holds for vowels earlier than the third-last syllable (i.e. in the fourth or fifth syllable from the end), e.g.

<u>a</u> .ri.sto.crat /æ/	he.li.cop.ter /e/	co.ro.na.ry /ɒ/.
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A regular exception to Trisyllabic Laxing is the complex vowel /ju:/, which may appear in third-last stressed syllables even though it is a tense vowel. This happens when it is followed by only one consonant-letter in spelling; *cubicle* /ju:/, *community* /ju:/, and — with Yod-dropping — *lunatic* /u:/; but not in *lullaby*, *muscular*, where it is followed by two consonant-letters.

Irregular exceptions, where some other tense vowel stands in a third-last (or earlier) syllable, are rare, e.g. *favourite* /eɪ/, *isolate* /aɪ/, *notify* /oʊ/, and a few others (9.20).

**8.4** When counting the syllables from the end of the word, we must ignore the suffixes *-es*, *-ed*, *-ing*, *-er*, *-est*, *-ly*, *-ness*, *-y* (adj.), *-ish* (adj.), *-able*. These suffixes are called **neutral suffixes**: they are very regular and can be freely added to almost any noun or verb or adjective, as the case may be. They do not integrate into the “body” of the word, and therefore do not cause Trisyllabic Laxing. We may indicate this with the “cross-hatch” boundary symbol # between the base word and the neutral suffix. (For a detailed discussion, see [12.15](#).) For example, the vowel remains tense in the following suffixed words:

lic <u>en</u> ces /aɪ/	var <u>iy</u> #ing /eə/	not <u>ic</u> #ing /oʊ/
sec <u>re</u> t#ly /i:/	t <u>id</u> i#ness /aɪ/	f <u>ev</u> er#ish /i:/
debat <u>a</u> #able /eɪ/	p <u>il</u> ot#ed /aɪ/	s <u>il</u> enc#er /aɪ/

Note further that the endings *-ary/-ery/-ory* also leave the preceding stressed vowel tense: *notary* /oʊ/, *bribery* /aɪ/, *advisory* /aɪ/, *plenary* /'pli:nəri/. (But: *coronary* /ɒ/, *cemetery* /e/, because there is yet another syllable after the stressed vowel!) Many verbs in *-ize* (or *-ise*) do not show Trisyllabic Laxing, e.g. *stabil#ize* /eɪ/, *final#ize* /aɪ/, *revital#ize* /aɪ/, *polar#ize* /oʊ/.

Other suffixes, which are called **nonneutral**, become integrated into the word, and cause Trisyllabic Laxing, for example, *-ative*, *-ic*, *-ity* etc. The boundary of nonneutral suffixes may be shown with a “plus” boundary symbol +.

prov <u>o</u> c+ative /ɒ/	A <u>r</u> ab+ic /æ/	ins <u>a</u> n+ity /æ/
comp <u>e</u> t+itor /e/	cr <u>i</u> min+al /ɪ/	met <u>r</u> +ify /e/

Compare *provoke*, *provok#ing*, *provok#ing#ly*, all with /oʊ/ (because these are neutral suffixes) — but *provoc+ative* with /ɒ/, because *-ative* is a nonneutral suffix which counts in the number of syllables and so it causes trisyllabic laxing.

Note. In [4.50](#) we saw something similar: the neutral suffixes do not “soften” final /k/ into /s/, so *-c* must be spelt *-ck* in *panic#ed*, *panic#ing*; but nonneutral *-ity* softens the *c*, cf. *elecric+ity*.

## Laxing endings

**8.5** The stressed vowel is also regularly lax when the next syllable contains a **Laxing Ending**. The most important laxing endings are: *-ic*, *-id*, *-et*, *-it*, *-el*, as well as *-ish* (in nouns or verbs). These are typically nonneutral endings. (Note that *-et* and *-it* are pronounced the same: /-ɪt/ or /-ət/, so phonologically they are variants of the same ending.) Here are some words where a laxing ending causes the stressed vowel to be lax:

**-ic**: *panic* /æ/, *arctic* /ɑ:/, *atomic* /ɒ/, *hysterical* /e/, *allergic* /ɜ:/, *physics* /ɪ/, *historical* /ɒ/, *public* /ʌ/, *nautical* /ɔ:/<sup>1</sup>, etc.

**-id**: *valid* /æ/, *rapid* /æ/, *vivid* /ɪ/, *solid* /ɒ/, *morbid* /ɔ:/<sup>2</sup>, etc.

**-ish** (in nouns or verbs): *parish* /æ/, *fetish* /e/, *finish* /ɪ/, *admonish* /ɒ/, etc.

**-et~-it**: *tabelet* /æ/, *planet* /æ/, *hermit* /ɜ:/, *spirit* /ɪ/, *summit* /ʌ/, etc.

**-el:** *panel* /æ/, *level* /e/, *novel* /ɒ/, *brothel* /ɒ/, *morsel* /ɔ:/, *shovel* /ʌ/, *funnel* /ʌ/, etc.

A regular exception, again, is /ju:/, which may appear before these endings (usually when followed by one consonant-letter in spelling), e.g. *cubic* /ju:/, *humid* /ju:/, *unit* /ju:/, and (with Yod-dropping) *rubric* /u:/.

Irregular exceptions, where some other tense vowel stands before a laxing ending, are rare, e.g. *basic* /eɪ/, *secret* /i:/, *label* /eɪ/ (see 9.21).

## THE BEHAVIOUR OF VOWELS BEFORE *R*

**8.6** In English a *r* usually influences the pronunciation of the vowel before it. This can be explained by the fact that *r* is very vowel-like (5.11). The *r* exerts its influence even when it is silent: it may then be regarded as an “underlying” element. Note that whether the *r* itself is pronounced or not depends on what comes AFTER the *r* — the R-dropping rule (5.14) is valid in all the examples that follow.

An important difference between tense and lax vowels is that they are differently influenced by *r*. When *r* influences a tense vowel, it “breaks” it (compare *lazy* /eɪ/ with *Mary* /eə/). When *r* influences a lax vowel, it “broadens” it (compare *hand* /æ/ with *hard* /ɑ:/). The rules of Pre-R Breaking and Pre-R Broadening are discussed below.

### Pre-R Breaking

**8.7** Pre-R Breaking affects tense vowels only. Tense vowels fall into two classes, which we call “Plain-Tense” and “Broken-Tense”:

<b>Plain-Tense</b>	i:	u: (ju:)	eɪ	oʊ	aɪ	aʊ	ɔɪ
<b>Broken-Tense</b>	ɪə	ʊə (jʊə)	eə	ɔ: <sup>3</sup>	aɪə	aʊə	ɔɪə

The two groups are practically in complementary distribution. Each plain-tense vowel has a broken counterpart. The plain-tense vowels never stand before *r*, while the broken-tense vowels only stand before *r* (but see 8.26). This is the rule of Pre-R Breaking (also called “Breaking” for short). Examples:

<u>Plain-Tense</u>	↔	<u>Broken-Tense</u>
<u>seem</u> /i:/	–	/ɪə/ <u>beer</u>
<u>moon</u> /u:/	–	/ʊə/ <u>poor</u>
( <u>duty</u> /ju:/	–	/jʊə/ <u>fury</u> )
<u>agent</u> /eɪ/	–	/eə/ <u>parent</u>
<u>home</u> /oʊ/	–	/ɔ:/ <sup>3</sup> <u>more</u>
<u>hiding</u> /aɪ/	–	/aɪə/ <u>tiring</u>
<u>mouse</u> /aʊ/	–	/aʊə/ <u>hour</u>



Breaking does not modify the vowels very drastically; /i:/ and /ɪə/, or even /oʊ/ and /ɔ:/ are fairly similar sounds. However, all types of IPA transcription insist on representing Pre-R Breaking. (See the discussion in 3.21).

**8.8** Let us see the phonetic changes caused by Pre-R Breaking. Generally speaking, Breaking makes the vowel slightly more open, and/or changes it into a diphthong moving towards the centre (i.e. towards the /ə/ position). The plain-tense vowels all end in a close or half-close element: /i: ɪ u: ʊ/ (cf. 7.8). The broken-tense vowels end in the half-open sound /ə/, being centring diphthongs (or triphthongs), with the exception of /ɔ:/, but this sound is also half-open. Pre-R Breaking means the turning of a close long vowel or a closing diphthong into a centring diphthong (or triphthong) or /ɔ:/.

The sound /ɔ:/ in *more* is the only broken vowel that is not a centring diphthong. In the early 20th century it was still pronounced /ɔə/, but this sound has gone out of use, and is now replaced by pure long /ɔ:/, the same vowel as in *form* or *law*. We refer to /ɔ:/ in its broken-tense role as /ɔ:/<sup>3</sup> (as in *more*), to distinguish this from its lax roles, namely /ɔ:/<sup>1</sup> (as in *law*) and /ɔ:/<sup>2</sup> (as in *form*), see 7.25.

The Breaking of /aɪ aʊ ɔɪ/ means the addition of a /ə/ to the diphthong to create triphthongs: /aɪə, aʊə ɔɪə/. These sounds are usually simplified in natural speech, see 8.27.

Breaking is not obligatory in AmE, where the plain-tense vowels may freely occur before *r*, so the following word-pairs usually have the same vowel in AmE: *seem* = *beer*, *agent* = *parent*, *moon* = *poor*, etc.

**8.9** English spelling does not indicate Breaking. To illustrate this, we list pairs of words whose vowels are spelt with the same grapheme, but must be pronounced differently because of the *r*. The *r* that causes the breaking is printed below as capital R. (Note that the spelling always has single *r* in these words, never *rr*.)

PLAINBROKEN		PLAINBROKEN	
/i:/	↔	/ɪə/ + r	
scene	–	heRe	
previous	–	seRious	
peeled	–	cheeRed	
easy	–	weaRy	
piece	–	pieRce	
/eɪ/	↔	/eə/ + r	
cape	–	caRe	
Albanian	–	BulgaRian	
break	–	sweaR	
pain	–	paiR	
contain	–	repaiR	
	↔	/ɔ:/ <sup>3</sup> + r	
	–	stoRy	
	–	tutoRial	
	–	mouRning	
	–	boaR	
	–	groaRning	

<u>/aɪ/</u> ⇔ <u>/aɪə/ + r</u>	<u>/aʊ/</u> ⇔ <u>/aʊə/ + r</u>
f <u>ī</u> ve    –    f <u>ī</u> Re	m <u>ou</u> se    –    h <u>ou</u> R
t <u>ī</u> med    –    t <u>ī</u> Red	l <u>ou</u> dest    –    s <u>ou</u> Rest
m <u>ī</u> nus    –    v <u>ī</u> Rus	ab <u>ou</u> t    –    dev <u>ou</u> r
typ <u>ī</u> st    –    ty <u>ī</u> Rant	

*(very few examples for /aʊə/, /ɔɪə/)*

(Whether the *r* itself is pronounced or not is governed by the R-dropping Rule, which you have to apply independently of Breaking.)

To sum up, Pre-R Breaking is a rule which requires that plain-tense vowels should be replaced by broken-tense vowels before *r*. It is obligatory (in RP) and exceptionless, and does not depend on the spelling of the vowel. Whatever letters the tense vowel is spelt with, it will be broken before *r*. Sequences like *\*/...i:r.../* or *\*/...oʊr.../* do not exist in RP.

## Pre-R Broadening

**8.10** Pre-R Broadening affects lax vowels only. The lax vowels fall into two classes, which we call “Plain-Lax” and “Broad-Lax”. The six plain-lax vowels are matched by only three broad-lax ones, because /e ɪ ʌ ʊ/ all have /ɜ:/ as their broad counterpart.

<b>Plain-Lax</b>	æ	ɒ	e	ɪ	ʌ	ʊ
<b>Broad-Lax</b>	ɑ:	ɔ: <sup>2</sup>	ɜ:			

The plain-lax vowels are replaced by their broad-lax counterparts before *r*, but only if this *r* is final (*car*) or is followed by a consonant (*hard, border*). This is the rule of Pre-R Broadening (also called “Broadening” for short). Compare:

<u>Plain-Lax</u>	⇔	<u>Broad-Lax</u>	_____
hand, cat	/æ/	–	/ɑ:/ hard, car
doctor, odd	/ɒ/	–	/ɔ:/ <sup>2</sup> border, for
help, ten	/e/	–	} /ɜ:/ term, her, girl, stir, fur, hurt
ink, fit	/ɪ/	–	
hunt, fun	/ʌ/	–	
bush, pull	/ʊ/	–	}

Pre-R Broadening is not shown in spelling: as you can see, the words in the left and right columns above have the same vowel-letters.

**8.11** Pre-R Broadening modifies the quality of the vowel quite strongly, and it causes lengthening: while plain-lax vowels are short, broad-lax vowels are long. However, there are no diphthongs among the lax vowels; all lax vowels — whether plain or broad — are monophthongs. The /ɔ:/ in *border, for* is labelled /ɔ:/<sup>2</sup>. (This sound today is the same as broken-tense /ɔ:/<sup>3</sup>, cf. 7.25).

Pre-R Broadening happens in just those cases where the *r* drops out, standing before a consonant or nothing. The length of the broad vowel compensates for the loss of the *r*. If you compare *hand* /hænd/ with *hard* /hɑ:d/, and so on, you will notice that the length mark appears exactly in the place of the *r*. Broadening is a case of **compensatory lengthening**.

Pre-R Broadening so obviously modifies vowel quality that everyone can hear the difference between /æ/ and /ɑ:/, etc. Broadening therefore is an easier rule to recognize and apply than Breaking. The real problem with Broadening is not HOW it works but WHEN it works; namely, its operation is blocked in certain environments (see next section).

Broadening also works in AmE, but of course the *r* is pronounced in all cases: *hard* /hɑrd/, *term* /tɜrm/ or /tɝrm/, *form* /fɔrm/. Because the *r* is retained in AmE, there is no basis for lengthening the vowel.

**8.12 The regular absence of Pre-R Broadening (the „Carrot“-rule).** — Broadening does not apply if the stressed lax vowel is followed by an *r* which is followed by a pronounced vowel within the word. For example, in *carrot* the *a* is not broadened to /ɑ:/ but remains uninfluenced by the *r*; the pronunciation is /'kærət/ and not \*/'kɑ:rət/. We call this regularity the „Carrot-rule“. The following words are all examples for the Carrot-rule: the vowel preserves its plain-lax quality (i.e. is not broadened). The symbol “V” means any vowel.

- /ærv/ carrot, marry, regularity, parody...
- /erV/ cherry, terrible, very, America...
- /ɪrv/ mirror, irritate, lyrical, miracle...
- /ɔrv/ sorry, borrow, historical, laurel, quarrel...
- /ʌrv/ hurry, current, worry /'wʌri/, thorough /'θʌrə/, Durham /'dʌrəm/...
- /ʊrv/ courier /'kʊriə/ (*no other example*)

We can refer to such words as “Carrot-words”. Note that the *r* is always pronounced here (since there is a vowel after it); there is no lengthening because there is nothing to compensate for. In “Carrot-words” the /r/ is usually spelt *rr*, e.g. *carrot*, *borrow*, *irritate*, but not always; the rule is a phonological rule, not a spelling-based one, so *parody*, *very*, *miracle* are also “Carrot-words”.

Bear in mind that this whole argument applies to lax vowels only. Tense vowels — as we saw in 8.7 — are subject to a different rule: Pre-R Breaking. Tense vowels are always broken by a following *r*, while lax vowels are broadened depending on what follows the *r*. Compare:

- *parent* /eə/ (tense vowel, automatically undergoes breaking)
- *card* /ɑ:/ (lax vowel, broadening happens because the *r* is followed by a consonant)
- *carol* /æ/ (lax vowel, no broadening because the *r* is followed by a pronounced vowel – Carrot-rule).

Very well, you may ask, but why is the vowel lax in *carol*? This question, however, cannot be answered. Some words have a tense vowel (*parent*), others a lax vowel (*card, carrot*); sometimes the spelling shows this, sometimes it doesn't. The tenseness or laxness of vowels is “underlying”, lexically given. We cannot “explain” this any more than we can tell why *Hagy* or *tör* have a short vowel and *ágy* or *tőr* have a long one.

**8.13** If a word ends in a broad-lax vowel plus silent *r* (e.g. *star* /stɑ:/, *prefer* /prɪ'fɜ:/), and we attach one of the neutral suffixes *-ing, -er, -y* (8.4), the *r* itself will have to be pronounced (as linking-R, since these suffixes begin with a vowel), but the broadness of the stressed vowel remains unchanged; the Carrot-rule does not work here. In spelling this is always regularly shown by doubling the *r*. For example:

st <u>ar</u> /'stɑ:/ → st <u>ar</u> r#y /'stɑ:ri/	pr <u>er</u> /prɪ'fɜ:/ → pr <u>er</u> r#ing /prɪ'fɜ:rɪŋ/
oc <u>cur</u> /ə'kɜ:/ → oc <u>cur</u> r#ing /ə'kɜ:rɪŋ/	st <u>ir</u> /'stɜ:/ → st <u>ir</u> r#er /'stɜ:rə/
ba <u>r</u> /'bɑ:/ → ba <u>r</u> r#ing /'bɑ:rɪŋ/	f <u>ur</u> /'fɜ:/ → f <u>ur</u> r#y /'fɜ:ri/

Compare these words, which look very similar in spelling:

<i>Plain-lax vowel</i> (no Broadening, Carrot-rule)	<i>Broad-lax vowel</i> (neutral suffix added after broadening)
h <u>er</u> ring /'herɪŋ/	⇔ pr <u>er</u> ring /prɪ'fɜ:rɪŋ/
ca <u>rr</u> y /'kæri/	⇔ st <u>ar</u> ry /'stɑ:ri/
mi <u>rr</u> or /'mɪrə/	⇔ st <u>ir</u> rer /'stɜ:rə/

Note 1. In *-ed* forms like *preferred* /prɪ'fɜ:d/, *barred* /bɑ:d/, the *r* is graphically doubled but remains silent as the *-e-* of *-ed* is not a pronounced vowel.

Note 2. The various forms of *to occur* are worth noting: *occur* /ə'kɜ:/, *occurred* /ə'kɜ:d/, *occurring* /ə'kɜ:rɪŋ/, but *occurrence* /ə'kɜ:rəns/.

## Broadness without *r*

**8.14** The broad-lax vowels /ɑ: ɔ:/ occur also when there is no *r* after them. We called these R-less broad vowels /ɑ:/<sup>1</sup> and /ɔ:/<sup>1</sup> (7.25-26). The spelling in these is nearly always *a, au, aw*.

**a) Broad /ɑ:/<sup>1</sup> without *r*.** — The following groups of words have /ɑ:/<sup>1</sup>:

- ASK-words: *ask, pass, bath, dance, demand, can't, example, aunt, laugh*, etc. These have *a* (rarely *au*) in a closed syllable, followed by a voiceless fricative, or nasal + consonant. (In AmE the vowel is /æ/ in all these words.)
- CALM-words: *calm, palm, calf, calves*, etc. These have *a* plus silent *l* plus a labial consonant.
- DRAMA-words: *drama, gala, banana, tomato, sonata, spa, bra, banal, moustache, memoirs* /'memwɑ:z/, etc. Here the pronunciation imitates the original (French, Italian, etc.) sound.

- the exceptional words *father*, *rather*, *lather*.

**b) Broad /ɔ:/<sup>1</sup> without *r*.** — The following groups of words have /ɔ:/<sup>1</sup> :

- SAUCE-words: *sauce*, *author*, *taught*, *lawn*, *raw*, etc. These have *au*, *aw* in the spelling.
- CALL-words: *call*, *bald*, *alter*, *almanac*, *walk*, etc. These have lax *a* plus *l* (pronounced, or before *k*, silent) plus consonant or nothing.
- THOUGHT-words: *thought*, *bought*, *caught*, etc. (see 4.53).
- the exceptional words *water*, *broad*, *abroad*.

Note. The sound /ɜ:/ occurs in one word where there is no *r* after it: *colonel* /'kɜ:nl/.

**8.15** To conclude the subject of R-influence on vowels, let us compare Pre-R Breaking and Pre-R Broadening in the following table.

TABLE 8.15. BREAKING AND BROADENING COMPARED

	<b>Pre-R Breaking</b> e.g. <i>c<u>a</u>re</i> , <i>j<u>u</u>ry</i> , <i>f<u>o</u>rum...</i>	<b>Pre-R Broadening</b> e.g. <i>c<u>a</u>r</i> , <i>h<u>u</u>rt</i> , <i>o<u>o</u>rgan...</i>
<i>What class of vowels does it affect?</i>	tense vowels	lax vowels
<i>What are its results?</i>	centring diphthongs, triphthongs, and /ɔ:/ <sup>3</sup>	/ɑ: <sup>2</sup> , ɔ: <sup>2</sup> , ɜ:/
<i>Does it affect length?</i>	no	yes, all broad vowels are long (compensatory lengthening)
<i>Does it affect vowel-quality?</i>	slightly	very much
<i>When does it happen?</i>	automatically, whenever the vowel is followed by <i>r</i>	only when the vowel is followed by: r + C ( <i>park</i> ); r + Ø ( <i>star</i> ) r + neutral suff. ( <i>starry</i> )
<i>Does it happen without <u>r</u>?</i>	no, broken-tense vowels do not occur without <i>r</i>	yes, /ɑ:/ <sup>1</sup> and /ɔ:/ <sup>1</sup> are found without <i>r</i> ( <i>ask</i> , <i>law</i> )
<i>Can the “plain” vowels stand before <u>r</u>?</i>	no, plain-tense vowels cannot stand before <i>r</i>	yes, if the <i>r</i> is foll. by a vowel in the word (Carrot-rule)
<i>Does the spelling have <u>r</u> or <u>rr</u>?</i>	always single <i>r</i> ( <i>parents</i> )	usually double <i>rr</i> ( <i>marry</i> ), but often single <i>r</i> ( <i>carol</i> )
<i>Does it work in AmE?</i>	no	yes

**8.16 Distribution of Plain-Lax and Broad Lax Vowels.** — The lax vowels are more interesting from the point of view of R-influence, so it is worth summarizing their behaviour.

Table 8.16 presents the lax vowels in the environments discussed so far. The sign “!” calls attention to the *starry*-type discussed in 8.13. The abbreviation “r + V” means “r followed by some pronounced vowel”; the abbreviation “r + C or Ø” means “r followed by consonant or nothing”.

TABLE 8.16 LAX VOWELS: PLAIN OR BROAD?

Vowel quality:	Plain-lax		Broad-lax	
	not r	r + V	r + C or Ø	not r
Followed by:	not r	r + V	r + C or Ø	not r
R-influence?	no	no	yes	no
Phenomenon:	--	Carrot-Rule 8.12	Pre-R Broadng. 8.10, 8.13	Broadness w/o r 8.14
	/æ/ hand vanity tavern ban	/æ/ carrot parody marriage Arab	/ɑ:/ <sup>2</sup> hard car harmony starry !	/ɑ:/ <sup>1</sup> ask dance calm father
	/ɒ/ jolly opera dog want	/ɒ/ sorry origin borrow quarrel	/ɔ:/ <sup>2</sup> border for orthodox warm	/ɔ:/ <sup>1</sup> sauce law call thought
	/e/ help letter head regiment	/e/ cherry very terrible experiment	/ɜ:/ term her mercy preferring ! girl fir affirmative stirrer ! hurt occur journal furry !	--  (/ɜ:/ colonel)
	/ɪ/ fit myth bitter militant	/ɪ/ mirror irritate empirical pyramid		
	/ʌ/ hunt fun supper stomach	/ʌ/ hurry current worry courage		
	/ʊ/ cook put	/ʊ/ courier		

### VOWEL SHIFT

**8.17** A number of English words (or word-stems) appear sometimes with a tense vowel and sometimes with a lax vowel, e.g. *crime* /kraɪm/ but *criminal* /'krɪmɪnəl/: the tense /aɪ/ shifts to lax /ɪ/. This tense-lax alternation is called **Vowel Shift**. Normally the form with the tense

vowel is the basic form, and the lax vowel appears in the derived word. Vowel shift is caused by one of these **laxing rules**:

1) **Trisyllabic Laxing**: the stressed syllable is the third from the end (8.3, 9.20),

e.g. *insane* /eɪ/ → *insanity* /æ/

2) **Laxing by ending**: the stressed syllable is followed by a laxing ending, *-ic, -id, -et, -it, -el, -ish* (noun, verb) (8.5, 9.21),

e.g. *tone* /oʊ/ → *tonic* /ɒ/

3) **Pre-U Laxing**: the stressed syllable is followed by “graphically free” *u* (see 9.22),

e.g. *grade* /eɪ/ → *gradual* /æ/

4) **Pre-Cluster Laxing**: the stressed vowel is followed by two consonants (9.16),

e.g. *intervene* /i:/ → *intervention* /e/;

5) **CiV Laxing**: here the stressed vowel itself is *i*, followed by Consonant+*i*+vowel (that is, a Glide-*i*) (4.26, 5.22, 9.23)

e.g. *revise* /aɪ/ – *revision* /ɪ/

Note. CiV-Laxing applies only to stressed *i*; the other vowels do not shift before CiV, e.g. *relate* /eɪ/ = *relation* /eɪ/.

There are various other cases when Vowel Shift takes place, though none of the above rules applies, as in *to read* /i:/ → *he read* /e/, *life* /aɪ/ → *to live* /ɪ/. In these the original reason for the shift has disappeared, so today these cases of Vowel-Shift are unmotivated irregularities.

**8.18 The Four Types of Vowel Shift.** — There are four types of Vowel Shift, four pairs of vowels that are each other’s tense/lax counterparts.

	<u>Tense</u>	→	<u>Lax</u>	<u>Examples</u>	<u>Typical spelling</u>
Type I	/eɪ/ /eə/	→	/æ/ /ə/	ins <u>ane</u> – ins <u>anity</u> comp <u>are</u> – comp <u>arison</u>	A
Type II	/i:/ /ɪə/	→	/e/ /ɪ/	int <u>ervene</u> – int <u>ervention</u> se <u>vere</u> – se <u>verity</u>	E
Type III	/aɪ/ /aɪə/	→	/ɪ/ /ɪə/	cr <u>ime</u> – cr <u>iminal</u> tyr <u>ant</u> – tyr <u>anny</u>	I, Y
Type IV	/oʊ/ /ɔ:/	→	/ɒ/ /ɔ:/	t <u>one</u> – t <u>onic</u> hist <u>orian</u> – hist <u>orical</u>	O

Each tense vowel has a subtype when a following *r* “breaks” it. (This is quite automatic and does not interfere with Vowel Shift. The lax vowel is not influenced by *r* because these words — *comparison, severity, etc.* — are all of the “Carrot”-type, see 8.12.)

The spelling usually does not reflect Vowel Shift: *insane* and *insanity* have the same vowel-letter *a* (see 1.19, 3.3c). However, in *vain* – *vanity* (which is the same Type I) the

spelling shows the difference. Or to take examples from Type II, *intervene* – *intervention* have the same vowel-letter *e*, but in *keep* – *kept* the spelling does reflect Vowel Shift.

Note. As you see, we were not quite right in saying at the end of 8.12 that we cannot tell why the vowel is lax in a word: Vowel Shift often explains this.

TABLE 8.18. EXAMPLES FOR VOWEL SHIFT

Type	Plain-Tense	Plain-Lax	Pre-R subtype	
			Broken-Tense	Plain-lax
Type I	/eɪ/ → /æ/		/eə/ → /æ/	
	navy — navigate		compare — comparison	
	Spain — Spanish		barbarian — barbaric	
	shade — shadow		prepare — preparatory	
	nature — natural			
	fable — fabulous			
	nation — national			
Type II	/i:/ → /e/		/ɪə/ → /e/	
	compete — competitor		hero — heroine	
	heal — health		severe — severity	
	receive — reception		hysteria — hysterical	
	penal — penalty			
	Jesus — Jesuit			
	metre — metric			
Type III	/aɪ/ → /ɪ/		/aɪə/ → /ɪ/	
	crime — criminal		tyrant — tyranny	
	decide — decision		satire — satirical	
	sign — signature		/'sætəɪə/ → /sə'tɪrɪkl/	
	wise — wisdom			
	rite — ritual			
	type — typical			
Type IV	/oʊ/ → /ɒ/		/ɔ:/ <sup>3</sup> → /ɒ/	
	provoke — provocative		historian — historical	
	neurosis — neurotic		flora — florist	
	sole — solitude		euphoria — euphoric	
	holy — holiday			
	clothes — cloth			
	know — knowledge			

**8.19** The other vowels of English do not take part in such regular alternations: they fall outside the vowel shift rule.

- (1) The complex vowel /ju:/ (and its broken variant /jʊə/) resists Vowel Shift, and remains unchanged even where the other tense vowels, /eɪ i: aɪ oʊ/ would become lax. For example: *cube* and *cubic*, *nude* and *nudity* have the same /ju:/, *pure* and *purify* have the same /jʊə/.



(Note, however, *reduce* /ju:/ – *reduction* /ʌ/, because here the *u* comes to be followed by two consonants.)

- (2) The remaining tense vowels, /u: ɔɪ əʊ/ have no regular lax counterpart. Pairs like *do* /u:/ – *does* /ʌ/, or *south* /aʊ/ – *southern* /ʌ/ are isolated and cannot be called regular. Nor does the lax vowel /ʊ/ take part in vowel-shift alternations.
- (3) There are a few irregular pairs that do not fit into the four types above because though the base word has a tense vowel, and the derived word a lax one, they are in the wrong pairing. For example, e.g. *Danish* /eɪ/ but *Denmark* /e/, *peace* /i:/ but *pacifist* /æ/, *clear* /ɪə/ but *clarify* /æ/.
- (4) There are also a number of stems which — contrary to expectation — do not undergo vowel shift, their tense vowel remains unchanged, e.g. *base* /beɪs/ → *basic* /'beɪsɪk/ (and not \*/'bæɪsɪk/); *note* /nəʊt/ → *notify* /'nəʊtəfaɪ/ (and not \*/'nɒtəfaɪ/).

**8.20** Vowel Shift is not a phonetic but a phonological phenomenon, because these tense/lax pairs are not phonetically similar. One might even say that it is a grammatical phenomenon, with limitations and exceptions characteristic of all grammatical rules:

- it applies before certain suffixes but not before others (*typ-ical* /ɪ/ but *typ-ist* /aɪ/);
- it applies to certain vowels but not to others (*tonic* /ɒ/ but *cubic* /ju:/);
- it applies to certain stems but not to others (*base* – *basic*, both /eɪ/).

Its knowledge, then, belongs to “non-phonetic knowledge” (1.21): it can be learnt by everybody, even those whose articulation is clumsy and Hungarian-like. The teacher should present and practise the four regular types of Vowel Shift. The explanation, of course, will depend on the age and level of the group. If you teach children you may say, for example, that certain vowels have “a particular friend” with whom they often take each other’s places, and even “wear each other’s clothes” (i.e. they are spelt the same way). Let us add that since Vowel Shift mostly happens in longer, derived words (usually of Latin origin), you need a somewhat more advanced vocabulary to illustrate its working.

**8.21** The English Vowel Shift is similar to Hungarian long-short alternations like *híd* – *hidak*, *ritus* – *rituális*. In Hungarian the vowel-pairs are quite similar phonetically (though not so much for *nyár* – *nyarat* or *tér* – *terek*). It can be useful to compare English and Hungarian pairs like the following, saying that “basically the same thing” happens in both languages, except that in English the phonetic differences are bigger:

<u>Hungarian</u>	<u>English</u>
náció – nácional(izmus)	nation – national(ism)
méter – metrikus	metre – metric
ritus – rituális	rite – ritual
neurózis – neurotikus	neurosis – neurotic

Many textbooks of English refer to Vowel Shift simply as “long-short” alternation. This terminology is acceptable in the classroom, where you may say that *rite* has “long *i*” (= /aɪ/) and *ritual* has “short *i*” (= /ɪ/), *nation* has “long *a*” and *national* has “short *a*”, etc.

Let us sum up the three kinds of length difference in English vowels.

**(1) Phonetic long/short:**                    *leave* /li:v/ = [li:v]     —   *leaf* /li:f/ = [lif]

The same vowel, but *leaf* is shortened in pronunciation by Pre-Voiceless Vowel Shortening (7.23). Phonetic length difference is never shown in our transcription, and does not influence the quality of the vowel.

**(2) Phonemic long/short:**                *leave* /li:v/     —   *live* /lɪv/

Two different (though phonetically similar) vowels, transcribed with different symbols. There is always some quality difference between phonemic long/short pairs (7.20). If a vowel can stand in stressed word-final position, it is analysed as long (3.20). Diphthongs are also long vowels.

**(3) Tense/lax:**                                *leave* /li:v/     —   *left* /left/

Two quite different vowels. The classification into tense or lax is derived from rules like Vowel Shift; Trisyllabic Laxing (8.3); Pre-R Breaking (which only affects tense vowels) vs. Pre-R Broadening (which only affects lax vowels) (8.15).

## VOWELS IN WORD-FINAL POSITION

**8.22** Not all vowels can appear at the end of an English word. No English word may end in a short full (= plain-lax) vowel, /æ e ɪ ɒ ʌ ʊ/, whatever the spelling suggests.

• If the final vowel is **full**, it must be long: either a diphthong or a long monophthong. This is the Rule of **Final Vowel Length**.

pap <u>a</u> /pə'pɑ:/	vet <u>o</u> /'vi:tʊʊ/	fianc <u>e</u> /fi'ɒnsɛɪ/
shad <u>ow</u> /'ʃædʊʊ/	valu <u>e</u> /'vælju:/	ber <u>e</u> t /'berɛɪ/

• If the final vowel is short and unstressed, it must weaken, becoming /ə/ or /i/, e.g. *visa* /'vi:zə/, *psyche* /'sɑki/. See 8.28.

The words *to*, *do*, *you* are interesting because they are the only ones that may end in unstressed weak /u/, that is, /tu du ju/. These forms are used before a word beginning with a vowel or /w/, e.g. *to end* /tu 'end/, *Are you Welsh?* /'ɑ: ju 'welʃ/. Before a consonant, they are usually pronounced with schwa: /tə də jə/. When really final, *to*, *do you* must be /tu: du: ju:/, e.g. *What are you listening to?* /tu:/.

## VOWELS BEFORE ANOTHER VOWEL

**8.23.** A sequence of two vowels belonging to two separate syllables, as in *ruin*, *poet*, is called a **hiatus** (pron. /haɪ'ertəs/). We may show the syllable boundary with a dot: *ru.in* /'ru:ɪn/, *po.et* /'pou.ət/. Bear in mind that words like *name* /neɪm/ or *clear* /klɪə/ do not belong here, they contain a diphthong, so they are one syllable. A diphthong cannot be pronounced as two syllables: *name* cannot be \*/'ne.ɪm/. (Words like *fruit* /fru:t/, *mean* /mi:n/ do not belong here either, since they only seem to have two vowels because of the digraph spelling.) (See also 9.34.)

The general rule is this: a prevocalic vowel (= one that stands before another vowel) must be either plain-tense, or — if weak — it must be /i/ or /ju/.

**8.24 If the first vowel is weak.** — In English /ə/ may never stand before a vowel. For example, the unstressed *o* weakens to /ə/ in *phonetic* /fə'netɪk/, but not in *poetic* /pou'etɪk/, where it is followed by the vowel /e/. The only weak vowels beginning a hiatus are /i ju/, e.g. *soci.ology* /,sɒsi'ɒlədʒi/, *cre.ative* /kri'eɪtɪv/, *intu.ition* /,ɪntju'ɪʃn/. There is quite a strong tendency to “tense” these prevocalic vowels, so *cre.ative* may become /kri:-/, *intu.ition* /,ɪntju:-/.

If the second vowel is /ə/, the /i u/ acts as Glide-i or Glide-u (5.22), e.g. *previ.ous* may be /i/ or /j/, *usu.al* may be /u/ or /w/, *annu.al* may be /ju/ or /jw/.

**8.25 If the first vowel is full.** — If the prevocalic vowel is full, i.e. unreduced, it must be tense. This is the Rule of **Prevocalic Tenseness**. It also applies before suffixes. Note especially the resulting transcription sequences /aɪɪ/, /ouə/, /i:i/, etc. The syllable boundary between the two vowels is shown in the spelling forms below with a dot:

ru.in /'ru:ɪn/	cha.otic /keɪ'ɒtɪk/	po.em /'pouəm/
ne.on /'ni:ən/	dj.et /'dʒæt/	vow.el /'vaʊəl/
see.ing /'si:ɪŋ/	ly.ing /'laɪɪŋ/	allow.ing /ə'ləʊɪŋ/
fre.er /'fri:ə/	archa.ic /ɑ:'keɪɪk/	low.est /'ləʊəst/
renew.al /rɪ'nju:əl/	boy.ish /'bɔɪɪʃ/	now.adays /'naʊədeɪz/

Such vowel + vowel sequences are usually simplified in natural speech, though dictionaries transcribe them in the above “idealized” fashion. Sometimes dictionaries place a hyphen between the two vowels to indicate syllable division, e.g. /ɑ:'keɪ-ɪk/. It should be noted that the middle /ɪ/ in these sequences may sound like a /j/, e.g. *boyish* may sound like ['bɔɪjʃ].

**Note.** Occasionally /ɔ:/<sup>1</sup> may also stand before a vowel, when a suffix is added, e.g. *draw.ing* /'drɔ:ɪŋ/ (also /'drɔ:ɪŋ/ with intrusive-R). *Draw.er* ‘fíók’ is /drɔ:/, *draw.er* ‘húzó’ is /drɔ:ə/.

## Smoothing

**8.26** When a tense vowel is followed by another vowel (in the same or the next word), it is usually simplified in pronunciation: it loses its close or closing articulation. This is called **Smoothing**. Its effect is similar to that of Pre-R Breaking. Smoothing is an optional phenomenon occurring in natural, colloquial speech.

(a) When /i: u:/ are followed by a vowel, they are smoothed to /ɪ ʊ/ — that is, their articulation becomes opener and lax (cf. 7.12) Compare:

	<i>Careful.</i>	“Smoothed”		<i>Careful</i>	“Smoothed”
	<u>/i:/ + V</u>	→ [ɪ] + V		<u>/u:/ + V</u>	→ [ʊ] + V
ne <u>o</u> n	/ˈni:ən/	[nɪən]	ru <u>i</u> n	/ˈru:ɪn/	[rʊɪn]
se <u>e</u> ing	/ˈsi:ɪŋ/	[sɪɪŋ]	yo <u>u</u> arrived	/ju: əˈraɪvd/	[jʊəˈraɪvd]
he <u></u> arrived	/hi:əˈraɪvd/	[hɪəˈraɪvd]	tw <u>o</u> o’clock	/ˈtu: əˈklɒk/	[ˈtʊəˈklɒk]
thre <u>e</u> o’clock	/ˈθri: əˈklɒk/	[ˈθɪɪəˈklɒk]	to <u></u> add	/tu: ˈæd/	[tʊˈæd]

The resulting sequences of /ɪ ʊ/ plus /ə ɪ/ can be contracted to one syllable: they then become diphthongs. For example, *ruin* (dictionary form /ˈru:ɪn/, two syllables) may be smoothed to /rʊɪn/ (one syllable, with a diphthong). When the second element is /ə/, the resulting smoothed /ɪə ʊə/ are identical with the broken-tense diphthongs /ɪə ʊə/, e.g.:

	<u>Smoothed</u>	=	<u>Broken</u>
/i:ə/ → /ɪə/	ne <u>o</u> n /nɪən/	=	be <u>e</u> r /bɪə/
	ide <u>a</u> /aɪˈdɪə/	=	ende <u>a</u> ring /ɪnˈdɪəriŋ/
/u:ə/ → /ʊə/	fu <u>e</u> l /fju:əl/	=	pu <u>r</u> ely /ˈpjʊəli/
	bre <u>w</u> ery /ˈbrʊəri/	=	ju <u>r</u> y /ˈdʒʊəri/

In some /i: + ə/ words the smoothed form with /ɪə/ has become the established pronunciation, and is now given in dictionaries as the standard form, e.g. *real*, *idea*, *theatre*, *European*, *theor*y, *museu*m, *Ian* — all with /ɪə/.

**8.27** (b) When the closing diphthongs are followed by a vowel, Smoothing causes the diphthong to lose its second element /-ɪ/ or /-ʊ/. The result is a monophthong. For example:

	<i>Careful</i>	“Smoothed”
	<u>Diph.+V</u> →	<u>Monoph.+V</u>
di <u>e</u> t	/ˈdaɪət/	[dæɪt]
go <u>o</u> ing	/ˈgouɪŋ/ (= [ˈgəʊɪŋ])	[gɜɪŋ]
so <u>o</u> early	/ˈsoʊˈɜ:lɪ/ (= [ˈsəʊˈɜ:lɪ])	[səˈɜ:lɪ] (or [ˈsɜ:lɪ])
vo <u>o</u> wel	/ˈvaʊəl/	[væəl]
so <u>u</u> r	/ˈsaʊə/	[sæə]
ho <u>o</u> odd	/ˈhaʊəd/	[hæəd]

Especially frequent is the Smoothing of the “triphthongs” /aɪə/ and /aʊə/: these sequences are nearly always simplified to [æə], whether they come from /aɪ+ə/, /aʊ+ə/ (*diet*,

*towel*) or from the Pre-R Breaking of /aɪ/, /aʊ/ (*virus, sour*). The resulting [æ] can be further simplified to long [a:]. This long [a:] is like H *á*, not like E /ɑ:/ in *darling, hard!* Compare:

	<u>Careful</u>	<u>Smoothed</u>	<u>Simplified</u>	<u>BUT NOT:</u>
dialling	/ˈdaɪəlɪŋ/	→ ['dæɪlɪŋ]	→ ['da:lɪŋ]	≠ darling /ˈdɑ:lɪŋ/
Howard	/ˈhɑʊəd/	→ ['hæəd]	→ [ha:d]	≠ hard /hɑ:d/

Learners need not actively master Smoothing, but they should get accustomed to hearing and correctly interpreting such forms, which sound quite unexplainable to the foreign ear. Hungarians, when hearing smoothed *Howard* [ha:d], *vowel* [va:l], or *Brian* [bra:n], will easily believe that they hear *had* [hæ:d] (or even *hard* [hɑ:d]), *Val* [væ:l], or *bran* [bræ:n]. *Tower* may sound dangerously similar to *tar!*

The contractions of *you, we, they* with *are* also show Smoothing. The vowel of *you're* may be further weakened in unstressed position to /ə/:

	<u>Careful</u>	<u>Smoothed</u>	<u>Weak form</u>
you're	/ju:ə/	→ /jʊə/	→ /jɜ:/ (7.34) → /jə/
we're	/wi:ə/	→ /wɪə/	
they're	/ðeɪə/	→ /ðeə/	

Smoothing has become historically established in *prayer* /preə/, *mayor* /meə/, which have only these pronunciations today.

## THE VOWELS OF WEAK SYLLABLES

**8.28** The weak vowels of English are /ə ɪ ʊ/. They appear only in unstressed syllables, due to the fact that in English the vowels of unstressed syllables are weakened (= reduced). This **Unstressed Vowel Weakening** (also called “**Reduction**”) may even lead to vowel loss, and the appearance of a syllabic consonant. Each of the three weak vowels has a sub-variant, so there are six possibilities in weak syllables: schwa, syllabic consonant, /ɪ ɪ ʊ ʊ/.

- **Schwa /ə/**, as in *tutor*, *ago* (7.36). Never stands before a vowel.
  - Sub-variant: **Syllabic consonants**: /ŋ/ or /l/ (5.18), free variants of schwa-plus-sonorant when not before a vowel (*button*, *chapel*, *present*).
- **Weak /i/**, as in *happy* (8.31). Occurs finally or before a vowel. Before a weak vowel it becomes Glide-i, as in *previous* (5.22)
  - Sub-variant: **Weak /ɪ/**, obligatory alternant of the above before a consonant: *music*, *remain*. This is articulated (and transcribed!) the same as the full /ɪ/ in *kit*.
- **Weak /u/**, with /j/ as in *evacuate*, *Ulysses*, or /j/ dropped as in *graduation* /-dʒu-/ (8.33). Occurs only before a vowel. Before a weak vowel it becomes Glide-u, as in *genuine*, *actual* (5.22).

– Sub-variant: **Weak /ʊ/**, obligatory alternant of the above before a consonant: This is articulated (and transcribed!) the same as the full /ʊ/ in *put*.

The next sections discuss weak vowels in some more detail.

Note. Some books never use the symbols /i u/ but replace them with /ɪ ʊ/ in all positions, e.g. *happy* is transcribed by them as /'hæpɪ/, *patio* as /'pætiʊ/, *create* as /kri'eɪt/, *graduate* as /'grædʒʊət/.

**8.29** To illustrate weakening, we may present word pairs where the same vowel-letters appear in stressed and unstressed syllables. (Stress is shown with an accent mark.)

<i>Stressed</i> <u>(full)</u>	<i>Unstressed</i> <u>(weak)</u>	<i>Stressed</i> <u>(full)</u>	<i>Unstressed</i> <u>(weak)</u>
súpper /ʌ/	suppóse /ə/	énter /e/	entíre /ɪ/
ágony /æ/	agáin /ə/	décorate /e/	Decémber /ɪ/
lād /æ/	sálad /ə/	cáge /eɪ/	páckage /ɪ/
r <sup>o</sup> pe /oʊ/	Éur <sup>o</sup> pe /ə/	degrée /i:/	cóffee /i/
brá /ɑ:/	Chína /ə/	debáte /eɪ/	sénate /ə, ɪ/
véry /e/	fláttery /ə/	expél /e/	chápel /Ø/
júry /ʊə/	céntury /ə/	contáin /eɪ/	Brítain /Ø/

In the last two examples the Ø shows that the vowel has been lost, and the following consonant takes over the syllabic role.

In words where the stress shifts from one syllable to another in grammatical derivations, the full/weak nature of vowels changes accordingly (more on this in [12.16](#)). Observe the underlined vowels:

*an óbj<sup>é</sup>ct* /'ɒbdʒɪkt/ – *to obj<sup>é</sup>ct* /əb'dʒekt/  
*grámmar* /'græmə/ – *grammátical* /grə'mætrɪkl/  
*refórm* /rɪ'fɔ:m/ – *rèfórmation* /,refə'meɪʃn/

**8.30** Weak vowels are less important in communication than full vowels, since weak syllables are less noticeable. The foreign learner needs to spend less time and energy on weak than on full vowels. The weak vowels are often interchangeable, e.g. *kitchen* can be /-tʃɪn/ or /-tʃən/ or /-tʃn/. It hardly ever leads to misunderstanding if you replace one by the other. For this reason we shall limit ourselves to some practical points.

If the weak vowel is **word-initial**, its pronunciation is:

<u>Spelling</u>	<u>Pronunc.</u>	<u>Examples</u>
<i>a-, o-</i>	/ə-/	<i>again, oppose</i>
<i>e-, i-</i>	/ɪ-/	<i>event, illegal</i>
<i>u-</i>	/ju-/	<i>united</i>

If the weak vowel is **word-final**, it is either /ə/ or /i/, as shown below.

<u>Spelling</u>	<u>Pronunc.</u>	<u>Examples</u>
-a, -Vr, -re	/-ə/	china, water, doctor, beggar, centre
-e, -ey, -i, -ie, -y	/-i/	recipe, honey, taxi, zombie, baby

However, the following word final vowels never weaken:

<u>Spelling</u>	<u>Pronunc.</u>	<u>Examples</u>
-o, -ow-	/-oʊ/	jumbo, fellow
-u, -ue, -ew	/-ju:/	menu, continue, mildew

Note. Non-RP speakers often weaken final -ow, pronouncing *fellow* as /'felə/, which may be rendered in phonetic respelling as *fella* or *feller*.

For weak vowels **before another vowel**, see 8.24.

**8.31 Weak /i/ (and /ɪ/).** — Where the spelling has *i*, *y*, *e*, *ie*, *a* not followed by *r*, the unstressed pronunciation is usually not schwa but weak /i/. Weak /i/ is the same as H *i*, and has the same quality as English /i:/ but is short. It may stand finally or before a vowel, but never before a consonant: *happy* /'hæpi/, *studio* /'stju:diəʊ/, *create* /kri'eɪt/. Many speakers lengthen /i/ at the end of the word, so *happy* becomes ['hæpi:].

If the next vowel is weak too (i.e. /ə/ or /ɪ/), the weak /i/ may be pronounced /j/, e.g.: *previous* /'pri:viəs/ or /'pri:vjəs/ (Glide-i 5.22).

Before a consonant weak /i/ is automatically replaced by /ɪ/, e.g. *appetite* /'æpɪtaɪt/, *remain* /rɪ'meɪn/, *music* /'mju:zɪk/. This weak /ɪ/ is phonetically the same as the full /ɪ/ in *kit*, *convince*, but of course here it is unstressed, so we regard it as a weak vowel.

The following table sums up the distribution of the three I-type sounds, /i: ɪ i/. The framed area contains the weak sounds.

	<i>Stressed</i>	<i>Unstressed</i>
<i>Long</i>	/i:/ <u>seem</u> , <u>arena</u>	/i:/ prote <u>in</u> , pedigr <u>ee</u>
<i>Short</i>	/ɪ/ k <u>i</u> t, conv <u>i</u> nce	<div style="border: 2px solid black; padding: 5px;">           /i/ bef. V or finally            stud<u>i</u>o, creat<u>e</u>, happ<u>y</u>, tax<u>i</u>            /ɪ/ bef. C <u>re</u>main, edit<u>i</u>, want<u>e</u>d         </div>

**8.32** Between two consonants speakers often replace /ɪ/ with /ə/, e.g. *palace* can be /'pælɪs/ or /'pæləs/, the ending -*ity* can be /-ɪti/ or /-əti/, etc. The choice depends on the speaker. /ɪ/ is the more old-fashioned pronunciation, /ə/ is the more modern one. Examples where /ɪ/ or /ə/ are equally possible:

/ɪ ~ ə/ *kitchen*, *sadness*, *hostess*, *animal*, *origin*, *gravity*, *happily*, *bracelet*, *delicate*,  
*palace*, *possible*, *barrister*, *delegation...*

Most books do not indicate this, but write either /ɪ/ or /ə/. My recommendation is to use /ə/, partly because it is becoming the norm in English, and partly because /ə/ is easier for Hungarians than /ɪ/. English /ɪ/ is among the difficult sounds and learners tend to replace it with H *i*, which leads to misunderstandings. The more /ɪ/ sounds we avoid the better.

However, in certain endings, even though they are unstressed, /ə/ is not allowed, and we always pronounce /ɪ/, e.g. in *-ing, -ic, -ish, -it, -es, -ed, -age*. Schwa is not possible in these. Take two examples: *elliptic*, with three identical vowels: /ɪ'lɪptɪk/, where both weak /ɪ/'s are pronounced the same as full /ɪ/; and *visibility* /vɪzə'bɪlətɪ/, where only the full vowels (*vi-* and *-bi-*) are pronounced /ɪ/, and the weak vowels are /ə/ and /i/.

In a few unstressed syllables (before a consonant) there is a meaning contrast carried by /ɪ/ and /ə/, in others (in word-final position) by /i/ and /ə/; that is, they produce minimal pairs (note that the *r* after the schwa is silent in these words). This is why schwa can be regarded a separate phoneme of English. Some such minimal pairs:

/ɪ/ ↔ /ə/	/ɪ/ ↔ /ə/	/i/ ↔ /ə/
teach <u>e</u> s – teach <u>e</u> rs	ill <u>u</u> sion – all <u>u</u> sion	rock <u>y</u> – rock <u>e</u> r
rais <u>e</u> s – raz <u>o</u> rs	ex <u>e</u> pt – ac <u>e</u> pt	Bett <u>y</u> – bett <u>e</u> r
box <u>e</u> s – box <u>e</u> rs	eff <u>e</u> ct – aff <u>e</u> ct	read <u>y</u> – redd <u>e</u> r

**8.33 Weak /u/ (and /ʊ/).** — In certain weak syllables, where the spelling has *u* (not followed by *r*), the vowel is weak /u/, often preceded by /j/. Whether the /j/ element is pronounced or not depends on Yod-Dropping (5.24). For example: *evacuate* /ɪ'vækjuət/, *united* /ju'nartɪd/, *Ulysses* /ju'li:si:z/, *insinuate* /ɪn'sɪnjuət/, *genuine* /'dʒenjuɪn/; but *graduation* /,grædʒu'eɪʃn/, *actual* /'æktʃuəl/.

Weak /u/ is the same as H *u*, and has the same quality as English /u:/ but is short. It always stands before a vowel, never before a consonant or finally.

Before a consonant weak /u/ is replaced by weak /ʊ/, e.g. *regular* /'regjʊlə/, *Portugual* /'pɔ:ʃʊgl/. (This weak /ʊ/ is phonetically the same sound as the full /ʊ/ in *push*, *butcher*, but of course here it is unstressed.) Many people use /ə/ in such positions: /'regjələ/, /'pɔ:ʃəgl/.

Word-finally we do not find weak /u/ but only full long /u:/, e.g. *menu* /'menju:/.

Note 1. When an unstressed letter *u* is followed by *r*, or by two consonant-letters, or by one final consonant, it is never pronounced as /ʊ/, but as /ə/, e.g. *measure* /'meʒə/, *accurate* /'ækjərət/, *consuluation* /,kɒnsəl-/ , *voluntary* /'vɒləntri/, *curriculum* /kə'rɪkjʊləm/.

Note 2. The function words *do, to, you* have weak /u/ (when not /ə/). See 8.22.



## SUMMARY OF THE FUNCTIONAL CLASSES OF VOWELS

**8.34** The table below sums up the major points of this chapter.

TABLE 8.34. THE FIVE FUNCTIONAL CLASSES OF VOWELS.

CLASS: VOWELS:	PLAIN-TENSE i: u: eɪ aɪ ɔɪ ʊʊ əʊ	BROKEN-TENSE ɔ: <sup>3</sup> ɪə eə ʊə aɪə əʊə	PLAIN-LAX æ e ɪ ɒ ʌ ʊ	BROAD-LAX ɑ: ɜ: ɔ: <sup>1,2</sup>	WEAK ə ɪ ɪ ʊ ʊ
Full or weak?	full	full	full	full	weak
Long or short?	long	long	short	long	short
Diphthong?	yes, exc. /i: u:/	yes, exc. /ɔ:/ <sup>3</sup>	no	no	no
Can it stand before <i>r</i> ?	no	yes	yes ( <i>carrot</i> )	yes	yes
Can it stand word-finally?	yes	yes	no	yes	yes
Can it stand bef. a vowel?	yes	no	no	no	/i/, /u/ – yes /ə/ – no
Is it normal in third-last stressed syl.?	no, exc. /ju:/	no, exc. /jʊə/	yes	yes	– –

— o —

### QUESTIONS FOR REVISION

1. What are the tense vowels and what articulatory features do they share?
2. What are the lax vowels and what articulatory features do they share?
3. What is the difference between tense/lax and long/short? Are all tense vowels long? Are all lax vowels short?
4. In what positions do diphthongs hardly ever occur?
5. Transcribe these words, and explain the pronunciation of *i+r*: *stir*, *stirring*, *mirror*, *empirical*, *empire*, *virus*.
6. Which rule is responsible for the difference between the underlined vowels in *Hungarian* – *Albanian*?
7. When do we NEVER find /ə/ in a weak syllable?
8. Which vowels may stand at the end of an English word?
9. When does *r* NOT influence a preceding full vowel?
10. Which vowels may appear before another (pronounced) vowel?

11. Which pair shows Vowel Shift in its underlined vowels? room /rʊm/ – room /ru:m/; cube – cubicle; repeat – repetitive; grammar – grammatical.
12. Which suffixes or endings cause neither laxing in the preceding syllable, nor trisyllabic laxing (i.e. leave the stem vowel uninfluenced)?
13. Which broad vowels may occur even when no *r* follows?

## CHAPTER 9

### LETTER-TO-SOUND RULES FOR VOWELS

**9.1** This chapter will look at the letter-to-sound rules for English vowels, that is, the part of the “reading code” of English which concerns the vowels. This is the area in which English spelling is the least reliable and where even the rules are fairly complicated. Yet it is worth dealing with these rules because the vast majority of English words follow them. (Unfortunately, the irregular words tend to be the most frequent and basic ones of the language.) Laying down clear-cut rules also helps us to pinpoint irregularities — as the old wisdom goes: “exception strengthens the rule”.

Most foreign learners approach English as much through the written as through the spoken medium. Very often they see a word in writing before they have heard and pronounced it. It is therefore important to provide learners with tools to predict the pronunciation of a written word. It is up to the teacher or course designer to decide how much of this material shall be actually taught. The teacher himself, however, must know these rules (and their exceptions), whether he explicitly teaches them or not.

#### Letter, grapheme, digraph

**9.2** A **grapheme** is a letter or letter-combination used to represent one particular phoneme or group of phonemes. If a grapheme is composed of two letters, we call it **digraph** (pron. /'daɪgrɑ:f/, H “kettősbetű”), e.g. English *sh, oo, ck*; Hungarian *cs, ny*. A digraph is a grapheme just like a single letter. (This is why in Hungarian school practice any grapheme, including digraphs like *cs*, is called “betű”.)

There are seven letters in English that take part in the representation of vowels: *a, e, i, o, u, w, y*. The letter *w* never represents a vowel on its own, but only as the second member of a digraph (e.g. *town, new*). The letter *y* (as a vowel-letter) always has exactly the same pronunciation as *i*, so *i* and *y* may be considered identical from our point of view. Therefore we really have five single-letter vowel-graphemes. For shortness' sake we shall call them “single vowel-letters”: they are: *a, e, i=y, o, u*.

Besides these five single vowel-letters there are thirteen vowel-digraphs. Note that *i* and *y, u* and *w* are equivalent as second elements of digraphs: *ai* is the same grapheme as *ay*, and *au* is the same as *aw*, etc. The difference is only graphic: the *-y, -w* forms are preferred

word-finally or before a vowel (e.g. *stay*, *mayor*, *now*, *power*), the *-i*, *-u* forms elsewhere (*rain*, *loud*). Therefore we treat them as the same grapheme, and speak of “the digraph *ai=ay*”, “the digraph *ou=ow*”, and so on.

English spelling uses the following thirteen vowel-digraphs:

<i>ee</i>	<i>ea</i>	<i>ae</i>	<i>ai=ay</i>	<i>au=aw</i>
<i>oo</i>	<i>oa</i>	<i>ie</i>	<i>ei=ey</i>	<i>eu=ew</i>
			<i>oi=oy</i>	<i>ou=ow</i>
			<i>ui</i>	

Observe that only *e* and *o* occur doubled. The combinations *oe* and *ue* are not listed above as they are not digraphs but combinations of *o* or *u* plus silent *e*, e.g. *toe*, *due*. Other digraphs like *ae*, *eo* are very rare (see 9.33).

**9.3 Full and weak pronunciations.** — In the present chapter we only deal with the full pronunciation of the vowel-graphemes, that is, when they appear in stressed syllables, or in such unstressed syllables which are not weakened (“strong-unstressed”, 11.4). The syllable may be primary stressed as in *á*nimal, romántic, or secondary stressed as in àcadémic, invèstigátion, or just a strong-unstressed syllable as in cáravan /-væn/, Kódak /-dæk/ — this makes no difference from the present point of view, they are all fully pronounced.

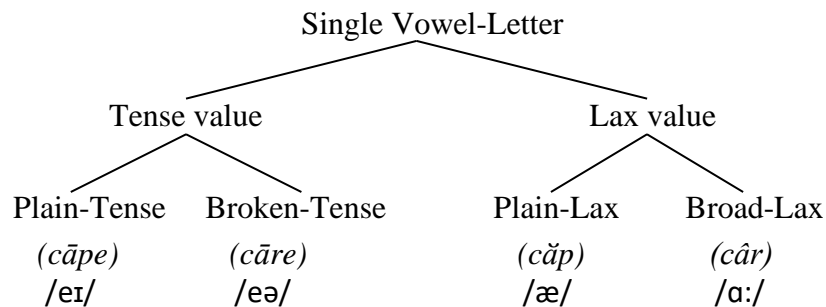
## THE STANDARD SOUND VALUES OF THE VOWEL-GRAPHEMES

**9.4 Single vowel-letters.** — Each of the five single vowel-letters has two basic sound values: a tense and a lax value (cf. 8.1). For example, the letter *a* has the tense sound value /eɪ/ (*cape*, *range*) and the lax sound value /æ/ (*cap*, *fabulous*, *carrot*). Both the tense and the lax value is, quite predictably, influenced by a following *r* according to the rules of Pre-R Breaking and Pre-R Broadening (8.7-13): for the letter *a* this will mean broken-tense /eə/ (*care*, *variant*) and broad-lax /ɑː/ (*car*, *pardon*). Thus each single vowel-letter has **four standard sound values**: plain-tense, broken-tense, plain-lax, broad-lax.

**9.5** It will be useful to introduce a practical way of indicating the pronunciation of the vowel-letter without having to transcribe the word. We use the following marks above the letter to indicate the sound values: the length-mark for tense pronunciations, the shortness mark for plain-lax and the circumflex mark for broad-lax. The length mark will serve for both the plain-tense and the broken-tense value, since the presence of a following *r* makes it clear when we have to do with the broken value. (We use the letter *a* as an example below; in Table 9.7 we list all marked letters):

Marked letter	Name of mark	Sound value	Pronunc.	Examples
$\bar{a}$	length mark	Plain-tense	/eɪ/	cāpe, rānge
same, before <i>r</i>		Broken-tense	/eə/	cāre, vāriant
$\check{a}$	shortness mark	Plain-lax	/æ/	căp, ănimal
$\hat{a}$	circumflex mark	Broad-lax	/ɑ:/	câr, pârdon

The four standard sound values for each single vowel-letter are the following (with examples for the letter *a*):



**9.6 Vowel Digraphs.** — The vowel-digraphs have only one standard sound value: tense, which is of course broken before *r*. For example, the grapheme *ai* has the plain-tense pronunciation /eɪ/ (*rain*), and the broken-tense pronunciation /eə/ (*hair*). The only digraph whose regular pronunciation is not tense but lax is *au=aw*; its sound value is lax /ɔ:/<sup>1</sup> (*law*).

In most cases the digraphs have the same pronunciation as one of the single letters. The grapheme *ai*, for instance, duplicates the tense pronunciations of the letter *a* (*cape* = *rain*, *care* = *hair*), so, using the marks we have just introduced, we may say that *ai* is equal to  $\bar{a}$ . The digraph *au=aw* is pronounced like broad or broken *o* (*sauce* = *law* = *more* = *nor*). The digraph *oo* is /u:/ just like tense  $\bar{u}$  except that *oo* never has a /j/ before it (see 8.2).

The only digraphs that have a sound of their own, not expressed by any single vowel-letter, are *ou=ow* (when pronounced /aʊ/), and *oi=oy* (pronounced /ɔɪ/).

**9.7 The standard sound values of the vowel-graphemes.** Table 9.7 shows all the standard sound values of the English vowel-graphemes when they express a full vowel. The phonetic values of the marks above the vowels appear from the table. (For the relation of these pronunciations with the phonological system of English, see Table 8.1.)

Table 9.7 is extremely important and must be studied very thoroughly. Let us point out a few important features of the table:

**a)** All full vowels appear somewhere in the table, with the exception of /ʊ/. This vowel has no regular spelling equivalent. It is usually spelt with *u* (*full*) or *oo* (*book*).

TABLE 9.7 STANDARD SOUND VALUES OF VOWEL-GRAPHEMES

GRAPHEME	TENSE		LAX		
	Plain-tense	Broken-tense	Plain-lax	Broad-lax	
<b>Single Vowel-Letters</b>					
A	/eɪ/ cāpe rānge	/eə/ cāre Māry	/æ/ cǎp cǎrrot	/ɑ:/ cār hård <sup>2</sup>	
E	/i:/ scēne ēven	/ɪə/ hēre ēra	/e/ yēs vĕry	/ɜ:/ hēr tĕrm	
I=Y	/aɪ/ tīme cȳcle	/aɪə/ fīre tȳrant	/ɪ/ hīt sȳrup	/ɜ:/ stīr gīrl	
O	/oʊ/ hōme pōst	/ɔ:/ <sup>3</sup> mōre glōry	/ɒ/ lōck sōrry	/ɔ:/ <sup>2</sup> nōr fōrm	
U	/ju:/ cūbe mūsic /u:/ Jūne	/jʊə/ cūre fūry /ʊə/ sūre	/ʌ/ cŭp hŭrry	/ɜ:/ fŭr tŭrn	
<b>Vowel-Digraphs</b>					
AI=AY (= ā)	/eɪ/ rain stay	/eə/ hair	<i>The other vowel-digraphs have no standard lax values!</i>		
EI=EY	/eɪ/ vein obey	/eə/ their			
EA (= ē)	/i:/ mean	/ɪə/ near			
EE	/i:/ need	/ɪə/ beer			
IE	/i:/ thief	/ɪə/ pier			
OA (= ō)	/oʊ/ coach	/ɔ:/ <sup>3</sup> coarse			
AU=AW (= ô)					/ɔ:/ <sup>1</sup> sauce law
OO	/u:/ moon	/ʊə/ poor			
EU=EW (= ū)	/ju:/ feudal new /u:/ drew	/jʊə/ Europe /ʊə/ Jewry			
UI	/ju:/ suit /u:/ fruit				
OI=OY	/ɔɪ/ join boy				
OU=OW	/aʊ/ loud now	/aʊə/ sour			

**b)** The letter *o* has only three different standard sound values, since its broken-tense (/ɔ:/<sup>3</sup>) and broad-lax (/ɔ:/<sup>2</sup>) values are pronounced the same way in RP (8.8).

**c)** The Broad-Lax column contains only three different sounds, as there are only three broad-lax vowels in English. The broad-lax values of *e*, *i*, *u* are the same /ɜ:/; *au=aw* is pronounced the same as broad (or broken) *o*.

**d)** The alphabetical names of the five letters *a*, *e*, *i*, *o*, *u*, are the same as their plain-lax pronunciations: /eɪ i: aɪ ɔʊ ju:/.

**e)** The graphemes *u* (when tense), *eu=ew*, and *ui* are basically /ju:/, and they drop their “yod” after certain consonants (5.24).

## THE REGULAR PRONUNCIATIONS OF THE SINGLE VOWEL-LETTERS

### Graphic Positions of Single Vowel-Letters

**9.8** We have seen that each vowel-grapheme has its standard sound values. For the vowel-digraphs, there is nothing else to say (except that there are some irregularities, but those have to be memorized anyway). For the single vowel-letters, however, an important question is still open: how does the spelling show whether they are tense or lax? To answer this question, we must examine the graphic position of the vowel-letter.

By the **graphic position** of a letter we mean the letters that immediately follow it in spelling, whether these are pronounced or not. A vowel-letter is either in “free” or in “covered” graphic position, as explained below.

In the following discussion the symbol “C” will stand for a consonant-letter, “V” for a vowel-letter. “S” will mean stop (/p, b/ etc.) and “L”, liquid (/l, r/). The symbol # represents the end of a word.

Note that the grapheme *x* counts as two consonant-letters (as it represents two sounds). Conversely, the digraphs *ph*, *th*, *ch* count as one consonant-letter (as they represent a single sound).

**9.9 Covered graphic position.** — A single vowel-letter is in covered graphic position if it is followed

(a) by two (or more) consonant-letters (the VCC arrangement)

*haMMer*, *doCTor*, *kiSS*, *luCK*, *paRLiament*, *saDDle*, *huNDred*, *teRM*; *aNTHem*, *oR-PHan*; *taXi*, *seX*, *oXygen*. (See (d) below for a regular exception.)

(b) by one final consonant-letter (the VC# arrangement)

*haM*, *doG*, *myTH*, *caR*, *fuR*, *begaN*, *admiT*, *upoN*, *prefeR*.

The covered graphic position (“fedett íráshelyzet”) is sometimes called “checked” or “closed” position.

**9.10 Free graphic position.** — A single vowel-letter is in free graphic position in all other cases; that is, if it is followed

(c) by one consonant-letter plus a vowel-letter (the VCV arrangement)

*caPE, leGAl, laZY, caRE, aNimal, heSitate, uSual; baThE, hyPhEn, baChElor.*

(d) by two consonant-letters plus a vowel-letter **IF** the first consonant-letter is a stop, the second a liquid /l/ or /r/ (the “stop-plus-liquid” or VSLV arrangement); this is a regular exception to type (a) above

*caBLE /'keɪbl/, approPRIate /ə'prɒʊpriət/, cyCLIst /'sɑ:kli:st/.*

(e) by another vowel-letter (the VV arrangement)

*poEtry, chaOs, ruIn, liE, duE.*

(f) by nothing (the V# arrangement)

*go, flu, apply, he.*

The free graphic position (“szabad íráshelyzet”) is sometimes called “open” position.

**9.11** The following table gives an overview of the various graphic positions in which a stressed single vowel-letter can find itself.

Covered Graphic Position		Free Graphic Position			
(a) VCC	(b) VC#	(c) VCV	(d) VSLV	(e) VV	(f) V#
ha <u>M</u> Mer a <u>F</u> Ter che <u>S</u> S bu <u>C</u> Kle ta <u>X</u> i	ca <u>P</u> pla <u>N</u> my <u>T</u> H admi <u>T</u> enro <u>L</u>	ca <u>P</u> E pri <u>C</u> E le <u>G</u> Al a <u>N</u> imal ba <u>T</u> hE	sta <u>B</u> LE cy <u>C</u> LIst nu <u>T</u> RIent ne <u>G</u> RO a <u>P</u> ROn	po <u>E</u> t cha <u>O</u> s ru <u>I</u> n li <u>E</u> du <u>E</u>	no <u></u> flu <u></u> be <u></u> deny <u></u> hi-fi <u></u>
te <u>R</u> M sta <u>R</u> Ted o <u>R</u> PHan	ca <u>R</u> pre <u>F</u> eR fu <u>R</u>	ca <u>R</u> E fu <u>R</u> Y glo <u>R</u> IOUS	- -	- -	- -

The words below the dotted line show R-influence on the vowel, according to the rules of Pre-R Broadening (a-b) and Pre-R Breaking (c).

Do not confuse the **free or covered** graphic position of a vowel-letter with the **open or closed** nature of the syllable. In English these two need not coincide. Syllable structure is a phonological matter, and does not depend on spelling. Two words with the same syllable structure may be spelt differently, one with a graphically free vowel, the other with a covered one, e.g. *salad* = *ballad*, *filed* = *mild*, *to animate* = *to annotate*; or the same graphic position may correspond to different syllable structures, as the free *a* in *baked* /berkt/ (one closed syllable) ≠ *naked* /'neɪkɪd/ (two syllables, one open and one closed).



## The Tense/Lax choice rules

**9.12** The most important factor in the tense/lax choice is the graphic position of the vowel-letter. The covered position indicates a lax pronunciation. The free position basically indicates a tense pronunciation, but a number of laxing rules may override this and impose a lax pronunciation.

The tense/lax choice rules are the following:

- **The vowel-letter is in covered position:**

- Rule 1** Covered Position Rule (“if covered, then lax”)

- **The vowel-letter is in free position:**

- Rule 2** Free Position Basic Rule (“if free, then tense”)

- Rule 3** Free *u* is non-laxable (*cūbic*).

- Rule 4** Prevocalic vowels are non-laxable (*herōic*).

*Laxing rules:*

- Rule 5** Trisyllabic Laxing (*grāvity*)

- Rule 6** Laxing by Ending (*tōnic*)

- Rule 7** Laxing by Free *u* (*grādual*)

- Rule 8** CiV Laxing (*revisiōn*)

*Tensing rule:*

- Rule 9** CiV Tensing (*rādiate*)

**9.13** We say that a vowel is pronounced **regularly** if it has one of its standard sound values (as listed in Table 9.7), predictable on the basis of the tense/lax choice rules.

The **irregular** pronunciations of the vowel graphemes fall into two large classes: Tenseness Reversals and Quality Deviations.

By **Tenseness Reversal** we mean a pronunciation where the letter has one of its standard values, but violates a tense/lax choice rule. The grapheme has the “wrong” tenseness value: it is tense when it should be lax, or vice versa. For example, *rānge* /reɪndʒ/ is a Tenseness Reversal because the *a* is tense even though it is in covered position. Still, its pronunciation, /eɪ/, is one of the standard sound values of the vowel-letter *a*. It is only the “tenseness value” (the tense/lax choice) which is irregular (“reversed”). In Tenseness Reversals the vowel-letter picks an unexpected value from its own row in Table 9.7, but does not take on the pronunciation of some other vowel-letter. Tenseness Reversals are fairly frequent, especially the free vowel-letters may be lax without explanation (*cīty*). Tenseness Reversals will be mentioned under the rule which they violate.

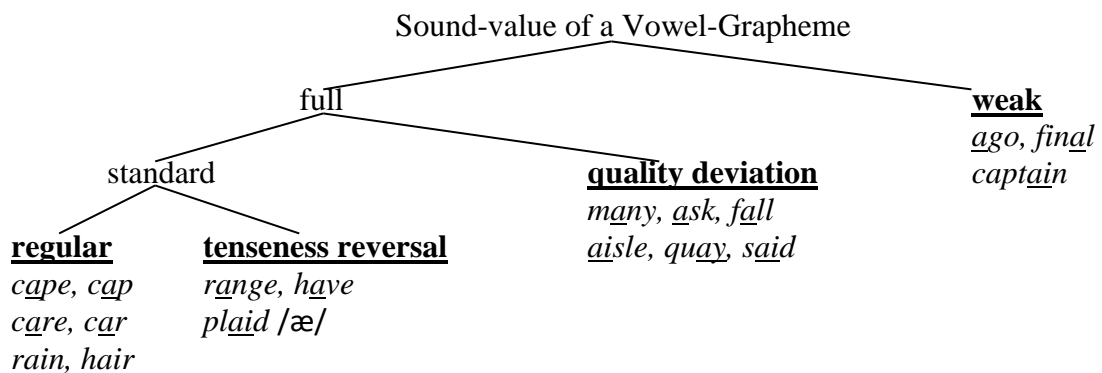
**9.14** By **Quality Deviations** we mean those cases where the grapheme does not have any of its standard sound values, but takes on the pronunciation of another vowel grapheme. For example, the *a* in *many* /'meni/ is a Quality Deviation because it is pronounced /e/, which is not among the standard sounds of *a* at all. In this word the letter *a* “borrows” a quality which

belongs to the letter *e*. Quality Deviations are relatively small in number, but they affect the most frequent words of English. The most famous quality deviation is the LOVE-words (listed in 9.32), which are spelt with *o* but pronounced as if spelt with *u*.

Some of these phenomena might be considered subrules rather than irregularities (like the pronunciation of *a* as /ɒ/ after /w/, as in *wash*), but in the present book they are regarded as Quality Deviations. They will be mentioned under each grapheme in 9.30-31.

Since the vowel digraphs (except *au/aw*) ought always to be tense, we must treat all their lax values as Quality Deviations.

**9.15** The diagram below sums up what types of pronunciation a vowel-grapheme may have in English. A few examples are added with *a* and *ai* for illustration.



Recall that “standard” means the pronunciations given for each vowel in Table 9.7. “Quality deviation” means any other full-vowel pronunciation. “Regular” means a standard pronunciation predictable with the Tense/Lax choice rules. “Tenseness reversal” means a standard pronunciation not predictable with these rules. In the following sections (9.16-28) we deal with the standard sound values only; quality deviations will be listed in 9.30-31.

The symbol % means that the vowel in question can also be pronounced in the regular way. For example, % *ate* may be regularly /ert/ or irregularly /et/. Remember furthermore that the marks above the vowels show that they are stressed, as well as indicating their tense or lax (or broad-lax) pronunciation. The key to these marks is Table 9.7.

## The Covered Position Rule

**9.16** **RULE 1.** IF A STRESSED SINGLE VOWEL-LETTER STANDS IN COVERED GRAPHIC POSITION, IT IS PRONOUNCED LAX.

Examples:

A	E	I=Y	O	U
<u>/æ/</u>	<u>/e/</u>	<u>/ɪ/</u>	<u>/ɒ/</u>	<u>/ʌ/</u>
căp	yēs	hīt	dŏg	cŭp
ădd	ěgg	mĭss	ŏff	skŭll

hämmer	lëtter	wíinner	stöpping	sümmër
fäctory	wrëstle	sýstem	dönkey	müstard
äggravate	sëttle	míddle	böggle	sückle
cärröt	bërry	mírror	sörrow	cürrënt

With automatic Pre-R Broadening:

<u>/ɑ:/</u>	<u>/ɜ:/</u>	<u>/ɜ:/</u>	<u>/ɔ:/<sup>2</sup></u>	<u>/ɜ:/</u>
câr	hêr	stîr	nôr	fûr
hârd	têrm	fîrst	fôm	hûrt
Spârtan	mêrmaid	Vîrgo	spôrts	ûrban
anârchic	intêrnal	affîrm	accôrding	distûrb
stârring	refêrred	stîrrer	abhôrred	fûrry

Note 1. In all these examples, and the others in this chapter, the marked vowel is understood to be stressed.

Note 2. For the difference between *carrot* and *starring*, see 8.13.

■ EXCEPTIONS (tenseness reversals). In some words the vowel-letters *a*, *i*, *o*, *u* (but never *e*) have their **tense** value even though they are in covered position.

*a* = /eɪ/ *āngel*, *hāste*, *chāmbër*, /eə/ *scārce*... (see list in 9.30 “A”)

*i* = /aɪ/ *kīnd*, *wīld*, *fīght*, *sīgn*, *Chrīst*, *īslānd*... (see list in 9.30 “I=Y”)

*o* = /oʊ/ *contrōl*, *fōlk*, *sōldier*, *mōst*, *dōn't*... (see list in 9.30 “O”)

*u* = /u:/ *trūth*, *Rūth*, *rūthless*.

Apart from these words (and some Quality Deviations like *tomb* /tu:m/, for which see 9.30), all single vowel-letters in covered position are lax.

## The Free Position Basic Rule

**9.17** **RULE 2.** IF A STRESSED SINGLE VOWEL-LETTER STANDS IN FREE GRAPHIC POSITION, IT IS PRONOUNCED **TENSE**, UNLESS SOME LAXING RULE APPLIES TO IT.

Examples:

<b>A</b>	<b>E</b>	<b>I=Y</b>	<b>O</b>	<b>U</b>
<u>/eɪ/</u>	<u>/i:/</u>	<u>/aɪ/</u>	<u>/oʊ/</u>	<u>/(j)u:/</u>
cāpe	scēne	fīve	hōme	cūbe
grīmāce	suprēme	advīce	explōde	redūce
rāzor	fēver	tīger	ōpen	sūper
vācant	rēcent	horīzon	mōment	stūdent
bāthe	ēther	cīpher	Lōthian	Lūther
cāble	mētre	mīgrant	nōble	scrūple
chāos	nēon	bīas	pōet	crūel
Māe	hē	applŶ	nō	flū

With automatic Pre-R Breaking:

<u>/eə/</u>	<u>/ɪə/</u>	<u>/aɪə/</u>	<u>/ɔ:/<sup>3</sup></u>	<u>/(i)ʊə/</u>
cāre	hēre	fīre	mōre	cūre
prepāre	sevēre	admīre	befōre	insūre

Māry	ēra	sīren	glōry	fūry
pārents	hēro	spīral	Dōrian	rūral

The Free Position Basic Rule has a number of regular exceptions called laxing rules, described in [9.19-23](#).

■ EXCEPTIONS (tenseness reversals). In a number of words the vowel is lax even though it is in free position and no laxing rule applies to it.

- (a) The free vowel is irregularly lax **in the final (or only) syllable**. These words are pronounced as if they did not end in final silent *-e*. This irregularity is extremely rare; it is only found in 8 words:

*hāve, āre; allēge /ə'ledʒ/, wēre; to līve (v), gīve; gōne /ɒ/, shōne /ɒ/.*

- (b) The free vowel is irregularly lax **in the second-last syllable**. This irregularity is very frequent. Here we just present a few examples. Fuller lists are given under the respective graphemes in [9.30](#).

*a = /æ/ sālād, gāther, ātom, Ārab...*

*e = /e/ dēvil, tēnant, vēry, lēmon...*

*i = /ɪ/ līnen, considēr, cīty, sýrup...*

*o = /ɒ/ prōper, bōther, bōdy, ōrange...*

(For *u*, see Rule 3.)

## Nonlaxable vowels

**9.18** Before discussing the laxing rules, we must mention two cases when the laxing rules do NOT apply:

### RULE 3. FREE *U* IS NON-LAXABLE.

When the stressed vowel-letter *u* is in free position, it is always tense, even if a Laxing Rule would seem to apply to it. Compare *grāvity* (lax /æ/ because of the trisyllabic position) but *ūnity* (tense /ju:/ despite the trisyllabic position); *pānic* (lax /æ/ because of the ending *-ic*) but *mūsic* (tense /ju:/ despite the ending *-ic*), etc.

■ EXCEPTIONS (tenseness reversals). In the following words free *u* is irregularly lax:

*u = /ʌ/ stūdy, pūnish, pūblic, pūblish, Dūblin, būnion, %cūlinary.*

### RULE 4. PREVOCALIC VOWELS ARE NON-LAXABLE.

When the stressed vowel-letter is followed by another vowel, it is always tense, even if a Laxing Rule would seem to apply to it (see [8.23](#)). Compare *erōtic* (lax /ɒ/ because of the ending *-ic*) but *herōic* (tense /oʊ/ despite the ending *-ic*).

■ EXCEPTIONS. There are no exceptions to this rule.

## The Free Position Laxing Rules

**9.19** As we have seen (Rule 2 above), if the stressed vowel-letter is in free graphic position, its pronunciation is expected to be tense. However, there are a number of words where the vowel — despite its free position — is pronounced lax (*animal*, *comic*, *lemon*, *give*). Most of these exceptions are explainable by a laxing rule. The laxing rules override the Free Position Basic Rule: they make the vowel lax despite its free graphic position. For example, in *pānic* the letter *a* is in free position, yet it is pronounced lax /æ/ because it is followed by *-ic*.

The following sections will treat these rules one by one.

### 9.20 Trisyllabic Laxing.

**RULE 5.** IF THE STRESSED VOWEL-LETTER (excepting *u* or prevocalic vowels) IS IN THE THIRD (or earlier) SYLLABLE FROM THE END OF THE WORD (not counting productive suffixes), IT IS PRONOUNCED LAX .

Examples (there are no examples with *u* because of Rule 3!):

A	E	I=Y	O	U
<u>/æ/</u>	<u>/e/</u>	<u>/ɪ/</u>	<u>/ɒ/</u>	_____
ānimal	hēsitate	vīsible	ōpera	--
insānity	crēdible	abīlity	biōlogy	
sācrament	sēcretary	cŷclamen	ōbligant	
pārody	vērify	mīracle	ōrigin	

This rule is the product of the phonological rule of Trisyllabic Laxing (see 8.3-4), which prescribes that any vowel except *u* (whatever its graphic position) must be lax in such a position. Note that a following *r* cannot influence such a vowel, since the vowel is lax, and the *r* is followed by another vowel (i.e. all the above words belong to the “carrot” type, 8.12). Note also the regular exceptions of the *rādiate*, *ōpium* type (CiV Tensing, 9.25).

■ EXCEPTIONS (tenseness reversals). In some words the free vowel in the third-last (or earlier) syllable remains tense. This only happens with *a*, *i*, *o*. (Note that words like *lāzi#ness*, *stābil#ize* are not irregular because they contain a neutral suffix. See 8.4, 12.18).

*a*: *fāvourite*, *bākelite*, *rārity*, *Ābraham*;

*i*: *īsolate*, *īrony*, *īvory*, *hībernate*, *dŷnamite*, *dīnosaur*, *mīcrophone*;

*o*: *nōtify*, *glōrify*, *ōmega*, *Ōberon*.

### 9.21 Laxing by Ending.

**RULE 6.** IF THE STRESSED VOWEL-LETTER (excepting *u* or prevocalic vowels) IS FOLLOWED BY A LAXING ENDING, IT IS PRONOUNCED LAX.

THE LAXING ENDINGS ARE: *-ic*, *-id*, *-et*, *-it*, *-el*, *-ish* (n, v).

Examples (no examples with *u* because of Rule 3):

<b>A</b>	<b>E</b>	<b>I=Y</b>	<b>O</b>	<b>U</b>
<u>/æ/</u>	<u>/e/</u>	<u>/ɪ/</u>	<u>/ɒ/</u>	_____
pānic	phonētic	analýtic	tōnic	--
fābric	mētric	cītric	erōtic	
vālid	intrēpid	vīvid	sōlid	
plānet	ēdit	līmit	prōphet	
pānel	lēvel	chīsel	nōvel	
vānish	blēmish	fīnish	pōlish (v.)	

Actually, these Laxing Endings prescribe that any vowel except *u* must be lax before them (see 8.5).

The ending *-ish* is a laxing ending only when it forms part of a noun (*pārish*) or a verb (*to pōlish*), but not when it is an adjective-forming suffix because in this function it is neutral (12.18): *Swēd#ish* /i:/, *slāv#ish* /eɪ/, *Dān#ish* /eɪ/, *Pōl#ish* /oʊ/. (There are a few irregularities like *Brītish*, *Spānish*, *Flēmish*.)

■ EXCEPTIONS (tenseness reversals). In some words the free vowel remains tense even though it is followed by a Laxing Ending.

Tense despite *-ic*: *bāsic*, *stratēgic*, *aerōbic* /eə'roʊbɪk/, *psīchic*, %*cyclic*.

Tense despite *-id*: *Dāvid*.

Tense despite *-et*, *-it*: *sēcret*.

Tense despite *-el*: *lābel*, *hāzel*, *nāvel*, *sēquel*, *lībel*.

Tense despite *-ish* (n,v): --

## 9.22 Laxing by Free U.

**RULE 7.** IF THE STRESSED VOWEL-LETTER (excepting *u* or prevocalic vowels) IS FOLLOWED IN THE NEXT SYLLABLE BY A FREE *U*, IT IS PRONOUNCED **LAX**.

Examples (no examples with *u* because of Rule 3):

<b>A</b>	<b>E</b>	<b>I=Y</b>	<b>O</b>	<b>U</b>
<u>/æ/</u>	<u>/e/</u>	<u>/ɪ/</u>	<u>/ɒ/</u>	_____
stāture	schēdule	fīgure	mōdule	--
grādual	gēnuine	vīsual	ōculist	
vālu	mēnu	contīnue	cōpula	

The unstressed *u* has this laxing effect only if it is in free position itself. A covered *u* has no laxing effect, e.g. *mīnus*, *bōnus*, *Jēsus* have tense stressed vowels. Compare *Jēsus* (/i:/, the *e* is not laxed because the *u* is covered) but *Jēsuit* (/e/, the *e* is laxed because the *u* is free; see Pre-U Laxing 8.17.)

■ EXCEPTIONS (tenseness reversals). Some nouns in *-ure* have a tense vowel:

*nāture*, *erāsure*, *procēdure*, *clōsure*, *compōsure*, *expōsure*; note also *vāgue*.

**9.23 CiV Laxing.**

**RULE 8.** IF THE STRESSED VOWEL-LETTER *I* IS FOLLOWED IN THE NEXT SYLLABLE BY AN UNSTRESSED *I* PLUS A VOWEL, IT IS PRONOUNCED **LAX**.

Examples: /ɪ/ *v*ision, *í*diot, *f*amīliar, *in*ītiate. (This rule is unofficially called the “Idiot-rule”.)

The abbreviation “CiV” represents the letters that follow the stressed vowel-letter *i*: one Consonant-letter plus an *i* plus a Vowel. Observe the following examples:

<u>...í CiV...</u>	<i>i</i> = /ɪ/...
v i s i o n	/ˈvɪʒn/
i d i o t	/ˈɪdiət/
f a m i l i a r	/fəˈmɪliə/
i n i t i a t e	/ɪˈniʃiət/
m a l i c i o u s	/məˈlɪʃəs/
p r e s i d i u m	/prɪˈsɪdiəm/
r e c i p i e n t	/rɪˈsɪpiənt/

The unstressed *i* in the CiV arrangement is of course a Glide-*i*, so we could also call this rule “Laxing of *i* by Glide-*i*”. Hungarian uses many similar words, but this can be misleading because the *i* in question is usually long in Hungarian: *v*íz*ió*, *Bol*í*via*, etc. Learners have a tendency to use /i:/ here and wrongly pronounce \*/ˈvi:ʒn/, \*/bəˈli:viə/.

Note that this laxing only applies when the stressed vowel-letter itself is *i*. For the other vowels see Rule 9 (9.25).

■ **EXCEPTIONS.** There are no exceptions to CiV Laxing.

**9.24** The laxing rules may overlap in one and the same word. For example, in *r*égular the *e*, though it is in free graphic position, is lax for two reasons: Trisyllabic Laxing, since it is in the third-last syllable (Rule 5), or equally, Laxing by Free *u*, since it is followed by a *u* which is in free position (Rule 7).

It is always better to refer to the simpler, more general rule. For example, the Covered Position Rule is a very general rule; therefore, whenever a vowel-letter is in covered position and is lax, it is best to refer simply to the Covered Position Rule and ignore other factors, even if some laxing rule could be referred to. The *a* in *á*ctual could be said to be lax because of Trisyllabic Laxing, or because of Laxing by Free U, but the best (because simplest) answer is that it is lax because of its covered position. The smaller, more particular rules should be brought in only if the general rules do not offer a satisfactory explanation.

**CiV Tensing**

**9.25** In words like *r*adiate /ˈreɪdiət/, *s*enior /ˈsi:niə/, the stressed vowel-letter is tense, even though it is in the third-last syllable, where Trisyllabic Laxing should apply (as it does in

*navigate* /'nævɪgert/, *senator* /'senətə/). This shows that *radiate*, *senior* escape Trisyllabic Laxing (they do not become \*/'rædiert/, \*/'seniə/).

The reason is that the stressed vowel is followed by “CiV” (Consonant + *i* + Vowel): *ra-DIAte*, *se-NIOr*. The CiV arrangement makes *a*, *e*, *o*, *u* tense (remember that *i* behaves in the opposite way, undergoing CiV Laxing, Rule 8 above). This tensing property is so strong that it overrides Trisyllabic Laxing. We must therefore formulate the last of our tense/lax choice rules, which we call CiV Tensing.

Note that CiV is sometimes spelt CeV (as in *ocean*, *area*).

**RULE 9. A STRESSED VOWEL-LETTER (EXCEPT *i*) FOLLOWED BY “CiV” IS ALWAYS TENSE.**

Examples (no examples with *i* because of Rule 8):

<b>A</b>	<b>E</b>	<b>I=Y</b>	<b>O</b>	<b>U</b>
<u>/eɪ/</u>	<u>/i:/</u>	_____	<u>/oʊ/</u>	<u>/(i)u:/</u>
mānia	sēnior	--	phōbia	jūnior
rādiate	mēdiate		ōpium	repūdiate
urānium	Armēnian		melōdious	pecūliar
vacātion	complētion		promōtion	inclūision

*With automatic Pre-R Breaking:*

<u>/eə/</u>	<u>/ɪə/</u>	_____	<u>/ɔ:/<sup>3</sup></u>	<u>/(i)ʊə/</u>
vārious	sērious	--	glōrious	cūrious
Hungārian	Algērian		Victōrian	infūriate
aquārium	impērial		tutōrial	prūrient

Rule 8 (CiV Laxing) and Rule 9 (CiV Tensing) complement each other: Rule 8 applies to stressed *i*, Rule 9 to the other vowel-letters.

■ EXCEPTIONS (tenseness reversals). In a few words the vowel is lax even though it is followed by a CiV sequence. This only happens to *a* or *e*.

*a* = /æ/ *Itālian*, *retāliate*, *Dāniel*, *compānion*, *nātionāl* (but *nātion!*), *rātion(al)*,  
*pāgeant*, *pātriot*, *cāviar*, *glācier*, *Slovākia*, *spāniel*.

*e* = /e/ *spēcīal*, *prēcīous*, *discrētīon*, *prēmīer*.

**9.26 Glide-i (CiV) and Free U Influence Compared.** — We have seen various rules in which a stressed vowel in free graphic position is influenced by a Glide-i or a Free U in the following syllable. We summarize these rules in the table below. The thick line includes those cases where the stressed vowel is regularly tense.



Stressed vowel in free pos.	<i>Followed by a consonant-letter, plus</i>	
	<i>Glide-i (“CiV”)</i>	<i>free U</i>
<b>U</b>	TENSE: ūnion, Jūliet <b>Rules 3 or 9</b>	TENSE: ūsual, mūtual <b>Rule 3</b>
<b>A</b> <b>E</b> <b>O</b>	TENSE: mānia, pātient mēdium, sēnior phōbia, Victōrian <b>Rule 9</b>	LAX: grādual, vāluē měnu, schēdule mōdule, cōpula <b>Rule 7</b>
<b>I</b>	LAX: vīsion, famīliar <b>Rule 8</b>	LAX: vīsual, fīgure <b>Rule 7</b>

### Overview of the Tense/Lax choice rules

**9.27** Table 9.27 illustrates all the rules above, with a few examples for each case. The areas in the shaded frames show the lax pronunciations.

The list after the table gives regular examples for the working of these nine rules. We have mostly used the letter *a* to exemplify the general types. Where several rules could be referred to, the most powerful one is mentioned (as suggested in 9.24). The word “no” under “R-influence” appears when the R-influence is blocked by the “Carrot-rule” (8.12).

TABLE 9.27 THE REGULAR PRONUNCIATION OF THE STRESSED SINGLE VOWEL-LETTERS

Graphic Position	Rule	Tense/Lax choice	A	E	I=Y	O	U
COVERED	1. Covered Position Rule	lax	<i>căp</i> <i>făctor</i> <i>cărrot</i>	<i>těn</i> <i>běggar</i> <i>běrry</i>	<i>hīt</i> <i>mīxing</i> <i>mīrror</i>	<i>dōg</i> <i>ōption</i> <i>sōrror</i>	<i>cŭp</i> <i>mŭscle</i> <i>cŭrrerit</i>
		broad-lax	<i>cār</i> <i>pārty</i>	<i>hēr</i> <i>pērson</i>	<i>stīr</i> <i>thīrsty</i>	<i>nōr</i> <i>fōrty</i>	<i>occŭr</i> <i>sŭrgeon</i>
FREE	2. Free Position Basic Rule	tense	<i>cāpe</i> <i>fātal</i> <i>stāble</i>	<i>scēne</i> <i>rēcent</i> <i>mētre</i>	<i>fīve</i> <i>mīnus</i> <i>cyclīst</i>	<i>hōme</i> <i>sōda</i> <i>nōble</i>	<i>cŭbe</i> <i>nŭdist</i> <i>scrŭple</i>
		broken-tense	<i>cāre</i> <i>pārents</i>	<i>hēre</i> <i>sērum</i>	<i>fīre</i> <i>vīrus</i>	<i>stōre</i> <i>glōry</i>	<i>cŭre</i> <i>dŭring</i>
	5. Trisyllabic Laxing	lax	<i>ānimal</i>	<i>cēmeterŷ</i>	<i>mīlītant</i>	<i>ōpera</i>	<i>pŭberty*</i>
	6. Laxing by Suffix	lax	<i>pānic</i>	<i>mētric</i>	<i>crītic</i>	<i>tōnic</i>	<i>cŭbic*</i>
	7. Laxing by Free <i>u</i>	lax	<i>stātue</i>	<i>měnu</i>	<i>vīsuāl</i>	<i>mōdule</i>	<i>ŭsuāl*</i>
8–9. CiV Tensg & CiV Laxg	tense; but <i>i</i> = lax	<i>mānia</i> <i>aquārium</i>	<i>mēdium</i> <i>sērious</i>	<i>īdiot</i> <i>Syria</i>	<i>sōcial</i> <i>Victōria</i>	<i>ŭnion</i> <i>fŭrious</i>	
4. Prevocalic Vs Non-laxable	tense	<i>mosāic</i>	<i>nēon</i>	<i>pīety</i>	<i>herōic</i>	<i>crŭel</i>	

\* Rule 3: Free *u* is Non-laxable.

## EXAMPLES FOR STRESSED SINGLE VOWEL-LETTERS (REGULAR PRONUNCIATIONS)

Example	Graphic position		Pronunciation			Tense/Lax choice rules applying
			tense-ness value	R-influence	sound	
cap	VC#	cov.	lax	--	/æ/	1 Cov.Pos.
car	VC#	cov.	lax	broadng.	/ɑ:/	1 Cov.Pos.
cape	VCV	free	tense	--	/eɪ/	2 Free Pos.
care	VCV	free	tense	breaking	/eə/	2 Free Pos.
cable	VSLV	free	tense	--	/eɪ/	2 Free Pos.
pathos	VCV	free	tense	--	/eɪ/	2 Free Pos.
saddle	VCC	cov.	lax	--	/æ/	1 Cov. Pos.
parents	VCV	free	tense	breaking	/eə/	2 Free Pos.
carrot	VCC	cov.	lax	no	/æ/	1 Cov. Pos.
starry	VCC	cov.	lax	broadng.	/ɑ:/	1 Cov. Pos.
animal	VCV	free	lax	--	/æ/	5 Trisyll.Lxg.
parody	VCV	free	lax	no	/æ/	5 Trisyll.Lxg.
arrogant	VCC	cov.	lax	no	/æ/	1 Cov.Pos.
oxygen	VCC	cov.	lax	--	/ɒ/	1 Cov. Pos.
fantasy	VCC	cov.	lax	--	/æ/	1 Cov.Pos.
harmony	VCC	cov.	lax	broadng.	/ɑ:/	1 Cov.Pos.
sacrament	VSLV	free	lax	--	/æ/	5 Trisyll.Lxg.
laity	VV	free	tense	--	/eɪ/	2 Free Pos, 4 Prevoc. V nonlx
cubicle	VCV	free	tense	--	/ju:/	2 Free Pos, 3 Free U nonlx
puritan	VCV	free	tense	breaking	/jʊə/	2 Free Pos, 3 Free U nonlx
duplicate	VSLV	free	tense	--	/ju:/	2 Free Pos, 3 Free U nonlx
ultimate	VCC	cov.	lax	--	/ʌ/	1 Cov. Pos.
turpentine	VCC	cov.	lax	broadng.	/ɜ:/	1 Cov. Pos.
panic	VCV	free	lax	--	/æ/	6 Lxg. Endg.
attic	VCC	cov.	lax	--	/æ/	1 Cov.Pos.
cubic	VCV	free	tense	--	/ju:/	2 Free Pos, 3 Free U nonlx
fabric	VSLV	free	lax	--	/æ/	6 Lxg. Endg.
graphic	VCV	free	lax	--	/æ/	6 Lxg. Endg.
rubric	VCV	free	tense	--	/u:/	2 Free Pos, 3 Free U nonlx
heroic	VV	free	tense	--	/oʊ/	2 Free Pos, 4 Prevoc. V nonlx

h <u>istoric</u>	VCV	free	lax	no	/ɒ/	6 Lxg. Endg.
p <u>olish</u> , <i>v</i>	VCV	free	lax	--	/ɒ/	6 Lxg. Endg.
P <u>olish</u> , <i>a</i>	VCV	free	tense	--	/oʊ/	2 Free Pos.
est <u>ablish</u>	VSLV	free	lax	--	/æ/	6 Lxg. Endg.
m <u>anual</u>	VCV	free	lax	--	/æ/	7 Lxg by Free <i>u</i>
<u>ac</u> tual	VCC	cov.	lax	--	/æ/	1 Cov.Pos.
v <u>isual</u>	VCV	free	lax	--	/ɪ/	7 Lxg by Free <i>u</i>
m <u>utual</u>	VCV	free	tense	--	/ju:/	2 Free Pos, 3 Free U nonlx
V <u>enus</u>	VCV	free	tense	--	/i:/	2 Free Pos.
v <u>enue</u>	VCV	free	lax	--	/e/	7 Lxg by Free <i>u</i>
st <u>ation</u>	VCV	free	tense	--	/eɪ/	2 Free Pos.
v <u>ision</u>	VCV	free	lax	--	/ɪ/	8 CiV Lxg.
<u>Adrian</u>	VSLV	free	tense	--	/eɪ/	2 Free Pos, 9 CiV Tensg.
<u>ac</u> tion	VCC	cov.	lax	--	/æ/	1 Cov.Pos.
Alb <u>anian</u>	VCV	free	tense	--	/eɪ/	2 Free Pos, 9 CiV Tensg.
Hung <u>arian</u>	VCV	free	tense	breaking	/eə/	2 Free Pos, 9 CiV Tensg.
Bol <u>ivian</u>	VCV	free	lax	--	/ɪ/	8 CiV Lxg.
r <u>adiate</u>	VCV	free	tense	--	/eɪ/	2 Free Pos, 9 CiV Tensg.

## Orthographic Final Consonant Doubling

**9.28** As we have seen, the general idea in English spelling is to express the lax nature of a vowel by putting it in covered graphic position. Compare *căp*, *hămmer*, *sĭckle*, *pârdon* (lax vowel in covered position), with *cāpe*, *pāper*, *cȳcle*, *pārent* (tense vowel in free position).

If a “productive” suffix (8.4) beginning with a vowel-letter (e.g. *-ing*) is added to a word ending in stressed VC# (*stop*, *admit*), the final consonant-letter of the base word must be doubled: *stopping* /'stɒpɪŋ/, *admitting* /əd'mɪtɪŋ/. This is necessary to avoid the vowel getting into free position: \**stoping*, \**admiting*, because such a spelling would suggest a tense vowel. We double the final consonant-letter to preserve the covered position of the stressed vowel-letter. The rule is an orthographic (i.e. purely visual) one, and does not influence the pronunciation. In fact, it also works when the suffix-initial vowel is silent (as in *-ed*, e.g. *stopped* /stɒpt/), or when the stem-final consonant is silent *r*, as in *occurred* /ə'kɜ:d/.

The rule of Orthographic Final Consonant Doubling can be worded as follows: if to a word ending in a stressed single vowel-letter plus one consonant-letter we add a productive suffix beginning with a vowel-letter, the final consonant of the stem is doubled.

In British English a final *-l* is doubled even when the preceding vowel is unstressed: *travelling*, *signalled*. This has no grammatical or phonological reason, it is mere tradition.

AmE does not follow this custom and treats final *-l* regularly: *tráveling*, *signaled*, but *compélled*, *contrólling* (doubled just like in BrE because end-stressed).

These productive suffixes are, with a few examples each:

- ed:** stopped, begged, handicapped, preferred, controlled, (*BrE* travelled), long-legged;
- ing:** stopping, planning, bedding, admitting, preferring, controlling, (*BrE* travelling);
- er:** stopper, planner, beginner, stirrer, controller, (*BrE* traveller), grasshopper, bootlegger; beggar; bigger, redder, inner, upper;
- est:** biggest, reddest, wettest;
- ish** (*adj*): biggish, reddish, piggish, Scottish;
- y** (*adj*): funny, spotty, plummy, cobwebby, skinny;
- y/-ie** (*diminutive*): daddy, sonny, Jimmy, doggie, Bobby;
- able:** regrettable, winnable, uncontrollable, stoppable.

## THE VOWEL GRAPHEMES ONE BY ONE

**9.29** In the following sections we list all the vowel graphemes, mentioning standard values (both tense and lax, regular or reversed) as well as Quality Deviations.

We give a few examples only for each regular type, but the irregularities are listed in full (unless there are too many of a particular type). Rare or old-fashioned words are not included. The three dots show that there are further words of the same type. A full stop after the examples means that there are no more words worth mentioning. Symbols and abbreviations used are:

**Std.** = standard sound values

**Tns.** = tense

**Reg.** = regular (entirely predictable from the graphic position)

**Rvrs.** = tenseness-reversal (tense or lax against the general rules)

**Devi.** = Quality Deviations

% = the vowel may also be pronounced with its regular sound

/.../<sup>R</sup> = R-influenced pronunciation (only occurs before R)

### **9.30** *Pronunciation of the Single Vowel Letters*

<b>A</b>	<b>Std.</b> <b>Tns:</b> /eɪ/ <b>Reg.</b> <i>cāpe, amāze, pāper, rādiāte...</i> <b>Rvrs.</b> <i>āngel, (ar)rānge, chānge, strānge, dānger; hāste; pāste, pāstry, tāste, chāste, wāste, Hāstings; bāss; chāmber, Cāmbridge, āncient, champāgne; bāsic, Dāvid, hāzel, nāvel, nāture; fāvourite, bākelite, Ābraham, āpricot.</i>
----------	--

		<b>/eə/<sup>R</sup></b>	<b>Reg.</b> <i>cāre, Māry, ārea, Hungārian...</i>
			Rvrs. <i>scārce; rāriety.</i>
	<b>Lax:</b>	<b>/æ/</b>	<b>Reg.</b> <i>cap, hammer, carrot, panic, gravel, animal...</i>
			Rvrs. <i>hāve; bālance, tālent, appārent, sālary, gāther, Spānish, mānor, tāvern, bāron, glāmour, shāadow, frāgile, mādām, ātom, sālād, Ārab, tāriff, hāzard, imāgine, fāmīne, exāmīne, Āthens, sātire, pālce, mālīce, mānage, dāmage, cābin, Lātin...; Itālian, retāliate, Dāniel, compānion, nātionāl (but nātion!), rātion(al), pāgeant, pātriot, cāvīar, glācier, Slovākia.</i>
		<b>/ɑ:/<sup>R</sup></b>	<b>Reg.</b> <i>car, hard, party, starry...</i>
			Rvrs. <i>are.</i>
Devi.		<b>/ɑ:/</b>	(/ɑ:/ <sup>1</sup> , not before R) <i>ask, class, last, path, dance, can't, branch, answer, example, palm, half, graph...; drama, tomato, sonata, spa, massage, garage...</i>
		<b>/ɒ/</b>	(after /w-/) <i>wash, want, wallet, what, squat, squash, quantity...; yacht /jɒt/.</i>
		<b>/ɔ:/<sup>R</sup></b>	(/ɔ:/ <sup>2</sup> ) <i>war, warm, swarm, ward, quart(er).</i>
		<b>/ɔ:/</b>	(/ɔ:/ <sup>1</sup> ) <i>call, bald, alter, walk, Malta...; water, Arkansas /'ɑ:kənsɔ:/, Magdalen /'mɔ:dlɪn/.</i>
		<b>/e/</b>	<i>any, many, Thames, %ate.</i>
<b>E</b>	<b>Stnd. Tns:</b>	<b>/i:/</b>	<b>Reg.</b> <i>scēne, ēven, hē, mētre, mēdium...</i>
			Rvrs. <i>stratēgic, sēcret, sēquel, procēdure.</i>
		<b>/ɪə/<sup>R</sup></b>	<b>Reg.</b> <i>hēre, ēra, sērious, quēry...</i>
	<b>Lax:</b>	<b>/e/</b>	<b>Reg.</b> <i>yes, letter, ebony, epic, severity...</i>
			Rvrs. <i>allēge /ə'ledʒ/; mēdal, mētal, tēnant, prēsēt, mēmory, elēven, sēven, nēver, clēver, togēther, whēther, Flēmish, vēry, lēmon, mēlon, chēmist, stērile, dēvil, shērīff, vēnom, devēlop, pētrol, mētro, dēbris, rēcord, lēgend, sēcōnd, dēcade, prēface, mēnace, rēsīn, Kēvin...; spēcīal, prēcīous, discrētīon, prēmīer, stēreo.</i>
		<b>/ɜ:/<sup>R</sup></b>	<b>Reg.</b> <i>her, term, permanent, preferred...</i>
			Rvrs. <i>were.</i>

	<b>Devi.</b>	/ɪ/ /eɪ/ /eə/ <sup>R</sup> /ɑ:/ <sup>R</sup>	<i>England, English, pretty.</i> <i>café /'kæfeɪ/, suede, fete, née, debris, regime...; ballet /'bæleɪ/, buffet /'bʊfeɪ/, Amadeus /-'deɪəs/...</i> <i>there, where.</i> <i>(/ɑ:/<sup>2</sup>) clerk, sergeant, Derby, Berkshire, Berkeley, Hertford.</i>
<b>I=Y</b>	<b>Stnd. Tns:</b>	<b>/aɪ/</b>	<b>Reg. <i>fīve, tīger, cȳcle, advīce, līe, līve (adj)...</i></b> Rvrs. <i>kīnd, (re)mīnd, behīnd, fīnd, grīnd, bīnd, blīnd, to wīnd (v); wīld, chīld, mīld; fīght, sīgh... (all words with igh); sīgn, alīgn, resīgn, desīgn, benīgn, paradīgm; clīmb, pīnt, nīnth, Chrīst; īsle /aɪl/, īsland, vīscount /'vaɪkaʊnt/, Carlīsle /'kɑ:lɑɪl/, Pīsces /'paɪsi:z/, indīct /ɪn'daɪt/; īsolate, hībernate, dīnosaur, dȳnamite, mīcrophone...</i>
		<b>/aɪə/<sup>R</sup></b>	<b>Reg. <i>fīre, sīren, vīrus, admīring, tȳre, tȳrant...</i></b> Rvrs. <i>īrony.</i>
	<b>Lax:</b>	<b>/ɪ/</b>	<b>Reg. <i>hīt, miss, bigger, system, mirror...</i></b> Rvrs. <i>līve (v), gīve; mīsery, līnen, rīsen, gīven, drīven, consīder, līver, delīver, shīver, Brītish, Brītain, līquor /'lɪkə/, cīty, pīty, līly, prīson, vīgour, sȳrup, cītrus, spīnach, īdyll, sȳringe, līzard, wīzard, Phīlip, vīcar, īmage, envī sage, trīple...</i>
		<b>/ɜ:/<sup>R</sup></b>	<b>Reg. <i>sir, girl, firm, virgin, stirrer...</i></b>
	<b>Devi.</b>	<b>/i:/</b>	<i>machine, police, fatigue, antique, kilo, ski, visa, sardine, elite, Sikh, Rhys, Ian /'i:ən/ (or /ɪən/)...</i>
<b>O</b>	<b>Stnd. Tns:</b>	<b>/oʊ/</b>	<b>Reg. <i>hōme, ōpen, nōble, mōtion, trōphy...</i></b> Rvrs. <i>contrōl, enrōl, patrōl; pōll, rōll, scrōll, strōll, tōll, swōllen; fōlk /foʊk/, yōlk /joʊk/, Hōlmes /hoʊmz/, Stockhōlm /'stɒkhoʊm/; bōld, ōld, sōldier...; bōlt, cōlt, revōlt...; mōst, hōst, pōst, ghōst; bōth, wōn't, dōn't, ōnly, cōmb, grōss, Jōb (Biblical name); nōtify, ōmega, Oberon; clōsure, compōsure, expōsure.</i>
		<b>/ɔ:/<sup>R</sup></b>	<b>Reg. <i>(/ɔ:/<sup>3</sup>) mōre, glōry, fōrum, Victōrian...</i></b>

	<b>Lax:</b> /ɒ/	<b>Reg.</b> <i>lock, stopped, sorry, opera, tonic...</i>
		<b>Rvrs.</b> <i>gõne, shõne; cõral, mõral, prõbable, prõper, hõver, Rõger, bõther, õlive, bõdy, cõpy, schõlar, fõrest, hõnour, põlyp, prõblem, mõdest, flõrist, fõreign, prõverb, prõvince, mõdern, mõnarch, õrange, cõlumn, sõlace, nõvice, hõmage, rõbin, flõrin...</i>
	/ɔ:/ <sup>R</sup>	<b>Reg.</b> (/ɔ:/ <sup>2</sup> ) <i>nor, form, torture, fortify...</i>
<b>Devi.</b>	/ʌ/	<i>love...</i> (see list in 9.32)
	/u:/	<i>do, two, who, to, tomb, womb, move, prove, lose, shoe.</i>
	/ʊ/	<i>bosom /'bʊzəm/, wolf, woman, W<u>o</u>lverhampton, W<u>o</u>lsey, W<u>o</u>llstonecraft, W<u>o</u>dehouse, Worcester /'wʊstə/, Boleyn /'bʊlɪn/, Pembroke /'pembɹʊk/.</i>
	/ɜ:/ <sup>R</sup>	(after /w-/) <i>work, word, world, worm, worse, worst, worth, worship; attorney.</i>
	/ɪ/	<i>women.</i>
	/ɜ:/	<i>colonel.</i>
<b>U</b>	<b>Stnd. Tns:</b> /ju:/	<b>Reg.</b> <i>cūbe, mūsic, redūce, ūnion, nūdity, dūe, cūcumber...</i>
	/u:/	<b>Reg.</b> (with Yod-drop) <i>flū, rūde, rūbric, Jūne, jūbilee...</i>
		<b>Rvrs.</b> <i>trūth, Rūth, rūthless.</i>
	/jʊə/ <sup>R</sup>	<b>Reg.</b> <i>cūre, dūring, fūry, pūritan...</i>
	/ʊə/ <sup>R</sup>	<b>Reg.</b> (with Yod-drop) <i>sūre, jūry, rūral...</i>
	<b>Lax:</b> /ʌ/	<b>Reg.</b> <i>cup, summer, mustard, current...</i>
		<b>Rvrs.</b> <i>stūdy, pūnish, pūblic, pūblish, Dūblin, būnion, %cūlinary.</i>
	/ɜ:/ <sup>R</sup>	<b>Reg.</b> <i>fur, furry, hurt, urban, murder...</i>
<b>Devi.</b>	/ʊ/	<i>put, full, sugar...</i> (see list in 9.32)
	/ɪ/	<i>busy, business.</i>
	/e/	<i>bury, burial.</i>
		<b>Silent u:</b> <i>buoy /bʊɪ/, buy /baɪ/, build /bɪld/; circuit /-kɪt/, biscuit /-kɪt/.</i> For silent <i>u</i> in <i>qu, gu</i> , see 4.51.
		<b>Yod-less weak vowel</b> in free position: <i>lettuce /ɪ/, minute /ɪ/, figure /ə/, insulate /ə/.</i>



### 9.31 Pronunciation of the vowel digraphs

There are words in which the two vowel-letters do not form a digraph but a hiatus (e.g. *oa-sis*): they are two separate syllables, therefore not included here. See 9.34.

<b>AI=AY</b>	<b>Stnd.</b>	<b>/eɪ/</b> <i>rain, paint, straight, stay, may...</i> <b>/eə/<sup>R</sup></b> <i>hair, stairs, fairy...</i> <i>mayor /meə/, prayer /preə/.</i>
	<b>Devi.</b>	<b>/æ/</b> <i>plaid, plait.</i> <b>/e/</b> <i>says, said, %again(st).</i> <b>/i:/</b> <i>quay /ki:/.</i> <b>/aɪ/</b> <i>aisle, Hawaii, Cairo, aye /aɪ/ ‘yes’.</i>
<b>AU=AW</b>	<b>Stnd.</b>	<b>/ɔ:/</b> <i>sauce, author, fault, taught, Laura, dinosaur /'daɪnəsɔ:/, law, crawl...</i>
	<b>Devi.</b>	<b>/ɒ/</b> <i>because, cauliflower, sausage, laurel, Laurence=Lawrence, Maurice, %Austria, Vauxhall /'vɒksɔ:l/.</i> <b>/ɑ:/</b> <i>aunt, laugh(-ter), draught.</i> <b>/eɪ/</b> <i>gauge.</i> <b>/ʊʊ/</b> <i>chauffeur, mauve, chauvinism, sauté...</i>
<b>EA</b>	<b>Stnd.</b>	<b>/i:/</b> <i>mean, sea, east, feature, measles...</i> <b>/ɪə/<sup>R</sup></b> <i>clear, ear, beard, dreary...</i>
	<b>Devi.</b>	<b>/e/</b> <i>bread, ready, health, pleasant, endeavour, meadow, cleanse, treacherous...</i> <b>/ɜ:/<sup>R</sup></b> <i>earth, earn, early, earnest, earl, heard, learn, pearl, rehearse, search, yearn.</i> <b>/eɪ/</b> <i>great, break, steak, yea, Yeats, Reagan.</i> <b>/eə/<sup>R</sup></b> <i>bear, pear, swear, wear, to tear “tép”.</i> <b>/ɑ:/<sup>R</sup></b> <i>heart, hearth.</i>
<b>EE</b>	<b>Stnd.</b>	<b>/i:/</b> <i>need, see, needle, chimpanzee...</i> <b>/ɪə/<sup>R</sup></b> <i>beer, engineer, cheers...</i>
	<b>Devi.</b>	<b>/ɪ/</b> <i>Greenwich /'grɪnɪdʒ/ (or /'gre-/).</i>

<b>EI=EY</b>	<b>Stnd.</b>	<b>/eɪ/</b> <i>veil, reign, eight, grey, obey...</i>
		<b>/eə/<sup>R</sup></b> <i>heir, their, Eire /'eərə/...</i>
<b>Devi.</b>	<b>/aɪ/</b> <i>eye, height, (n)either (/i:/ or /aɪ/), kaleidoscope, seismograph, Eiffel /'aɪfl/.</i>	
	<b>/i:/</b> <i>ceiling, receive (con-, per-, de-), receipt /rɪ'si:t/, seize, protéin, key, Neil, O'Neill, Sheila, Seymour, (n)either (/i:/ ~/aɪ/).</i>	
	<b>/ɪə/<sup>R</sup></b> <i>weird.</i>	
	<b>/e/</b> <i>leisure, Leicester, Reynolds.</i>	
<b>EU=EW</b>	<b>Stnd.</b>	<b>/ju:/</b> <i>feudal, neuter, <u>que</u>ue, Euston, new, view...</i>
		<b>/u:/</b> <i>rheumatism, crew, blew, Jew...</i>
		<b>/jʊə/<sup>R</sup></b> <i>Europe, <u>lique</u>ur /lɪ'kjʊə/...</i>
<b>Devi.</b>	<b>/oʊ/</b> <i>sew, Shrewsbury /'ʃrəʊzbri/.</i>	
	<b>/ef/</b> <i>lieutenant /lef'tenənt/.</i>	
<b>IE</b>	<b>Stnd.</b>	<b>/i:/</b> <i>thief, field, priest, Diesel, hygienic /haɪ'dʒi:nɪk/...</i> (Word-finally -ie is taken as i + silent e, e.g. die, pie...)
		<b>/ɪə/<sup>R</sup></b> <i>pier, fierce, cashier...</i>
<b>Devi.</b>	<b>/e/</b> <i>friend.</i>	
	<b>/ɪ/</b> <i>sieve.</i>	
<b>OA</b>	<b>Stnd.</b>	<b>/oʊ/</b> <i>coach, oak, toast, approach...</i>
		<b>/ɔ:/<sup>R</sup></b> <i>(/ɔ:/<sup>3</sup>) coarse, roar, board...</i>
<b>Devi.</b>	<b>/ɔ:/</b> <i>(/ɔ:/<sup>1</sup>) broad, abroad.</i>	
<b>OI=OY</b>	<b>Stnd.</b>	<b>/ɔɪ/</b> <i>join, avoid, boy, royal...</i>
	<b>Devi.</b>	<b>/wɑ:/</b> <i>bourgeois, memoirs, repertoire, reservoir...</i>
	<b>/waɪ/</b> <i>choir /'kwaɪə/</i>	
<b>OO</b>	<b>Stnd.</b>	<b>/u:/</b> <i>moon, food, cartoon, choose...</i>
		<b>/ʊə/<sup>R</sup></b> <i>poor, Moor...</i>
	<b>Devi.</b>	<b>/ʊ/</b> <i>book, look, took, good, stood, wood, soot, wool(len), foot...</i>
		<b>/ʌ/</b> <i>blood, flood.</i>
	<b>/oʊ/</b> <i>brooch, Roosevelt.</i>	
	<b>/ɔ:/<sup>R</sup></b> <i>(/ɔ:/<sup>3</sup>) door, floor.</i>	

<b>OU=OW</b>	<b>Stnd.</b>	<b>/aʊ/</b> <i>loud, count, scoundrel, thou, pronounce, plough, now, crown, browse, owl...</i>
		<b>/aʊə/<sup>R</sup></b> <i>sour, hour, devour...</i>
	<b>Devi.</b>	<p><b>/oʊ/</b> <i>soul, shoulder, poultry, (al)though, dough, own, blow, owe, window, fellow...</i></p> <p><b>/ɔ:/<sup>R</sup></b> (<b>/ɔ:/<sup>β</sup></b>) <i>four, your, pour, court, course, (re)source, mourn.</i></p> <p><b>/ɔ:/</b> (<b>/ɔ:/<sup>l</sup></b>) <i>bought, fought, ought, brought, thought, sought, wrought, nought.</i></p> <p><b>/ɒ/</b> <i>knowledge, acknowledge, cough.</i></p> <p><b>/ʌ/</b> <i>trouble, double, couple, couplet, country, cousin, southern, touch, young, courage, flourish, nourish, Douglas; enough, rough, tough, hiccough (= hiccup).</i></p> <p><b>/ʊ/</b> <i>could, should, would, courier.</i></p> <p><b>/ɜ:/<sup>R</sup></b> <i>journey, journal, adjourn, courtesy, bourbon.</i></p> <p><b>/u:/</b> <i>soup, group, wound (n), you, youth, through, coup /ku:/, coupon, goulash, mousse, souvenir, route.</i></p> <p><b>/ʊə/<sup>R</sup></b> <i>bourgeois /'bʊəʒwɑ:/, tour, gourmet /'gʊəmeɪ/...</i></p> <p><b>/ju:/</b> <i>Houston (Texas).</i></p>
<b>UI</b>	<b>Stnd.</b>	<p><b>/ju:/</b> <i>nuisance, suit...</i></p> <p><b>/u:/</b> <i>(with Yod-Dropping) juice, fruit, recruit...</i></p> <p>For <i>ui</i> combinations where the <i>u</i> is silent (<i>build</i>, etc.), see under “U” in <a href="#">9.30</a>.</p>

**9.32 The LOVE-words.** — There are about 50 words in which the letter *o* is pronounced /ʌ/. They are listed here. This quality deviation of *o* occurs chiefly before *m*, *n*, *v*.

Before <i>m</i>	Before <i>n</i>	Before <i>v</i>	Bef. other cons.
come, be-	one (once) Monday	love	other
comfort, -able	none London	dove	brother
company, ac-	done honey	glove	mother
accomplish	son money	above	nothing
compass	ton (monetary)	cover (re-, dis-)	
stomach	won front (con-)	covert	dozen
some	wonder frontier	covet	colour
somersault	monk onion	covenant	
Somerset	monkey sponge	oven	worry
	constable mongrel	shove	borough
	conjure among	shovel	thorough
	“bívészkedik” tongue	govern (-ment)	
	month	slovenly	

**The PUT-words.** In these a covered *u* is pronounced /ʊ/. This mostly happens after labial consonants (*p*, *b*, *f*)

After <i>p</i>	After <i>b</i>	After <i>f</i>	After other cons.
pull	bull	full	cushion
pulley	bullet	fulfil	cuckoo
pulpit	bulletin		
push	bully		
pussy	bush		
put	ambush		
pudding	butcher		

### 9.33 Some rare or difficult vowel-combinations

**eo:** /i:/ *people*;

/e/ *Leonard, leopard, jeopardize, Geoffrey (= Jeffrey)*;

/oʊ/ *yeoman*; and, with breaking, /ɔ:/ *George, Geordie*. (Normally, *e* and *o* do not form a digraph but are separate vowels, i.e. a hiatus, e.g. *neon, theory, Leo*.)

**ae:** /eɪ/ *Gaelic, Israel(i), sunda, reggae*; and, with breaking, /eə/ *aero-*;

/i:/ *Caesar* /'si:zə/, *aegis* /'i:dʒɪs/, *aesthetics* /i:s'θetiks/.

**oe:** /i:/ *Oedipus, amoeba, phoenix, Phoebe* /'fi:bi/

/u:/ *manoeuvre* /mə'nu:və/

**ao:** /eɪ/ *gaol (= jail)*

**aa:** /eə/ *Aaron*; weakened in *Isaac* /'aɪzək/.

**eau:** /ju:/ *beauty*; /oʊ/ *bureau*, /ɒ/ *bureaucracy*.

**9.34 Flanking vowels that look like digraphs but aren't.** — Sometimes the stressed vowel-letter stands next to another vowel, but they are pronounced separately. They flank each other, but form neither a digraph nor a diphthong, but a hiatus (8.23). Below we list the

most important such words, placing a dot between the two flanking vowels. Stress is shown by an acute accent.

*a.i* – *archá.ic, prosá.ic, na.íve*

*e.a* – *cre.áte, idé.a, re.áality, thé.atre, me.ánder*

*e.u* – *musé.um, mausolé.um*

*i.e* – *clí.ent, sci.ence, soci.ety, vari.ety*

*o.a* – *bó.a, o.ásis, Nó.ah, cò.alítion*

*o.e* – *pó.et, po.étic, Zó.e*

*o.i* – *heró.ic*

*o.o* – *zo.ólogy, co.óperate*

*u.i* – *rú.in, flú.id, trú.ism, sú.icide, tu.ítion, intu.ítion, blu.ish, suite /swi:t/*

The name for an animal park, *zoo* /zu:/, is originally a mistake: it comes from a popular misanalysis of the word *zoological* /,zouə'lɒdʒɪkl/ *garden*, which was pronounced by less educated Londoners as /zu:'lɒdʒɪkl/, and then clipped to *zoo*, which has now become an accepted word.

— o —

## QUESTIONS FOR REVISION

1. Study Table 9.23 carefully, then cover the table, leaving only the example words free: try to fill in the features yourself.
2. What are the standard sound values of the five single vowel-letters?
3. Why are there four tense pronunciations given for the letter *u* in Table 9.7?
4. Which letter is not affected by the laxing rules?
5. Which letter does not undergo CiV Tensing?
6. Which of these words have a laxing ending: *giving, music, robbed, motion, panel, Danish, usable, rapid, status, cherish*.
7. What is the simplest explanation for the laxness of the stressed *a* in *vascular*?
8. In what sense is the *a* of *range* pronounced irregularly, and in what sense is it not?
9. Which English vowel can only be represented by Quality Deviations (since it has no regular grapheme of its own)?
10. Two rules conflict in the stressed vowel of *patriot*, which can be pronounced tense or lax. Which rule gets the upper hand if it is tense, and which if it is lax?
11. What is the difference between the standard sound values of *oo* on the one hand, and tense *u*, *eu=ew*, *ui* on the other?
12. Which of the nine tense-lax choice rules has the greatest number of exceptions, and in which syllable of the word does this irregularity mostly occur?

## CHAPTER 10

### THE ENGLISH VOWELS ONE BY ONE

#### (CHECKLIST)

This chapter offers nothing new: it is simply a checklist, grouping under each vowel all the information given in Chapters 7 to 9. It is thus a twin to Chapter 6, where the consonants were listed in the same way.

In the remarks on spelling, “Standard” includes both the regular cases and the tense-ness reversals, as explained in [9.13](#). The terms “tense” and “lax” refer to the two basic “sound values” of the vowel letters ([9.7](#)), “broken” and “broad” to the two types of R-influence ([8.16](#)). For Vowel Shift, see [8.18](#).

### Short vowels

**/ɪ/**

Half-close, front, short vowel. Different from H *i*, somewhat like H *é*. Never found in a stressed word-final position or before another vowel. Phonological behaviour: plain-lax. Its tense counterpart in Vowel-Shift is /aɪ/.

There is also a weak vowel /ɪ/, articulated in the same way, occurring in unstressed syllables, e.g. the two weak vowels of *establish* /ɪ'stæblɪʃ/. This weak /ɪ/ only occurs before a consonant, resulting from the weakening of *e*, *i*, *y* (or *a* in *-age*, *-ate*, *-ace*). We list no examples here; see [8.31](#).

#### SPELLING

- Standard: *i* – *hit*, *simple*, *irritate*, *ambition*...  
*y* – *myth*, *typical*, *syrup*, *Dylan*...
- Rare: *e* – *England*, *English*, *pretty*.
- Exceptional: *women* /'wɪmɪn/, *busy* /'bɪzi/, *business* /'bɪznɪs/, *sieve*.

**/e/**

Half-open, front, short vowel. Articulated between H *é* and *e*. Never found in word-final position or before another vowel. Phonological behaviour: plain-lax. Its tense counterpart in Vowel-Shift is /i:/.

SPELLING

- Standard: *e* – *yes, letter, very, terror, elephant...*; *allege* /ə'ledʒ/
- Frequent: *ea* – *head, breath, dealt, endeavour, Beaconsfield...*
- Rare: *a* – *any, many, Thames, %ate* (/et/ or /ert/)  
*ai, ay* – *said* /sed/, *says* /sez/, *%again(st)* (/gen-/ or /geɪn-/).  
*ei, ey* – *leisure* /'leɪʒə/, *Leicester* /'lestə/, *Reynolds* /'renldz/.  
*eo* – *Leonard* /'lenəd/, *leopard, Geoffrey* /'dʒefri/, *jeopardize* /'dʒepədaɪz/.
- Exceptional: *friend* /frend/, *bury* /'beri/.

**/æ/**

Open, front, short vowel, often lengthened (3.20, 7.14). Articulated between H *e* and *á*. Never found in word-final position or before another vowel. Phonological behaviour: plain-lax. Its tense counterpart in Vowel-Shift is /eɪ/.

SPELLING

- Standard: *a* – *cap, have, matter, wax, animal, Albert, carrot, parody...*; *have*.
- Exceptional: *ai* – *plait* /plæt/, *plaid* /plæd/.

**/ʌ/**

Open, central, short, unrounded vowel. Similar to H *á* but short. Never found in word-final position or before another vowel. Phonological behaviour: plain-lax. Does not take part in regular Vowel-Shift.

SPELLING

- Standard: *u* – *cup, summer, function, hurry...*; *study, public, punish, Dublin, butler*
- Frequent: *o* – *love, come, son...* (see list in 9.32)
- Rare: *ou* – *country, cousin, double, trouble, enough, rough, tough, touch, young, southern, Southwark* /'sʌðək/.
- Exceptional: *blood* /blʌd/, *flood* /flʌd/, *does* /dʌz/, *twopence* /'tʌpns/ (old coin).

**/ɒ/**

Open, back, short, rounded vowel. Very similar to H *a*. Never found in word-final position or before another vowel. Phonological behaviour: plain-lax. Its tense counterpart in Vowel-Shift is /oʊ/.

SPELLING

- Standard: *o* – *lock, bottom, opera, sovereign, sorry, orange...*
- Frequent: *a* (after /w/) – *want, what, swan, quality, squat, quarrel...*
- Rare: *au, aw* – *because* /br'kɔz/, *laurel, Laurence=Lawrence* /'lɔrəns/, *cauliflower, Austria, Austin, sausage*.
- Exceptional: *cough* /kɒf/, *Gloucester* /'glɒstə/, *(ac)knowledge* /('ək)'nɒlɪdʒ/, *bureaucracy* /bjʊə'rɒkrəsi/, *gone, shone, wrath, yacht*.

**/ʊ/**

Half-close, back, short, rounded vowel. Different from H *u*, somewhat like H *o*. Never found in word-final position or before another vowel. Phonological behaviour: plain-lax. Does not take part in regular Vowel-Shift.

There is also a weak vowel /ʊ/, articulated in the same way, occurring in unstressed syllables. It is preceded by /j/ (unless Yod Dropping intervenes) e.g. *regular* /'regjʊlə/. This weak /ʊ/ only occurs before a consonant, and is always spelt *u*, resulting from the weakening of free *u*. We list no examples here; see [8.33](#).

SPELLING

- Standard: the sound /ʊ/ has no standard spelling equivalent.
- Frequent: *oo – look, shook, foot, good, wool...*  
*u – put, full, butcher, sugar...*
- Rare : *o – bosom /'bʊzəm/, wolf, woman, Wolverhampton, Wolsey, Wollstonecraft, Wodehouse, Worcester /'wʊstə/, Boleyn /'bʊlɪn/, Pembroke /'pembɹʊk/.*
- Exceptional: *ou – could, should, would, courier /'kʊriə/.*

**Long vowels (= long monophthongs)****/i:/**

Close, front vowel, normally long (but shortened before a voiceless consonant). Similar to H *í*, but usually slightly diphthongized. Cannot stand before *r*. Phonological behaviour: plain-tense. Its lax counterpart in Vowel Shift is /e/.

SPELLING

- Standard: *e – scene, even, he, metre, medium...*  
*ee – need, see, needle, chimpanzee...*  
*ea – mean, sea, east, feature, measles...*  
*ie – thief, field, priest, Diesel...*
- Frequent: *i – machine, police, kilo, visa, ski, suite, pizza /'pi:tsə/...*
- Rare: *ei/ey – ceiling, receive, seize, key, Neil, O'Neill, Sheila, (n)either (/i:/ or /aɪ/)...*  
*ae – aesthetic /i:s'θetɪk/, Caesar /'si:zə/, algae /'ældʒi:/...*  
*oe – Oedipus /'i:di:pəs/, amoeba...*
- Exceptional: *quay /ki:/, people.*

**/u:/**

Close, back, rounded vowel, normally long (but shortened before a voiceless consonant). Similar to H *ú*, but usually slightly diphthongized. Cannot stand before *r*. In certain cases it is preceded by /j/, and behaves like a complex vowel ([8.2](#)). Phonological behaviour: plain-tense. Does not undergo Vowel-Shift.

SPELLING OF /u:/ WITHOUT /j/

- Standard: *oo – moon, food, cartoon, choose, spook...*



*u* (with Yod-Dropping): *flu, rude, June, super, solution, blue...*  
*eu, ew* (with Yod-Dropping): *rheumatism, crew, Andrew, blew, Jew...*  
*ui* (with Yod-Dropping): *juice, fruit, recruit...*

- Frequent: *ou – soup, group, coupon, goulash, route, through, you, youth...*
- Rare: *o – do, two, who (whose, whom), to, shoe, canoe, tomb, womb, move, prove, lose.*
- Exceptional: *manoeuvre /mə'nu:və/.*

#### SPELLING OF /ju:/

- Standard: *u – cube, music, reduce, union, nudity, due, ambiguity...*  
*eu, ew – feudal, neuter, new...*  
*ui – nuisance, suit...*
- Exceptional: *beauty /'bju:ti/, beautiful, Home /'hju:m/, Houston /'hju:stən/.*

#### **/ɑ:/**

Open, back, unrounded vowel, normally long (but shortened before a voiceless consonant). Similar to H *a*, but longer. Phonological behaviour: broad-lax. Its broadness may be lexically given (*ask* /ɑ:/<sup>1</sup>), or may be due to Pre-R broadening (*car* /ɑ:/<sup>2</sup>). See 7.26.

#### SPELLING

- Standard: *a (+R): car, hard, party, starry...; are.*
- Frequent: *a* (not before R): *ask, class, path, dance, example, palm, graph, drama, spa, tomato, sonata, father, rather, lather, ah!...*
- Rare: *oi* (in French words) – *memoirs /'memwɑ:z/, reservoir /'rezəvwa:/, bourgeois /'bʊʒwɑ:z/...*  
*e (+R): clerk, sergeant, Derby, Berkshire, Berkeley /'bɑ:kli/, Hertford.*  
*au – aunt, laughter, draught /dra:ft/.*
- Exceptional: *heart /hɑ:t/, hearth /hɑ:θ/.*

#### **/ɔ:/**

Half-open, back, rounded vowel, normally long (but shortened before a voiceless consonant). Similar to H *ó*, but more open. Phonological behaviour: this vowel either counts as broad-lax, in which case its broadness may be lexically given (*sauce* /ɔ:/<sup>1</sup>), or may be due to Pre-R broadening (*form* /ɔ:/<sup>2</sup>); or it counts as broken-tense (*more* /ɔ:/<sup>3</sup>). See 7.25.

#### SPELLING

- Standard: *au, aw: sauce, author, fault, law, crawl, taught...*  
*o (+R): nor, form, torture, fortify, George...; more, glory, forum, Victorian...*  
*oa (+R): coarse, roar, board...*
- Frequent: *a (+l, cov. pos.): call, bald, alter, walk, Malta, appalled...*  
*a (+R, cov. pos., after /w/): war, swarm, quarter...*
- Rare: *ou (+ght): bought, sought, nought...*  
*ou (+R): four, your, pour, court, course, (re)source, mourn, Bournemouth /'bɔ:nməθ/.*

- Exceptional: (*a*)*broad* /(*ə*)'brɔ:d/, *Maugham* /mɔ:m/, *Vaughan* /vɔ:n/, *water*, *Magdalen* /'mɔ:dlɪn/, *Sean* /ʃɔ:n/, *door*, *floor*, *Arkansas* /'ɑ:kənsɔ:/, *drawer* 'fíók' /drɔ:/.  
sure %/ʃɔ:/.

### /ɜ:/

Half-open, central, unrounded vowel, normally long (but shortened before a voiceless consonant). Similar to H *ö*, but longer and not lip-rounded. Phonological behaviour: broad-lax. This sound only occurs before *r*, and is always the result of Pre-R Broadening.

#### SPELLING

- Standard: *e* (+R): *her*, *term*, *per*manent, *prefer*red...  
*i* (+R): *sir*, *girl*, *firm*, *virgin*, *stirrer*...  
*u* (+R): *fur*, *hurt*, *urban*, *furry*...
- Frequent: *ea* (+R): *earth*, *earn*, *early*, *earnest*, *earl*, *heard*, *learn*, *pearl*, *rehearse*, *search*, *yearn*.
- Rare: *o* (+R, cov. pos., after /w/): *work*, *worm*, *word*, *worth*, *world*, *worse*, *worship*.  
*ou* (+R): *journey*, *journal*, *adjourn*, *courtesy*, *bourbon*.
- Exceptional: *colonel* /'kɜ:nl/, *attorney*, *amateur*, *connoisseur*.

## DIPHTHONGS

### Closing diphthongs

#### /eɪ/

Narrow, closing, front diphthong. Starts from half-open /e/ and moves towards /ɪ/. Same as H *éj*. Cannot stand before *r*. Phonological behaviour: plain-tense. Its lax counterpart in Vowel-Shift is /æ/.

#### SPELLING

- Standard: *a* – *cape*, *paper*, *range*, *radiate*, *archaic*...  
*ai*, *ay* – *rain*, *paint*, *straight*, *stay*, *may*...  
*ei*, *ey* – *veil*, *reign*, *eight*, *grey*, *obey*...
- Frequent: *e*, *é*, *ée* (in French words): *suede*, *fete*, *née*, *regime*...
- Rare: *ea* – *great*, *break*, *steak*, *yea*, *Yeats*, *Reagan*.  
*ae* – *Gaelic*, *Israel* /'ɪzreɪl/, *sundae*, *reggae*.
- Exceptional: *gauge* /geɪdʒ/, *gaol* = *jail* /dʒeɪl/.

#### /aɪ/

Wide, closing, front diphthong. Starts from open /a/ and moves towards /ɪ/. Same as H *áj*. Phonological behaviour: plain-tense. Its lax counterpart in Vowel-Shift is /ɪ/.

#### SPELLING

- Standard: *i* – *five*, *tiger*, *kind*, *advice*, *lie*, *client*...  
*y* – *type*, *dye*, *cycle*, *hydrogen*...

- Rare: *ai* – *aisle* /aɪ/, *Hawaii* /hə'waɪ/, *Cairo*.  
*ei*, *ey* – (n)*either*, *eye*, *height*.
- Exceptional: *buy*.

**/ɔɪ/**

Wide, closing, back-to-front diphthong. Starts from half-open /ɔ/ and moves towards /ɪ/. Similar to H *oj*. Phonological behaviour: plain-tense. Does not take part in regular Vowel-Shift.

SPELLING

- Standard: *oi*, *oy* – *join*, *avoid*, *boy*, *royal*...  
(This sound has no other spelling equivalent.)

**/oʊ**

Narrow, closing, back diphthong. May also be transcribed /əʊ/. In RP it is centralized: it starts from half-close /ə/ and moves towards /ʊ/. Very different from H *ó*. Cannot stand before *r*. Phonological behaviour: plain-tense. Its lax counterpart in Vowel-Shift is /ɒ/.

SPELLING

- Standard: *o* – *home*, *open*, *noble*, *post*, *notify*...  
*oa* – *coach*, *oak*, *toast*, *approach*...
- Frequent: *ou* – *soul*, *shoulder*, *poultry*, (al)*though*, *own*, *blow*, *owe*...
- Rare: *au* (in French words): *chauffeur*, *mauve*, *chauvinism*, *sauté*...
- Exceptional: *sew*, *brooch*, *yeoman* /'jəʊmən/.

**/aʊ**

Wide, closing, back diphthong. Starts from open /a/ and moves towards /ʊ/. Different from H *au*; more like *á+u*. Cannot stand before *r*. Phonological behaviour: plain-tense. Does not take part in regular Vowel-Shift.

SPELLING

- Standard: *ou*, *ow* – *loud*, *count*, *pronounce*, *plough*, *now*, *crown*, *browse*, *owl*...  
(This sound has no other spelling equivalent. Note, however, *Faust(us)* /'fəʊst(əs)/, in imitation of the German.)

**Centring diphthongs****/ɪə/**

Narrow, front-to-centre diphthong. Starts from half-close /ɪ/ and moves towards /ə/. Not similar enough to any Hungarian sound. Normally stands before *r*, and is the result of Pre-R

Breaking (*here*); but may occasionally result from the smoothing of /i:ə/ → /ɪə/ (*museum*, see 8.26). Phonological behaviour: broken-tense. Its lax counterpart in Vowel-Shift is /e/.

#### SPELLING

- Standard: *e* (+R): *here, era, serious, query...*  
*ee* (+R): *beer, engineer, cheers...*  
*ea* (+R): *clear, ear, beard, dreary...*  
*ie* (+R): *pier, fierce, cashier...*
- Exceptional: *weird* /wɪəd/.

#### /eə/

Narrow, front-to-centre diphthong. Starts from half-open /e/ and moves towards /ə/. Similar to H *e* but longer and slightly diphthongal. This sound only occurs before *r*, and is the result of Pre-R Breaking. Phonological behaviour: broken-tense. Its lax counterpart in Vowel-Shift is /æ/.

#### SPELLING

- Standard: *a* (+R): *care, Mary, scarce, Hungarian...*  
*ai, ay* (+R): *hair, stairs, fairy, Ayr...*  
*ei, ey* (+R): *heir, their, Eire...*
- Rare: *ea* (+R): *bear, pear, swear, wear, to tear.*
- Exceptional: *there, where, mayor* /meə/, *prayer* /preə/, *Aaron* /'eərən/.

#### /ʊə/

Narrow, back-to-centre diphthong. Starts from half-open /ʊ/ and moves towards /ə/. Very different from H *ú* or *ur*. Phonological behaviour: broken-tense. Normally stands before *r*, and is the result of Pre-R Breaking (*cure*); but may occasionally result from the smoothing of /u:ə/ → /ʊə/ (*fuel*, see 8.26). In certain cases it is preceded by /j/, and behaves like a complex vowel (8.2). Optionally replaceable by /ɔ:/, see 7.34.

#### SPELLING OF /ʊə/ WITHOUT /j/

- Standard: *u* (+R, with Yod-Dropping): *sure, jury, rural...*  
*oo* (+R): *poor, boor, Moor...*
- Rare: *ou* (+R): *bourgeois, tour, tourist.*

#### SPELLING OF /jʊə/

- Standard: *u* (+R): *cure, during, fury, puritan...*  
*eu* (+R): *Europe* /'jʊərəp/, *liqueur* /lɪ'kjʊə/, *neuron* /'njʊərən/...

## Triphthongs

There are two English triphthongs, /aɪə aʊə/, which may be regarded as single vowels because they normally form one syllable. They are similar to the centring diphthongs in that they end in /ə/.

### /aɪə/

Wide, front-to-high-to-centre triphthong. The /ɪ/ in the middle may be left out by Smoothing, the result being /aə/ or even a long /a:/, see [8.27](#). Similar to H *áje*. Normally stands before *r*, and is the result of Pre-R Breaking (*fire*); when the /ɪ/ itself is pronounced, the /ə/ before it may be missing: *virus* /'vaɪ(ə)rəs/. Phonological behaviour: broken-tense. Its lax counterpart in Vowel-Shift is /ɪ/. The sound /aɪə/ may also result from /aɪ/ + /ə/ (*lion*), see [8.24](#).

#### SPELLING

- Standard: *i, y (+R): fire, siren, virus, admiring, tyre, tyrant...; iron.*  
Note that *i* + unstressed vowel is normally two syllables: *diet, lion, bias, pious, society...*, but may be “smoothed” into one.
- Exceptional: *choir* /'kwaɪə/.

### /aʊə/

Wide, back-to-high-to-centre triphthong. The /ʊ/ in the middle may be left out by Smoothing, the result being /aə/ or even a long /a:/, [8.27](#). Different from H *au+e*, rather beginning like H *á*. Normally stands before *r*, and is the result of Pre-R Breaking (*sour*). Phonological behaviour: broken-tense. Does not take part in regular Vowel-Shift. The sound /aʊə/ may also result from /aʊ/ + /ə/ (*towel*), [8.24](#).

#### SPELLING

- Standard: *ou (+R): sour, hour, devour...*  
Note that *ow* + unstressed vowel is normally two syllables: *towel, vowel, power, Howard...*, but may be “smoothed” into one.

## WEAK VOWELS

### /ə/

Central, unrounded, short, obscure vowel ([7.36-37](#)). Somewhere between H *ö, a, e*. Only occurs in unstressed syllables. Cannot stand before another vowel ([8.24](#)). May result from the weakening of any vowel, so its spelling can be practically any vowel-grapheme ([8.29-30](#)).

**/i/**

Front, close, unrounded, short vowel. Same as H *i*. Only occurs in unstressed syllables, standing before a vowel or word-finally. May result from the weakening of *e*, *i*, *y* (8.31). Alternates with /j/ before unstressed vowels (Glide-i 5.22).

**/u/**

Back, close, rounded, short vowel. Same as H *u*. Only occurs in unstressed syllables, standing before a vowel. Results from the weakening of /ju:/. Preceded by /j/ unless Yod Dropping takes place. Always spelt *u* (e.g. *duality* /dju'æləti/, *continuous* /kən'tɪnjuəs/). See 8.33.

## PART III – SUPRASEGMENTALS

### CHAPTER 11

#### STRESS IN BASE WORDS

**11.1** The pronunciation of a language does not only depend on how correctly the sounds (that is, the segments) are produced and perceived. As pointed out in [1.4-7](#) and [1.15](#), pronunciation has suprasegmental elements: stress (H. “hangsúly”) and intonation (H. “hanglejtés”). The remaining four chapters of this book will be devoted to suprasegmentals. We will discuss word stress in two chapters: basic notions, as well as the stressing of base words (i.e. words without suffixes) in Chapter 11; the stressing of prefixed, suffixed, and compound words in Chapter 12. Larger units will be analysed in the last two chapters: the stress and rhythm of phrases and sentences in Chapter 13, and intonation in Chapter 14.

It should be mentioned that speech has several further suprasegmental features, like speed (or tempo, H “beszédsebesség”) and key (or voice height, H “hangfekvés”). These, however, are not really linguistic elements. They characterize the speaker’s personality, feelings and attitudes, but they vary so much from person to person, from moment to moment, that they are not stable enough to be part of the language system. Speed and key are called “paralinguistic” features: they accompany language behaviour.

Note. The suprasegmental features of a language are also called “prosody”.

#### BASIC NOTIONS OF SYLLABLES AND STRESS

**11.2 The syllable.** — The basic unit of suprasegmental pronunciation is the syllable. Let us briefly summarize what we need to know about the syllable for our further discussions. We may indicate the boundaries between syllables with a dot, e.g. *ran.dom* /'ræn.dəm/.

Syllables may be strong or weak, depending on their vowel.

- (a) If a syllable has a full vowel ([7.6](#)), we call it a **full-vowelled (or “strong”) syllable**. Strong syllables are usually stressed, but may also be unstressed. Full-vowelled but un-

stressed syllables, as in *disco* /'dɪskoʊ/ or *activity* /æk'tɪvəti/, are called **strong-unstressed syllables**.

• (b) If a syllable has a weak vowel (/ə i ɪ u ʊ/ or zero, 8.28-29), we call it a **weak-vowelled (or “weak”) syllable**. Weak syllables are always unstressed.

As we know, in English it is possible for a weak syllable to have no vowel: this happens when /ə/ drops out and the following sonorant consonant /n l/ becomes syllabic, e.g. *written* /'rɪ.tn/ or *tables* /'teɪ.blz/ (5.18, 8.28). We treat syllabic consonants as a kind of weak vowel, so /tn/, /blz/, etc. are well-formed weak-vowelled syllables.

Another element whose “vowelhood” is problematic is Glide-i (5.22). When it disappears in pronunciation, as in *omission*, *Christian*, we cannot consider it to be a vowel, so *o.mi.ssion* is three syllables on the surface: /ə.'mɪ.n/, and *Chris.tian* is two /'krɪs.tʃən/. Yet from the point of view of stress, Glide-i counts as an underlying syllable even if it is silent. Thus *omission* (where Glide-i is silent), *opinion* (where it is pronounced as /j/), and *oblivion* (where it is /i/) have the same basic syllable structure, and their stress is in the same place: before the *-ion* ending.

Note. Strong-unstressed syllables are sometimes called “tertiary-stressed”; and weak syllables are called “zero-stressed” or “completely unstressed”.

Orthographic and phonetic syllables are not the same in English because spelling has its own rules. As this book is about pronunciation and not orthography, we will not speak about orthographic syllables or syllable division rules. For example, the word *suppose* is divided in spelling as *sup-pose*, but for the phonologist it is *su.ppose*, as in pronunciation there is only one /p/, which goes into the second syllable: /sə'pəʊz/. However, when we want to show that this word is composed of a prefix and a root, we show this as *sup/pose*, since this division refers to grammatical units. Remember, then, that our syllable divisions here are not always the same as those of English orthography.

**11.3** The place of stress in an English word is not counted from the beginning but from the end. For example, though *philosophy* has the stress on its second syllable, and *parody* on its first, linguistically both words have it on the third from the end — consequently, *philosophy* and *párody* have their stress in the same place! This approach will show the working of the rules more clearly.

The last three syllables of an English word have names of their own, as shown below:

	-3	-2	-1	end of word
<i>full name</i>	antepenultimate syllable	penultimate syllable	final syllable	#
<i>short name</i>	<b>antepenult</b>	<b>penult</b>	<b>ult</b>	
<i>popular name</i>	third-last syllable	second-last syllable	last syllable	



In this book we mostly use the short names. *Párody* or *philósophy* have the stress on the antepenult (pron. /,æntipə'nɒlt/), *órange* or *banána* on the penult (pron. /pə'nɒlt/), and *magazíne* or *paráde* on the ult.

When no misunderstanding can arise, one may of course use the simple terms “front-stressed” (= stressed on the first syllable) and “end-stressed” (= stressed on the last syllable).

**11.4** The consonants at the beginning of a syllable are called the **onset**. In English the onset can contain up to three consonants: *rain*, *train*, *strain* (more on this in 11.7). The rest of the syllable — that is, the vowel plus the consonants following it — is called the **rhyme**. For example, in *strike* the onset is /str/ and the rhyme is /aɪk/; in *danced* the onset is /d/ and the rhyme is /ɑ:nst/.

Syllables are said to have “weight” depending on the rhyme:

- **Heavy syllable:** the rhyme has a long vowel (or diphthong) and/or contains more than one consonant, e.g. *strike*, *danced*, *cry*, *glimpse*, *fox*.
- **Light syllable:** the rhyme has a short vowel and maximally one consonant, e.g. *strip*, *shock*, *add*, *drum*.

Especially a **light ult** will be interesting: a final syllable that ends in a short vowel plus zero or one consonant (*pá.per*, *cá.rry*, *de.vé.lop*, *prác.tise*, *ba.ná.na*). Light ults will play a role in the stressing of verbs.

**11.5 Definition of stress.** — Stress is a property of certain syllables, and can be defined as **loudness**: a stressed syllable is louder than an unstressed syllable. The first syllable of *ménu* /'menju:/ is louder than the second, even though the second has a long vowel. Stress is a rhythmic feature. The stressed syllable stands out, just like in music, when you beat the rhythm on a drum, making “stressed” beats louder: *ta-TA-ta-ta-ta-TA-ta-ta-ta*.

Stressed syllables always have a full vowel. In *banána* /bə'nɑ:nə/ the stressed syllable has a full vowel /ɑ:/, but the unstressed syllables have a weak vowel /ə/. In *Chicágo* /ʃɪ'kɑ:gou/ the stressed syllable has a full vowel, the unstressed syllables have /ɪ/ (weak) and /ou/ (strong) respectively. Remember especially that if a syllable has schwa, it is impossible for it to be stressed.

To sum up: stress in English is characterized by loudness and full vowel quality.

Note. Some books use the term “accent” for stress, and “accentuation” for stressing.

**11.6** Every word — at least in its dictionary form — has stress on one of its syllables. The stress can fall on any syllable of the word, but for a given word it is lexically fixed, e.g. *ánec-dote* /'ænekdoʊt/, *banána* /bə'nɑ:nə/, *políce* /pə'li:s/. In Hungarian stress is fixed on the first syllable of words. Learners of English must get used to stressing other syllables, but this does not cause much difficulty in articulation (see 1.5). The problem is rather one of lexical

or grammatical knowledge: which syllable to stress in which word? We will discuss this in detail later in this chapter.

If a word is only one syllable (= monosyllabic), then obviously that single syllable is stressed: *cát* /'kæɪt/. When transcribing monosyllabic words in isolation (as in a dictionary), we omit the stress mark because it could not fall anywhere else, so its placement is redundant. Instead of /'kæɪt/ we simply write /kæɪt/ by convention — but the stress mark is “invisibly” still there! Do not believe that monosyllabic words transcribed as *cat* /kæɪt/ have no stress because you cannot see the stress mark.

In connected speech some words — especially “function-words” like articles, auxiliaries, etc. — may lose their stress (13.15-21)

**11.7 How many consonants in the onset?** — The stress mark in transcription is placed before the entire stressed syllable (not just before the stressed vowel). To do this correctly, we must apply the **rule of the maximal onset**: the stressed syllable begins with as many consonants as would be possible at the beginning of an English word. For example, in *display* the stressed syllable is *splay* because it is possible for an English word to begin with *spl-* (e.g. *spleen*). Therefore the placing of the stress mark in this word is /dɪ'spleɪ/.

Consider the following examples. In the ordinary-spelling forms, stress is shown with an acute accent above the vowel, and syllable division with a dot; C means consonant, V means vowel:

<u>No onset</u> (V-)	<u>1 cons in onset</u> (CV-)	<u>2 cons in onset</u> (CCV-)	<u>3 cons in onset</u> (CCCV-)
re.álicity /ri'æliɪti/	su.ppórt /sə'pɔ:t/	di.plóma /dɪ'plɔumə/	di.spláy /dɪ'spleɪ/
po.étic /pɔʊ'etɪk/	va.nílla /və'nɪlə/	a.ggréssive /ə'grɛsɪv/	in.strúct /ɪn'strʌkt/
vi.óla /vi'ɔʊlə/	mag.nétic /mæg'netɪk/	sim.plícity /sɪm'plɪsəti/	excúse (=ek.scuse) /ɪk'skju:z/

As you can see, the stress mark is placed before the consonant groups /pl- gr- spl- str- skj-/, because these would be possible as English word-beginnings; but /gn- mpl- nstr- kskj-/ would not be possible, so the first segment of these is left in the preceding syllable.

**11.8 Primary and secondary stress.** — Some words have two (or even three) stressed syllables. In such cases the last one is the **primary stress** (H “főhangsúly”), and the ones before it are **secondary stresses** (H “mellékhangsúly”). For example, in the word *terminology* /tɜ:mɪ'nɒlədʒi/ there are two stressed syllables, *ter-* and *-no-*, both louder than their neighbours and both having a full vowel. The second of these, *-no-*, has the primary stress because English prosody is characterized by “end-weight”: the last stress is the strongest. To adapt a famous literary quotation: all stresses are equal, but the last one is more equal than the others.

This means that no secondary stress is possible after the primary stress. In compounds like *screwdriver* /'skru:draɪvə/, where the first element has the primary stress, the second element must lose its stress. (Its original stressed syllable retains its full vowel, surviving as a strong-unstressed syllable: /-draɪ-/).

Note. Some authors place a little circle before such strong-unstressed syllables and call them “tertiary-stressed”, e.g. 'screw<sub>o</sub> driver.

**11.9 Methods of indicating stress.** — In transcription, primary stress is shown with an upper mark /'/, secondary with a lower mark /,/.

There exists a simpler method of showing stress without transcribing the word: using **accent-marks** (H “ékezetek”) above the stressed vowels in ordinary spelling. In this method primary stress is shown with an **acute accent** (pron. /ə'kju:t 'æksent/, H “éles ékezet”), e.g. *á*, secondary stress with a **grave accent** (pron. /'grɑ:v/, H “tompá ékezet”), e.g. *à*. Compare the two equivalent stress-marking methods:

<u>with transcription</u>	<u>with accent marks</u>
/,tɜ:mɪ'nɒlədʒi/	= <i>términológia</i>
/bə'nɑ:nə/	= <i>banána</i>
/'dekəreɪt/	= <i>décorate</i>

The accent-mark method is especially useful with intermediate and higher-level students, for whom the only problem is, quite often, the place of stress (see discussion in 3.26).

Note 1. The term “accent” has different meanings, which should not be confused:

- (1) Somebody’s manner of pronunciation, usually dialectal or foreign-sounding (H “akcentus”).
- (2) A mark above a vowel-letter (H “ékezet”).
- (3) Stress, especially primary stress (H “hangsúly”).

Note 2. Some dictionaries, which do not use the IPA, place the stress-mark after the syllable. For example, *maintain* is transcribed as [mān.tān'] (= IPA /meɪn'teɪn/). Such a system is also logical; the user must see what conventions the dictionary follows.

**11.10 Degrees of stress.** — We distinguish three degrees of stress, and symbolize each with a code number:

- 1 – Primary stress: is loud, has a full vowel, and is the last (or only) stress in the word.
- 2 – Secondary stress: is loud, has a full vowel, but is followed by another stress later in the word.
- 0 – Unstressed syllable: is not loud, and usually has a weak vowel (= weak syllable); but it may have a full vowel (= strong-unstressed syllable.)

Let us show the same in table form:

TABLE 11.10 DEGREES OF STRESS

type	subtype (degree)	code	features			examples
			the last stress	loud	full vowel	
STRESSED	primary str.	1	yes	yes	yes	<i>ó</i> range, <i>tèrminó</i> logy
	secondary str.	2	no	yes	yes	<i>tèrminó</i> logy
UNSTRESSED	strong-unstr.	0	—	no	yes	<i>dí</i> sco, <i>ac</i> tivity
	weak	0	—	no	no	<i>ó</i> range, <i>tèrminó</i> logy

**11.11 Word stress patterns.** — Using these code numbers, we can represent the stress pattern of a word. Each number stands for a syllable; the numbers may be written above the vowels. (Naturally, silent vowel-letters are ignored, and vowel-digraphs are taken as one vowel.)

1 0	1 0	0 1 0 0	2 0 1 0	2 0 1 0 0
órange	díscó	ac <u>tí</u> vity	dècor <u>á</u> tion	tèr <u>mínó</u> logy
0 1 0	0 1	1 0 0	1 0 0	0 1 0
ban <u>á</u> na	pol <u>í</u> ce	ánec <u>dó</u> te	scr <u>é</u> wdriver	mag <u>nét</u> ic
1	0 1	2 0 1	0 1 0 0	1 0 0 0
cat	dir <u>é</u> ct	rèpr <u>é</u> sént	rep <u>é</u> atedly	dècor <u>á</u> tor

Some of the syllables marked with “0” have a full vowel: these are strong-unstressed syllables, as the *-ra-* of *dècorator*, or the *-dote* of *ánecdote*.

The stress-pattern of words may be the same despite the different sounds they are made up of. For instance, the words in each column below have the same stress pattern:

[0 1]	[1 0 0]	[0 1 0]	[2 0 1]	[0 2 0 1 0]
pol <u>í</u> ce	dècor <u>á</u> te	ban <u>á</u> na	rèpr <u>é</u> sént	invèst <u>í</u> gation
dir <u>é</u> ct	g <u>é</u> n <u>é</u> ral	prof <u>é</u> ssor	mag <u>á</u> z <u>í</u> ne	enth <u>ú</u> si <u>á</u> stic
sev <u>é</u> re	hóli <u>d</u> ay	dev <u>é</u> lop	kàngar <u>ó</u>	exp <u>é</u> r <u>í</u> ment <u>á</u> l
ball <u>ó</u> on	ám <u>b</u> ulance	neur <u>ó</u> tic	pic <u>t</u> ur <u>é</u> sque	ac <u>á</u> d <u>é</u> m <u>í</u> cian
<i>etc.</i>	<i>etc.</i>	<i>etc.</i>	<i>etc.</i>	<i>etc.</i>

Such groups of rhythmically identical words are useful in pronunciation practice, as they help learners to memorize the stress patterns even if the rules behind them would be too complicated to understand.

In the stress pattern codes, three dots [...] will mean any number of extra syllables. For example, [...1 0 0] will mean words of three or more syllables with stress on the antepenult, including both *pá*rody and *philó*sophy.

## SECONDARY-STRESS PLACEMENT

**11.12** We first examine secondary stress, since it is simpler and more regular than primary stress. Secondary stress can only occur before the primary. Secondary-stressed syllables are loud and must have full vowel quality, just like primary-stressed ones. Remember that because a secondary stress falls early in the word, its vowel is normally pronounced lax, due to Trisyllabic Laxing (*nàvigátion* /æ/, 8.3), unless made tense by CiV Tensing (*ràdiátion* /eɪ/, 9.25).

There are two principles that influence the position (and existence) of secondary stress: Stress Clash Avoidance and the Early Stress Requirement.

**11.13 Stress Clash Avoidance.** — English does not like two stressed syllables next to each other: such a “stress clash” tends to be avoided. There is usually an unstressed syllable (or sometimes two) between the secondary stress and the primary stress, that is, [2 0 1...] as in *dè.co.rá.tion*, or [2 0 0 1...] as in *jùs.ti.fi.cá.tion*. Having one unstressed syllable between two stresses gives English a characteristic rhythm: □ □ □ □ □ ..., where the big boxes represent stressed, the small boxes unstressed syllables: *DUM-de-DUM-de-DUM-de...* Many long words have this rhythm:

*sù.pe.rà.nnu.á.tion* [2 0 2 0 1 0] /,su: . pə . ,ræ . nju . 'eɪ . fn/

Such a rhythm — a regular alternation of stressed and unstressed syllables — is called **iambic rhythm** (pron. /aɪ'æmbɪk 'rɪðəm/). English has a strong iambic tendency.

There exist a few [2 1] words, with secondary stress immediately before the primary stress, which is a stress-clash, e.g. *sàr.díne* /,sɑ:'di:n/, *prìn.céss* /,prɪn'ses/, *mòn.sóon* /,mɒn'su:n/, *Chì.nése* /,tʃɑ'ni:z/, and the numerals in *-teen*, e.g. *thìr.téen* /,θɜ:'ti:n/, but this is so rare that it may be regarded as an irregularity.

Note. In poetry the alternating rhythm is called “iambic” only when it begins with an unstressed syllable (e.g. *detèrminátion*), but when it begins with a stressed syllable (as in *sùperànnuátion*), it has the special name “trochaic”.

**11.14 The Early Stress Requirement.** — No English word may begin with two unstressed syllables. This is called the Early Stress Requirement; “early” means the first two syllables of a word. The beginning \*[0 0...] is strictly forbidden; one of the first two syllables of any word must be stressed (primary or secondary).

Let us see the consequences of these two principles, Stress Clash Avoidance and the Early Stress Requirement. (Syllable boundaries are shown with a dot.)

- If the primary is on the second syllable, there is no secondary because the two would clash:  
[0 1...] *po.líce, di.réct, ba.ná.na, a.bán.don*
- If the primary is on the third syllable, there must be a secondary on the first syllable:  
[2 0 1...] *mà.ga.zíne, rè.pre.sént, Pòr.tu.guése, à.ca.dé.mic, dè.co.rá.tion, pèr.so.ná.li.ty, pè.da.gó.gi.cal*
- If the primary is on the fourth or fifth syllable, the secondary falls either on the first syllable or on the second; or there may be two secondary stresses:  
[2 0 0 1...] *jùs.ti.fi.cá.tion, chà.rac.te.rís.tic, ì.rri.ta.bí.li.ty...*  
[0 2 0 1...] *a.ssò.ci.á.tion, a.nà.chro.nís.tic, fa.mì.li.á.ri.ty...*  
[2 0 0 0 1...] *rà.tio.na.li.zá.tion, ìn. di. vi. si. bí. li.ty...*  
[0 2 0 0 1...] *com.pù.te.ri.zá.tion, de.mò.cra.ti.zá.tion...*  
[2 0 2 0 1...] *sù.pe.rà.nnu.á.tion*

**11.15 Derivational secondary stress.** — In longer words which are derived by suffixation, the suffix often creates a new primary stress towards the end of the word (discussed in [12.20-28](#)). The original primary stress then becomes secondary, but its vowel quality does not change (these syllables are underlined below). Compare:

<u>Base word</u>		<u>Derived word</u>
décorate /'dekəreɪt/	→	dècorátion /,dekə'reɪʃn/
ídiot /'ɪdiət/	→	ìdiótic /,ɪdɪ'ɒtɪk/
úniverse /'ju:nɪvɜ:s/	→	ùnivérsal /,ju:nɪ'vɜ:s/
jústify /'dʒʌstəfaɪ/	→	jùstificátion /,dʒʌstəfɪ'keɪʃn/
compúter /kəm'pjʊ:tə/	→	compùterizátion /kəm,pjʊ:təraɪ'zeɪʃn/
impréssion /ɪm'preʃn/	→	imprèssionístic /ɪm,preʃə'nɪstɪk/

In such words the place of the secondary stress is determined by the base word. We call this “derivational secondary stress”. This pattern is self-evident, and causes no difficulty.

**11.16 Iambic secondary stress.** — When the base word has its primary stress on the second syllable from the beginning (*refórm*), and the derived word has it on the third (*reformátion*), the old primary cannot survive as secondary because it would stand immediately before the new primary (e.g. \**refòrmátion* would be a \*[0 2 1...] pattern, with a stress clash). To avoid this, the secondary stress moves left to the first syllable of the word: *rèformátion* [2 0 1...]. In this way iambic rhythm is ensured. This leftward movement of stress is called **Iambic Reversal**, and the resulting word-initial secondary stress is called **iambic secondary stress**.

Iambic Reversal is difficult for foreign learners because the first two syllables switch (or “reverse”) their stress, and this causes the change of their vowels from weak to full and full to weak, respectively. Observe the examples below, and note how both stress and vowel quality change in the first two syllables, e.g. /rɪ'fɔ:m/ → /,refəm-/ , or /hə'raɪ-/ → /,hɒrɪ-/. The newly placed iambic secondary stresses are underlined.

<i>Base word, stress on 2nd syl.</i>		<i>Derived word, stress on 1st and 3rd syl.</i>
<u>[0 1...]</u>		<u>[2 0...]</u>
refórm /rɪ'fɔ:m/	→	rèformátion /,refə'meɪʃn/
suppóse /sə'pəʊz/	→	sùpposítion /,sʌpə'zɪʃn/
deríve /dɪ'reɪv/	→	dèrivátion /,derɪ'veɪʃn/
horízon /hə'raɪzn/	→	hòrizóntal /,hɒrɪ'zɒntl/
philósophy /fɪ'lɒsəfi/	→	phɪlosóphical /,fɪlə'sɒfɪkl/
acádemy /ə'kædəmi/	→	àcadémic /,ækə'demɪk/
contínue /kən'tɪnju:/	→	còntinúity /,kɒntɪ'nju:əti/

Iambic Reversal affects a large number of words in a very regular fashion. The teacher must be aware of — and at the appropriate moment, teach — this regularity and explain that it follows from the principles of English word stress.

In the first syllable of *philosophy* the vowel /ɪ/ does not seem to change. But we should rather say that /ɪ/ changes into itself, since this vowel can act both as weak and full (7.12, 8.31). Thus *philosophy* (unstressed syllable) has weak /ɪ/, while *philosophical* (stressed syllable) has full /ɪ/ — though the two vowels happen to sound the same in this case.

**11.17 Summary of secondary stress.** — Secondary stress automatically appears when the primary is on the third or a later syllable from the beginning of the word. The secondary stress is always before the primary, but never immediately before it (except in *sàrdine* and a few others). The stress of derived words often remains in its original place as secondary stress (derivational secondary stress, *décorate* – *dècorátion*). However, if the base word has its primary stress on the second syllable, and the derived has it on the third, the original stress moves one syllable to the left (iambic secondary stress, *refórm* – *rèformátion*). This Iambic Reversal usually changes the vowel quality of the first two syllables.

## PRIMARY-STRESS PLACEMENT

**11.18** We now turn our attention to the place of primary stress in English words. The place of stress depends on three factors.

- (1) Phonological factors: how many syllables does the word have, and what is the shape of the last two syllables?
- (2) Morphological factors: is it a base word, or does it have suffixes or prefixes?
- (3) Syntactic factors: what word class does the word belong to: noun, verb, adjective?

In this chapter we shall examine base words (with no suffixes), and discuss them according to their word class. Only the three large classes (nouns, verbs, adjectives) are worth discussing;

the other classes either consist of very short words, or — in the case of adverbs — are mainly derived from adjectives with the suffix *-ly*.

There exists some free variation in the place of primary stress, just like in the pronunciation of vowels and consonants (see 2.9-10). Some speakers stress *kilometre* on the first syllable: *kilometre* /'kɪləmi:tə/, others on the antepenult: *kilómetre* /kɪ'lɒmɪtə/. Some people say *garage* as /'gærɑ:ʒ/, others — especially Americans — stress it on the ult: /gə'rɑ:ʒ/. BrE has *hárrass* /'hærəs/, AmE has *haráss* /hə'ræs/. But such variations are rare.

## The stressing of nouns

### The general stress rule for nouns

**11.19** Nouns of two or three syllables are generally stressed on their first syllable.

- Two-syllable nouns (the “**páper**” type):

[1 0] *páper, hábit, órange, cíty, wáter, sálad, bánquet, hérring, éffort, súffix, pálace, Égypt, ágent, érrand, pátience, mótion, sénate, pírate, Áthens, Páris...*

- Three-syllable nouns (the “**cínema**” type):

[1 0 0] *cínema, óbstacle, éctstasy, órigin, évidence, ámateur* /'æmətə/, *cáran, péndulum, páradox, gárrison, áqueduct...*

The general rule also works for most nouns whose last syllable is long-vowelled (the “**fél-low**” type) (further examples in 11.23):

[1 0] *féllow* /-oʊ/, *óutrage* /-eɪdʒ/, *émpire* /-aɪə/, *ménu* /-ju:/, *míssile* /-aɪl/...

[1 0 0] *ávenue, crócodile, hóliday, párachute, cómpromise, Éskimo, ánecdote, sábotage, Fáhrenheit* /'færənhaɪt/...

The general rule also works for nouns where the penult vowel is followed by two consonants: a stop plus a liquid (the “**álgebra**” type). Such a consonant-cluster (shown in capitals below) counts as one (see 9.10.d), and does not influence the place of stress:

[1 0 0] *ímmiGRant, pédiGREE, álgebra, póetry, PéricLES, clávicLE, páraBLE...*

On the other hand, if the penult vowel is followed by a “real” consonant-cluster, the stress goes on the penult (the “**agéNda**” type, see 11.24)

### Nouns of more than three syllables (the “**acádemy**” type)

**11.20** Nouns of more than three syllables have the stress on the antepenult (= the third-last syllable). Examples:

[...0 1 0 0] *acádemy, América, photógraphy, currículum, análysis, rhinóceros, thermómeter, impértinence, aspáragus, apóstrophe* /-fi/, *facsímile* /fæk'sɪmɪli/, *idólatry, adrénaline, soliloquy* /sə'lɪləkwɪ/, *càrdiología, intèlligéntsia...*



We may elegantly include *páper*, *cínema*, *acádemy* in one rule, and put it like this: nouns are stressed on their first syllable, but not earlier than the antepenult. This is the general stress rule for nouns.

With some abstraction it can be said that there is a “three-syllable window” aligned to the end of nouns; stress is placed within this window on the leftmost syllable. Observe the diagram below: the “surplus” initial syllables of *a[cádemy*, *cu[rrículum*, *cardi[ólogy*, *intelli[géntsia* fall outside the window, so they cannot bear the primary stress because they are too far from the end of the word.

*Three-syllable window*

<i>antep.</i>	<i>penu.</i>	<i>ult</i>	<i>#</i>
		<u>cát</u>	
	<u>pá-</u>	per	
	<u>bán-</u>	quet	
	<u>cí-</u>	ne- ma	
	<u>ób-</u>	sta- cle	
	<u>pró-</u>	te- stant	
a-	<u>cá-</u>	de- my	
cu-	<u>rrí-</u>	cu- lum	
car-di-	<u>ó-</u>	lo- gy	
in-te-lli-	<u>gént-</u>	si- a	

Linguistically speaking, all these nouns have their stress in the same place: on the earliest (= leftmost) syllable within the three-syllable window.

### Nouns stressed on the fourth-last syllable (the “cemetery” type)

**11.21** A few long nouns do not obey the “three-syllable window” principle, and have their stress on the fourth syllable from the end (the “preantepenult” — usually their first syllable). Here belong words with the ending *-Vry* (vowel+r+y), and some others.

[...1 0 0 0] nouns in *-Vry*: *cémet|ery*, *cátég|ory*, *álleg|ory*, *íntev|ory*, *lávát|ory*, *dýsent|ery*, *émíss|ary*, *consérvat|ory* /kən'sɜ:vətəri/, *labórat|ory*, *obsérvat|ory*, *véterín|ary* /'vetrənəri/...

[1 0 0 0] other nouns: *hélicopter*, *áristocrat*, *álligator*, *céremony*, *épilepsy*, *mélancholy*, *télevision*, *ágriculture*, *Áristotle*, *pároxysm*, *mátriarchy*, *kílómetre* (also regularly *kilómetre*) ...

Note 1. In *-Vry* words the unstressed vowel before *-ry* is often dropped, and with the loss of this syllable the stress becomes regularly antepenultimate, e.g. *cémet(e)ry*, *dýsent(e)ry*, *labórat(o)ry* (cf. 12.32).

Note 2. In AmE the opposite happens: the unstressed vowel before *-ry* is pronounced full, e.g. /kən'sɜrvətɹi/, /'semətɹi/.

### End-stressed nouns

**11.22** If the above rules worked perfectly, no English noun would be end-stressed. However, a number of nouns are in fact stressed on the ult (=are end-stressed).

- End-stressed because of an ending (**the “paráde” type**). Some nouns have a “self-stressed ending”, i.e. an ending which always has the primary stress, like *-áde*, *-óon*. Examples (see more in 12.20):

[...0 1] *par|áde*, *ball|óon*, *crit|íque*, *cass|éte*, *degr|ée*, *lèmon|áde*, *cìgar|éte*,  
*mòuntain|éer*, *chìmpanz|ée*...

- End-stressed because converted from a verb (**the “debáte” type**). Some nouns, which are converted from a verb, copy the end-stress of the verb. Examples (more in 11.35.b):

[0 1] *a debáte*, *a surpríse*, *a retúrñ*, *a demánd*, *an arrést*, *my reséarch*...

- End-stressed without reason (**the “Júly” type**). The rest of the end-stressed nouns usually have a long vowel in their last syllable, which — in their case — manages to draw the stress on itself:

[0 1] *Júly*, *trombóne*, *políce*, *machíne*, *champágne*, *liquéur*, *regíme*, *élite*,  
*domáin*, *Perú*, *Ukráine*, *canóe* /-u:/, *morále*, *giráffe*, *papá*...

[2 0 1] *kàngaróo*, *màgazine*, *màrgarine*, *tàngeríne*, *màyonnaíse*, *Àberdéen* ...

A small number of end-stressed nouns have a short-vowelled ult. This is quite unusual:

[0 1] *evént*, *canál*, *hotél*, *expénse*, *succéss*, *excéss*, *abyss*, *penúlt*, *Berlín*, *Milán*,  
*Madríd*, *Japán*, *Ceylón* /sɪ'lɒn/...

[2 0 1] *pèrsonnèl*, *càrousel*, *violín*, *Àmsterdám*, *Bùdapést* /,bjɜ:də'pest/...

Remember that no English word may begin with two unstressed syllables (11.14), so if the end-stressed word has more than two syllables there must be an automatic secondary stress on the first syllable: *lèmonáde*, *càrousel*.

**11.23 Long-vowelled ult in nouns.** — We have seen that there are nouns which are end-stressed without reason. We supposed that in some of these the long vowel of the ult may have drawn the stress on itself: *Júly* /aɪ/, *giráffe* /ɑ:/, *màgazine* /i:/. Do not forget, however, that this is a minority of nouns, an exceptional behaviour. The fact that a noun has a long-vowelled ult is normally not enough reason to end-stress it. Most nouns with a long-vowelled ult behave regularly, with stress on the first syllable: *fèllow* /'felɒʊ/, *párachute* /'pærəʃu:t/, *émpire* /'empaɪə/. Hungarian learners often make the mistake of end-stressing nouns with a long-vowelled ult, saying \*/fə'lɒʊ/, \*/,pærə'ʃu:t/, \*/ɪm'paɪə/.

Compare the last syllables of the following nouns: the first column is the most normal (light ult, weak unstressed vowel); the middle column is still regular though somewhat unusual (strong unstressed ult, long vowel); the right-hand column is irregular because these nouns are end-stressed:

**Regular (initial-stressed)****weak ult**

rálly /'ræli/

téndon /'tendən/

grámmar /'græmə/

éxodus /'eksədəs/

**long-vowelled ult**

álly /'ælaɪ/

hórmone /'hɔ:moun/

rádar /'reɪdɑ:/

párachute /'pærəʃu:t/

**Irregular (end-stressed)****long-vowelled ult**

Julý /dʒu'laɪ/

trombóne /trɒm'boun/

cigár /sɪ'gɑ:/

kàngaróo /,kæŋgə'ru:/

Below we list further regular examples of the “fellow” type: though they have a long-vowelled ult, they are stressed on their first syllable. We give the end of each word in transcription to remind you of the fullness of the last (unstressed!) vowel:

[1 0]

óutage /-eɪdʒ/

rábbi /-aɪ/

récord /-ɔ:d/

Móscow /-oʊ/

ménu /-ju:/

cólleague /-i:g/

cafe /-eɪ/

fánzine /-i:n/

prótein /-i:n/

cóntour /-ʊə/

tríbute /-ju:t/

éxpert /-ɜ:t/

téxtile /-aɪ/

ádvért /-ɜ:t/

gárage /-ɑ:ʒ/

détail /-eɪ/

[1 0 0]

ánecdote /-oʊt/

pédigree /-i:/

crócodile /-aɪ/

sácrifice /-aɪs/

Péricles /-i:z/

ávenue /-ju:/

sábottage /-ɑ:ʒ/

páradigm /-aɪm/

**Penult-stressed nouns**

**11.24** Certain nouns of three or more syllables have the stress on their penult, ending in a ...*de-DUM-de* pattern. In these words the penult syllable is heavy. They fall into two categories: a penult made heavy by a consonant cluster, or by a long vowel.

• **Penult is stressed because of a following consonant cluster (the “agéndá” type).** In these nouns the penult is heavy, because its vowel is followed by a consonant cluster: *agéNDA*, *eléCTron*. (The consonants responsible are shown in small capitals):

[...0 1 0] *agéNDA*, *veráNDA*, *eléCTron*, *SeptéMBER*, *fiásCO*, *intéstine*, *mànifésto*, *asbéstos*, *Augústine*, *moméntum*, *amáLGam*, *TrafáLGar*, *pentáTHLon*, *GibráLTar* /dʒɪ'brɔ:ltə/...

We should remark that if the two consonants are a “stop-plus-liquid” combination, this does not count as a cluster, it does not make the penult heavy and does not draw the stress before itself, e.g. *ímmigrant*, *álgebra*, *Péricles* /'perɪkli:z/.

The “agéndá”-subrule also works with **ghost consonant clusters**, which are double only in spelling but not in pronunciation. For example, *vaníLLa* /və'nɪlə/ is stressed as if it really had two /l/'s.

[...0 1 0] *vaníLLa*, *tobáCCo*, *diléMMA*, *commítTEE*, *spaghéTTi*, *umbréLLA*, *VIéNNA*, *OthéLLO*, *proféSSor*, *espréSSo*, *RebéCCA*, *òperéTTA*, *adoléSCent*...

Unfortunately, a number of similar nouns, having a consonant cluster after the penult, do not behave like this but are stressed on the antepenult (**the “character” type**). There is no explanation for this. If learners mispronounce *character*, *orchestra* as \*/kə'ræktə/, \*/ɔ:kɪstrə/ instead of the correct /'kærəktə/, /'ɔ:kɪstrə/, this means they know the stress principles of English, but haven't noticed that *cháracter*, etc. escape the “agéndá”-rule. Similar words, with a cluster after the penult yet stressed on the antepenult:

[1 0 0] *cháracter*, *cáleNDAR*, *órcheSTRA*, *váleNTine*, *éneRGY*, *próteSTANT*, *Páles-Tine*, *áneCDote*, *ádjEctive*, *búrguNDY*, *MáncheSTER*, *gálaXY*, *ánaRCHY*, *mónaR-CHY*, *pásseNGer*, *FáhreNHeit*...

Note. A few nouns are stressed on the penult without a following cluster: *enámél* /ɪ'næməl/, *Índiána*, *Díána* /daɪ'ænə/, *Viágra* /vaɪ'ægrə/ (-gr- is stop+liquid, should not count), *piáno* /pi'ænɒs/.

**11.25 • Penult is stressed because it has a long vowel (the “horizon” type).** In nouns whose penult syllable has a long vowel (including diphthongs), stress is on the penult. For example, in *horízon* /hə'raɪzɒn/, *aréna* /ə'ri:nə/, the long vowels /aɪ/, /i:/ draw the stress to the penult. The following examples are arranged according to their primary-stressed (long!) vowel.

[...0 1 0]

horízon /aɪ/ Messíah /mə'saɪə/ Àphrodíte /,æfrə'dartɪ/ appèndicítis /ə,pɛndɪ'saɪtɪs/	graffítí /i:/ marína /i:/ albíno /i:/ ìncognító /,ɪnkɒg'ni:tɒs/	muséum /i:/ idéa /i:/ Càribbéan /,kærə'bi:ən/ cohérence /ɪə/
potáto /eɪ/ curátor /eɪ/ hiátus /eɪ/ canáry /eə/	banána /ɑ:/ pànoráma /ɑ:/ karáte /ɑ:/ safári /ɑ:/	aróma /oʊ/ Octóber /oʊ/ oppónent /oʊ/ Eudóra /ɔ:/

Similarly: *discíple*, *Oríon*, *salíva*, *províso*, *Elíza*, *angína*, *papýrus*, *inquíry*, *volcáno*, *Genéva*, *torpédo*, *Therésa*, *Koréa*, *àvocádo*, *èldorádo*, *sonáta*, *Chicágo*, *Toyóta*, *diagnósis*, *decórum*, *Mercédes* /eɪ/, etc.

This subrule (“if the penult has a long vowel, it is stressed”) is simple and clear, yet this group is difficult for the foreign learner because in a penult position English spelling is hardly able to show that a vowel is long. There is nothing to tell the learner that the *i* in *horízon* is long (tense) /aɪ/ and not short (lax) /ɪ/. The vowel is “invisibly” long: this may be called the “*horizon*-puzzle”. We must admit that our treatment of this has been somewhat circular. In 9.17 we said that in *horizon* the letter *i* has its tense pronunciation because it is stressed and is in free graphic position. Now we say that it is stressed because it is tense (or long). Unfortunately, this is a typical hen-and-egg problem, for which there is no solution.

Learners have to memorize which words have a long penult vowel (and are therefore stressed on the penult). Observe the following word pairs, which look as if they had the same kind of penult syllable, yet in one the penult vowel is short, in the other, long, which causes their stressing to be different:

<u>Short penult vowel</u>		<u>Long penult vowel</u>
[1 0 0]		[0 1 0]
vénison /'venɪsən/	—	horizon /hə'raɪzn/
Hélēna /'helənə/	—	arēna /ə'ri:nə/
émphāsis /'emfæsɪs/	—	oásis /oʊ'eɪsɪs/
cúpōla /'kju:pələ/	—	aróma /ə'roumə/
cónsonant	—	compónent

or, to take a pair of adjectives with the same difference:

reverent /'revərənt/	—	coherent /koʊ'hɪərənt/
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To sum up: words like *horizon* are a source of confusion because the length of the penult vowel cannot be seen from the spelling, and so learners often misplace the stress.

Note. The Latin word *regina* ‘queen’ is also pronounced with a long (and therefore stressed) penult vowel in English: /rɪ'li:zəbəθ rɪ'dʒaɪnə/. — *Helena* has a less frequent pronunciation /hə'li:nə/.

### Summary of the stressing of nouns.

**11.26** The following table sums up all types of unsuffixed nouns. The symbol “Δ” marks cases for which there is no explanation.

In determining the place of stress in unsuffixed nouns, the major factor is the number of syllables in the word, though the phonological makeup of the penult may also play a role.

- 1) The general rule is that nouns are stressed on their first syllable, but not earlier than the antepenult (*páper, cínema, acádemy*).
- 2) A small group of nouns have the stress on the fourth-last syllable (*cémetery*).
- 3) A number of nouns are end-stressed: some because of their ending (*par/áde*), some because they come from verbs (*to debáte* → *a debáte*), and some without reason (*Julý*).
- 4) Nouns whose penult is heavy are penult-stressed: some because of a consonant cluster (*agéndā*), others because of a long penult vowel (which cannot be seen from the spelling: *horízon*).

TABLE 11.26. STRESS IN NOUNS (no suffixes)

	<b>-4 stress on pre- antepenult</b>	<b>-3 stress on antepenult</b>	<b>-2 stress on penult</b>	<b>-1 stress on ult (= end-stressed)</b>
<b>general rule</b>	--	CÍNEMA <u>11.19</u> ACÁDEMY, CÀRDIÓLOGY <u>11.20</u>	PÁPER <u>11.19</u> FÉLLOW: despite final long V <u>11.19, 23</u> AGÉNDÁ, MÀNIFÉSTO: heavy penult (V is fol- lowed by CC) <u>11.24</u> HORÍZON, PÀNORÁMA: heavy penult (V is long) <u>11.25</u>	--
<b>subrules, frequent tendencies</b>	CÉMÉTERY: words in -Vry <u>11.21</u>	Δ CHÁRACTER: often when penult V is foll by CC <u>11.24</u>	VANÍLLA, SPAGHÉTTI: “ghost CC” behaves like real <u>11.24</u>	PARÁDE: ending stressed <u>11.22</u> DEBÁTE: stress from verb <u>11.22</u> Δ JULÝ, KÀNGARÓO: sometimes when last V is long <u>11.22</u>
<b>unusual words</b>	Δ HÉLICOPTER, MÉLANCHOLY <u>11.21</u>		Δ ENÁMEL, DIÁNA	Δ EVÉNT, CANÁL, PÈRSONNÉL <u>11.22</u>

## The stressing of verbs

**11.27** The stressing of verbs is governed by different rules than that of nouns. Here the major factor is the phonological makeup of the last syllable (the ult), but morphological considerations — namely, verbal prefixes — also play an important role. We must now say a few words about these.

Verbal prefixes fall into two categories: independent prefixes and integrated prefixes. **Independent prefixes** always have a clear meaning and are always stressed, as in *mìs|cálcu|late*, *òver|grów*, *dè|mágn|etize*. They will be dealt with in Chapter 12.

**Integrated prefixes** have no clear or separable meaning, and are not attached to words but to (more or less) meaningless roots. For example, *be|gin* or *sup|pose* or *re|duce* do not have two meaningful elements, but are composed of an integrated prefix (*be-*, *sup-*, *re-*) and a root (*-gin*, *-pose*, *-duce*). Integrated prefixes are important for our present topic because

they prefer not to carry the primary stress. We will, if necessary, show them with a vertical line: *be|gín, rè|pre|sént*.

Note. Most of the “integrated prefix + root” combinations come from Latin. For instance, *sup/pose* meant “to put under” in Latin, and *re/duce* meant “to lead back”, but their components are no longer analysable as such in English.

Many verbs are also used as nouns, e.g. *debáte, cómfort*. We will come back to this problem in 11.35. Verbal suffixes will be treated together with other suffixes in Chapter 12.

The main criterion in determining the stress of a verb is the phonological makeup of the ult, i.e. the number of consonants and the length of the vowel in the last syllable. Let us look at these properties first.

### Verbs ending in two consonants (the “defénd” type)

**11.28** Verbs ending in two consonants are always end-stressed. The number of syllables is irrelevant.

[0 1] *defénd, prevént, accépt, consíst, retúrn, embárk, seléct, arrést, adópt, remind, exchánge, demánd...*

[2 0 1] *còntradíct, rèpresént, ìnteráct, còmprehénd, ìnterrúpt, còrrespónd...*

Verbs ending in *r*+consonant (*retúrn*) are best regarded as belonging here, with the *r* being lexically present in their underlying form, but obligatorily dropped in BrE: /rɪ'tɜ:n/. If one prefers to consider their surface pronunciation, they belong to the “SUPPÓSE” type (see below), as their stressed vowel is automatically lengthened by Pre-R Broadening. Both rules will make them end-stressed.

Verbs that end in *-ss* (of course pronounced as single /s/) are also end-stressed: *impréss, caréss, surpáss, posséss, conféss*, etc. However, we find unexpected penult-stress in *trésspass, encómpass, háarrass* (AmE has the expected *harááss*).

A few three-syllable verbs ending in two consonants are front-stressed: *to súpplement, to cómpliment, to mánifest* (cf. 11.37.)

### Verbs with a light ult (the “trável” type)

**11.29** These verbs end in a short vowel plus zero or one consonant. They are stressed on the penult. (In two-syllable verbs this of course means the first syllable.) The number of syllables is again irrelevant. The vowel of the ult is weakened to /ɪ/, /i/ or /ə/.

[1 0] *trável, vómit, ópen, cárry, práctise, fínish, wórship, prómit, prófit, scribble, énter, fásten, quárrel, rével, pívot, réckon, ánsver, ínjure /'ɪndʒə/...*

[0 1 0] *imáagine, exámine, detérmine, abándon, intérpret, devélop, abólish, inhérit, solícit, reméber, surrender, consíder...*

A number of verbs which look similar, having a light ult, are end-stressed because they are morphologically composed of prefix + root, e.g. *be|gín, per|mít* (see 11.33.b.)

There are a few verbs that end in an unnecessary silent *-e*, which — misleadingly — suggests that the ult vowel is long, but this is not so: *práctise*, *prómise*, *ínjure*, *imáagine*, *de-términe*, *exámine*.

### Verbs with a long-vowelled ult

**11.30** If the verb has a long vowel (or diphthong) in its last syllable, the number of syllables becomes an important factor in determining the place of stress.

(a) **Two-syllable verbs** with a long-vowelled ult (the “**suppóse**” type) are end-stressed:

[0 1] *suppóse*, *donáte*, *prodúce*, *destróy*, *excúse*, *contáin*, *believe*, *créate*, *debáte*, *baptíze*, *contról*, *prefér*, *adóre*, *devóur*, *dený*, *ignite*, *survéy*, *reviéw*...

Note. Verbs in /oʊ/ (spelt *-ow*) escape this rule and are front-stressed, e.g. *fóllow*, *swállow*, *hárrow*.

(b) **Verbs of three or more syllables** with a long-vowelled ult (the “**décorate**” type) are stressed on the antepenult.

[1 0 0] *décorate*, *dúPLICATE* /'dju:-/, *dévastate*, *súbstitute*, *éxecute*, *sátisfy*, *récognize*, *ánalyse*, *próphesy* /-saɪ/, *sácrifice*, *ímprovise*, *éxercise*, *diagnóse*...

[0 1 0 0] *invéstigate*, *elíminate*, *exággerate*, *discríminate*, *solídify*...

Note. There is unusual penult-stressing in *contínue*, *contribúte*, *distribúte*. (The latter two are used by some speakers with regular stressing: %cóntribute, %díistribute.)

**11.31** Let us overview what we have said so far. The three rules described in 11.28-30 are the **phonological stress rules** for verbs: they are based on the phonological makeup of the last syllable (= the ult) of the verb.

<i>Phonological makeup of the verb's ult</i>	<i>No. of syll.</i>	<i>Stress on antepenult</i>	<i>Stress on penult</i>	<i>Stress on ult</i>
(a) <i>Ult ends in CC</i>	2			defénd
	3-4			còntradíct
(b) <i>Ult is light (ends in short V+C)</i>	2		trável, cárry	
	3-4		imáagine	
(c) <i>Ult is long-vowelled</i>	2			suppóse
	3-4	décorate		

In the first two rules the number of syllables does not matter, only the vowels and consonants of the last syllable. However, in the third rule we find that two-syllable verbs (*suppóse*) and three-syllable verbs (*décorate*) are stressed differently.



So far, our rules have been based on purely phonological considerations. English verbs, however, can be sensitive to morphological considerations: the existence of prefixes. We shall now turn our attention to these.

### The morphological stress rule: integrated verbal prefixes

**11.32** Integrated verbal prefixes (11.27) prefer to be unstressed, as in *sup|póse*, consequently verbs consisting of “prefix + root” are stressed on the root, whatever their phonological makeup. This is the **morphological stress rule** for verbs: “put primary stress on the root, not on the integrated prefix”. It causes end-stress in some cases where the phonological rule would place it earlier.

(a) The morphological rule causes end-stress even if the verb has a one-syllable root with a light ult, e.g. *per|mít*, *ex|pél*. (Recall that a light ult has a short vowel plus possibly one consonant). Such verbs are not penult-stressed, as the phonological rule would have it (compare *vísit*, *trável*), but stressed on their last syllable: the root.

[0 0 1] *be|gín*, *be|cóme*, *for|gét*, *o|mít*, *per|mít*, *re|bél*, *ex|pél*...

(b) The morphological rule causes end-stress in those three-syllable verbs which are made up of a prefix (or two prefixes) plus a one-syllable root: *ìntro|véne*, *sùper|séde*. Such verbs — even if they have a long-vowelled ult — are not antepenult-stressed, as the phonological rule would have it (compare *décorate*, *díagnose*), but stressed on their last syllable: the root.

[2 0 1] *ìntro|véne*, *ìntro|dúce*, *òver|héar*, *èxtra|póse*, *ùnder|míne*, *sùper|séde*,  
*ènter|táin*, *mìs|re|pórt*, *rè|de|sìgn*, *prè|con|céive*, *mìs|per|céive*, *dis|be|lìeve*...

Of course the antepenult automatically gets a secondary stress, whether it is a prefix or not.

Let us note that other verbs with a long ult (where the ult is not a root) obey the phonological rule and are stressed on the antepenult (*séparate*), even if they have a prefix (*ré-cognize*); in these verbs the primary stress may fall on the prefix.

Compare the working of the phonological rule and the morphological rule:

	<i>Phonological rule</i>	<i>Morphological rule</i>
(a) <i>verb with light ult</i>	<i>vísit</i> <i>trável</i>	<i>per mít</i> <i>ex pél</i>
(b) <i>3-syllable verb with long-vowelled ult</i>	<i>décorate</i> <i>díagnose</i>	<i>ìntro dúce</i> <i>ènter táin</i>

Note. There is unusual front-stress in *ím|pro|vise*, *súper|vise*; unusual end-stress in *às|certáin* /,æ sə'teɪn/.

**11.33** However, in most cases the working of the morphological rule coincides (or “overlaps”) with the phonological rule, and both give the same result:

– Many verbs are end-stressed for two reasons: because they end in two consonants and because they are composed of prefix(es) + root: *de|fénd*, *con|síst*, *re|túrn*, *em|bárk*, *ex|chánge*, *còntra|díct*, *rè|pre|sént*, *inter|áct*.

– Many two-syllable verbs are end-stressed for two reasons: because they have a long-vowelled ult, and because they are composed of prefix(es) + root: *sup|póse*, *pro|dúce*, *de|stróy*, *ex|cúse*, *be|lieve*, *im|plý*, *re|viév*.

– Many verbs are penult-stressed for two reasons: because they end in a light ult, and because they are composed of prefix(es) + root (and the root happens to end in a light ult): *con|síder*, *ex|ámine*, *de|vélop*, *de|términe*, *in|hérit*, *sur|rénder*.

In all verbs listed in this section, the phonological and morphological stress rules give the same result.

**11.34** Let us note that the phonological rule always applies to those verbs of three (or more) syllables which have a long-vowelled ult but do not end in a one-syllable root, e.g. *dé|vastate*, *ré|cognize*. The syllables *-ate* or *-ize* are not roots (they are more like suffixes). These verbs obey the phonological rule in 11.30.b, getting antepenult stress. If the prefix happens to be in the antepenult syllable, the primary stress will fall on it. Therefore stress will be the same in *générate*, *sácrífice* (which have no prefix) and in *dé|vastate*, *éx|ecute* (which have a prefix). Observe the verbs below:

<i>Antepenult, prim. stress</i>		<i>Long-vowelled ult (not a root)</i>	<i>Pron. of prefix</i>
↓		↓	
<b>dé-</b>	va-	state	/’de-/
<b>éx-</b>	e-	cute	/’eks-/
<b>ré-</b>	cog-	nize	/’re-/
<b>pér-</b>	mu-	tate	/’pɜː-/
in- <b>tér-</b>	ro-	gate	/In’tɛ-/
ex- <b>trá-</b>	po-	late	/Ik’stræ-/

Here the prefixes *de-*, *ex-*, *re-*, *per-*, and the second syllables of *inter-*, *extra-* have to bear the primary stress because they happen to occupy the antepenult position.

It will be interesting to compare what happens to the prefixes *inter-* and *extra-* in two types of verb, namely *intérrogate*, *extrápolate* on the one hand, where the long-vowelled ult throws back the primary stress to the antepenult (hitting one syllable of the prefix), and *intervéne*, *èxtrapóse* on the other hand, where the root is primary-stressed, and an automatic secondary stress falls on the penult (hitting the other syllable of the prefix):

	<i>ant.</i>	<i>pen.</i>	<i>ult</i>	
in-	<b>tér-</b>	ro-	gate	/ɪn'terəgert/ (two-syllable root “-rogate”)
	ìn-	ter-	<b>véne</b>	/,ɪntə'vi:n/ (one-syllable root “-vene”)
ex-	<b>trá-</b>	po-	late	/ɪk'stræpələrt/ (two-syllable root “-polate”)
	èx-	tra-	<b>póse</b>	/,ɛkstrə'pouz/ (one-syllable root “-pose”)

The prefixes have two different pronunciations according to which of their syllables has to bear stress in the given word. This causes their vowels to be full or weak, respectively.

## Noun/Verb homographs

**11.35** Many English words can be used as nouns and verbs, with the same spelling and, usually, with the same pronunciation. (This is called “conversion” in grammar.) The following types exist.

(a) **Noun-like stress** for both noun and verb (the “**cómfort**”-type). In these words, both the noun and the verb are front-stressed: *my cómfort = to cómfort*. Here the verb copies the stress of the noun. Examples:

[1 0] noun ⇒ verb: *cómfort, cómment, cóntact, fórecast, détail, fráanchise, pérfume, índex, áccess, ínterview, ínterest, párody...*

This type includes all two-syllable words where the noun converted into a verb has a light *ult*, e.g. *to hammer, to water, to study, to reason, to model, to cover, to feature*, etc. etc. Similarly, longer nouns and verbs, due to their respective rules, are often identically stressed on the antepenult, e.g. *a súbstitute = to súbstitute, an éxercise = to éxercise*.

Note. The pairs *práctice = práctise* and *licence = license* also belong here even though their spelling is different.

(b) **Verb-like stress** for both noun and verb (the “**debáte**”-type). Here both the noun and the verb are end-stressed: *a debáte = to debáte*. Here the noun copies the stress of the verb. Examples:

[0 1] verb ⇒ noun: *debáte, dispúte, caréss, retúrn, expréss, demánd, efféct, arrést, deláy, reséarch, lámént, surpríse, attáck, resérve, desíre...*

Unfortunately, we cannot tell why one noun-verb pair belongs to Type (a), the other to Type (b). There is no reason why *áccess* has front-stress both as noun and verb, while *succéss* has end-stress in both its functions — this must be memorized as a lexical property.

## 11.36

(c) **Noun/Verb pairs with stress difference (the “rébel/rebél” type).** — There is a sizeable number of two-syllable words which have different stressing when they are nouns or verbs.

The noun has front-stress, the verb has end-stress. In many cases the stress difference does not cause much difficulty as the sounds themselves remain the same, e.g. *a miscount* /'mɪskaʊnt/ – *to miscóunt* /mɪs'kaʊnt/, *a dígest* /'daɪdʒest/ – *to dígest* /daɪ'dʒest/; similarly *an úpgrade* – *to upgráde*, *an ínsert* – *to insért*, *a réwrite* – *to rewíte*, etc. But in some pairs the pronunciation of the vowels changes in accordance with the stress change. We list the most important such pairs below.

	<u>Noun</u> [1 0]	<u>Verb</u> [0 1]		<u>Noun</u> [1 0]	<u>Verb</u> [0 1]
accent	/'æksent/	/ək'sent/	present	/'preznt/	/prɪ'zent/
addict	/'ædɪkt/	/ə'dɪkt/	produce	/'prɒdju:s/	/prə'dju:s/
ally	/'ælaɪ/	/ə'laɪ/	progress	/'prɒʊgres/	/prə'gres/
attribute	/'ætrɪbjʊ:t/	/ə'trɪbjʊ:t/	project	/'prɒdʒekt/	/prə'dʒekt/
contrast	/'kɒntrɑ:st/	/kən'trɑ:st/	protest	/'prɒʊtest/	/prə'test/
convict	/'kɒnvɪkt/	/kən'vɪkt/	rebel	/'rebl/	/rɪ'bel/
desert	/'dezət/	/dɪ'zɜ:t/	record	/'rekɔ:d/	/rɪ'kɔ:d/
export	/'eksɔ:t/	/ɪk'sɔ:t/	refuse	/'refju:s/	/rɪ'fju:z/
object	/'ɒbdʒɪkt/	/əb'dʒekt/	subject	/'sʌbdʒɪkt/	/səb'dʒekt/

Further pairs showing such stress-change are: *abstract*, *combine*, *compress*, *concert*, *conduct*, *consort*, *contract*, *escort*, *import*, *insult*, *permit*, *proceed(s)*, *segment*, *survey*, *torment*, *transfer*, *transport*.

The following table sums up the types of two-syllable noun/verb homographs:

	(a) “cómfort”-type	(b) “debáte”-type	(c) “rébel/rebél”-type
Noun-like stress [1 0]	<i>my cómfort</i> (noun) <i>to cómfort</i> (verb)	—	<i>a rébel</i> (noun)
Verb-like stress [0 1]	—	<i>a debáte</i> (noun) <i>to debáte</i> (verb)	<i>to rebél</i> (verb)

**11.37 Strong/weak unstressed ults.** — Some three-syllable words which are used both as verbs and nouns (or adjectives), differ only in having a strong or weak unstressed ult, without any difference in the place of stress. These words end in *-ment* or *-ate* and are stressed on the antepenult. The noun or adjective has a weak-vowelled ult, while the verb has a strong (full-vowelled) ult:

	<u>Weak ult (N or A)</u>	<u>Strong ult (V)</u>
<b>-ment:</b>		
dócument	/'dɒkjʊmṁnt/ N	/'dɒkjʊmṁnt/ V
cómplement	/'kɒmplṁnt/ N	/'kɒmplṁnt/ V
cómpliment	/'kɒmplɪmṁnt/ N	/'kɒmplɪmṁnt/ V
súpplement	/'sʌplṁnt/ N	/'sʌplṁnt/ V
<b>-ate:</b>		
assóciate	/ə'sɔʃjṁt/ N	/ə'sɔʃjṁt/ V
délegate	/'delɪgṁt/ N	/'delɪgṁt/ V

é <u>stimate</u>	/'estɪmət/ N	/'estɪmə <u>t</u> / V
grá <u>duate</u>	/'grædʒuət/ N	/'grædʒuə <u>t</u> / V
í <u>ntimate</u>	/'ɪntɪmət/ A	/'ɪntɪmə <u>t</u> / V
sé <u>parate</u>	/'sep(ə)rət/ A	/'sepərə <u>t</u> / V

There is one more similar pair: *a próphecy* /'prɒfəsi/ – *to próphesy* /'prɒfəsi/.

### Summary of the stressing of verbs

**11.38** Phonological and morphological rules both come into play in verbs.

- The **phonological stress rules** for verbs are based on the makeup of the ult.
  - If the verb ends in two consonants, the ult is stressed (*defend, contradict*).
  - If the ult is light (ends in short vowel plus zero or one consonant), the penult is stressed (*trável, cárry, imáigne, develop*).
  - If the ult has a long vowel, then
    - in two-syllable verbs the ult is stressed (*debáte*);
    - in longer verbs the antepenult is stressed (*decorate, investigate*).
- The **morphological stress rule** prescribes end-stress where the phonological rule would not predict it. If the last syllable is the root, the verb is end-stressed (*be|gin, inter|vene*).
- **Noun-like stress**: a number of verbs do not follow any of these rules but copy the pronunciation of the noun from which they are converted (*comfort, interview*).

TABLE 11.38 STRESS IN VERBS (no suffixes)

	<b>-3</b> Stress on antepenult	<b>-2</b> Stress on penult	<b>-1</b> Stress on ult (= end-stressed)
<b>phonol. rule is enough</b>	DÉCORATE, SÚBSTITUTE, INVÉSTIGATE: 3/4-syl verb with long V in ult <u>11.30, 34</u>	TRÁVEL, IMÁGINE: light ult <u>11.29</u>	DEFÉND, CÒNTRADÍCT: ends in 2 cons <u>11.28</u>  SUPPÓSE, DONÁTE: 2-syl verb with long V in ult <u>11.30</u>
<b>morphol. rule is needed</b>			BE GÍN <u>11.32</u>  ÌNTER VÉNE <u>11.32</u>
<b>stress from noun</b>	ÌNTERVIEW <u>11.35</u>	CÓMFORT <u>11.35</u>	

Note. There exist many verbs that are stressed on the fourth-last syllable, [1 0 0 0] *cápitalize*, but they are all suffixed, this is why we do not include them here.

## The stressing of adjectives

### Two-syllable adjectives

**11.39** Two-syllable adjectives follow the verb rules.

- If they have a light ult, stress is on the first syllable.

[1 0] (like “trável” type verbs, 11.29): *cléver, próper, rígíd, súllen, éasy, háppy, húman, néutral, fámous...*

- If the ult is heavy (ends in two consonants, or is long-vowelled), they are end-stressed:

[0 1] (like “defénd” type verbs, 11.28): *occúlt, penúlt, distínt, corréct, absúrd, abrípt, bizárre...*

[0 1] (like “suppóse” type verbs, 11.30): *extréme, insáne, sevére, secúre, máture, humáne, banál /bə'nɑ:l/, mínúte /maɪ'nju:t/ ‘kicsiny’, afráíd, obscéne, acúte, divíne, compléte, sublíme, benígn /br'nain/...*

It is worth comparing the adjectives *human* and *humane*. The first has a short-vowelled (light) ult, therefore the stress falls on the first syllable, consequently the *-a-* weakens to schwa: /'hju:mən/. In *humane* the ult has a long vowel (graphically signalled by the final *-e*), therefore the stress is on the ult: /hju:'meɪn/.

Some adjectives do not obey these rules and are front-stressed despite their long-vowelled ult: *nárrów, yéllów, hóllów, sénile, móbile, fémale*; or despite their ending in two consonants: *hónest, módest, pérfect, ábstract, décent*.

### Three-syllable (or longer) adjectives

**11.40** These are stressed like nouns. (Most of these longer adjectives have, or appear to have, some kind of suffix, but that should not disturb us at this point.)

- ♦ Generally the antepenult is stressed:

[1 0 0] (like “cínema” type nouns, 11.19): *définite, ínfinite, ínegral, úsual, márvellous, árrogant, féminine, símilar, óbsolete, ádequate, lúdicrous, grándiose, ábsolute, dérelict, párrallel...*

[0 1 0 0] (like “acádemy” type nouns, 11.20): *signíficant, ridicúulous, supérior...*

- ♦ The penult is stressed if it is heavy (closed by two consonants, or if it has a long vowel).

[...0 1 0] (like “agéndá” type nouns, 11.24): *etéRnal, treméNDous, clandéSTine, objéCTive, excéSSive, relúCTant, abúNDant, impóRTant, malíGNant, òriéntal...*

[...0 1 0] (like “horízón” type nouns, 11.25): *cohérent, complácent, feróciOUS, outrágeous /aʊt'reɪdʒəs/, courágeous /kə'reɪdʒəs/...*

In this latter type the length of the penult vowel cannot be seen from the spelling (this is what we called the “*horizon-puzzle*”): compare *coherent* /kəʊˈhɪərənt/ with *reverent* /ˈrevərənt/.

A few other three-syllable adjectives with a light ult are stressed on the penult (like verbs): *explicit*, *decrépít*, *intrépid*, and so is the numeral *éléven*.

Longer adjectives are all suffixed, so they are treated in Chapter 12. Note especially the suffix *-ive*, [12.28](#).

### Adjective homographs

**11.41** A few adjectives are spelt the same as a noun or verb, but the stress is placed differently (see the similar noun/verb homographs in [11.36](#)). The most important such words, where the vowel quality changes due to the stress shift, are the following (A = adjective, N = noun, V = verb):

	<u>stress earlier</u>	<u>stress later</u>
alternate	/ˈɔːltənɛɪt/ V	/ɔːlˈtɜːnət/ A
content(s)	/ˈkɒntents/ N	/kənˈtɛnt/ A
invalid	/ˈɪnvəlɪd/ N	/ɪnˈvælɪd/ A
minute	/ˈmɪnɪt/ N	/maɪˈnjuːt/ A
present	/ˈprezənt/ A, N	/prɪˈzent/ V
perfect	/ˈpɜːfɪkt/ A	/pəˈfekt/ V
suspect	/ˈsʌspekt/ A, N	/səˈspekt/ V

## Summary of the Stressing of Base Words

**11.42** English word stress has many rules, subrules, and exceptions, like all other areas of grammar (think of the rules for using articles!). How much of this a teacher wishes to teach is a question of teaching method. It is possible not to teach any stress rules but suggest that the stressing of each word has to be learnt separately — that stress is lexical, not predictable from other features of the word. However, advanced learners (as well as native speakers) are generally able to place the stress correctly on words they have never pronounced before. Obviously they possess some knowledge which enables them to do so; this is exactly what we tried to describe in this chapter.

Nouns prefer to have their stress earlier (towards the beginning of the word), verbs later. Any end-stressed noun is slightly unusual, while verbs are frequently end-stressed. Verbs are also more sensitive to how the last syllable is built up (whether it is a light ult, or whether it is long-vowelled).

The [...0 1 0] “de-DUM-de” stress pattern (penult-stressing) is found in a minority of words. These usually have a light ult. All verbs with a light ult belong here (*devélop*, *abán-don*), but nouns and adjectives only if they have an (invisibly!) long penult vowel (*horízon*, *cohérent*), or if the penult vowel is followed by two consonants (*agénda*, *vaníLLa*, *etéRNal*). The *agénda* type has many exceptions in which the noun is stressed on the antepenult (*chá-*

racter) in accordance with the general tendency of nouns to have their stress earlier in the word.

**11.43** Another question is when a heavy ult (one that has a long vowel, or ends in two consonants) bears the stress and when it does not. In two-syllable words a heavy ult is often stressed (*suppóse, extrémé, defénd, paráde*), but in longer words it usually “throws back” the stress by two syllables onto the antepenult (*ánecdote, décorate, páradox, dérelict*).

We can illustrate this with the two pronunciations of the adjective *clandestine*. Many native speakers pronounce it with a light ult, /-ɪn/, in which case the stress falls on the penult, drawn there by the consonant cluster *-st-*, thus /klæn'destɪn/ (like “*agéndá*”). Other speakers pronounce it with a heavy ult, /-aɪn/, but now the heavy ult throws the stress back to the antepenult, so this pronunciation is /'klændɪstáɪn/ (like *ánecdote*).

In two-syllable nouns the heavy ult is normally unstressed: *féllow, téxtile*. These are often mis-stressed by learners: \**féllów, \*téxtíle*. Heavy-ult-stressing is normal in two-syllable verbs and adjectives, but not in nouns: compare *desíre, entíre*, but *émpire*.

**11.44** The following table sums up all important types of stress in nouns, verbs, and adjectives. Words appearing in the same column have the same stress pattern. The most general types, obeying the basic rules, appear in SMALL CAPITALS.

TABLE 11.44 OVERVIEW OF WORD STRESS PATTERNS (unsuffixed)

Stress on:	Word has 2 syllables		Word has 3 syllables			Word has 4 syllables		
	penult [1 0]	ult [0 1]	antepen. [1 0 0]	penult [0 1 0]	ult [2 0 1]	preantep. [1 0 0 0]	antepen. [0 1 0 0]	penult [2 0 1 0]
<b>Nouns</b>	PÁPER FÉLLOW	paráde debáte Júly	CÍNEMA chárácter	AGÉNDÁ VANÍLLA HORÍZON	kángaróo pèrsonnèl	cémeterý hélicopter	ACÁDEMY	MÀNIFÉSTO ÒPERÉTTA PÀNORÁMA
<b>Verbs</b>	TRÁVEL cómfort	DEFÉND SUPPÓSE begín	DÉCORATE ínterview	IMÁGINE DEVÉLOP contínue	CÒNTRADÍCT íntervéne		INVÉSTI- GATE	
<b>Adj.s</b>	CLÉVER nárrów	DISTÍNCT EXTRÉME	DÉFINITE	ETÉRNAL COHÉRENT explícit			SIGNÍFI- CANT	

— 0 —

## QUESTIONS FOR REVISION

1. What is the onset of a syllable and how many consonants may it contain?
2. In what sense is the relationship between stress and vowel-quality asymmetrical?



3. Why is iambic secondary stress more difficult than derivational secondary stress?
4. Why is the stress different in *remember* and *represent*?
5. Which adjectives follow the verb-type stress rules?
6. Why can we say that *rhinoceros* and *crocodile* have their stress in the same place?
7. Explain the stressing of *August* (the month), *Augustus* (a name), and *august* ('magasztos').
8. Here are some two-syllable verbs: *to beget*, *to rivet*, *to compare*, *to assist*, *to xerox*. Explain their stressing.
9. Why is the verbal prefix primary-stressed in *recognize*, *devastate*?
10. Is the stress placed differently in *a graduate* and *to graduate*? What is the difference?
11. Are one-syllable words like *cheese*, *drink*, *blue* stressed? When do we transcribe them with a stress-mark?
12. What do we mean by the term "horizon-puzzle"?

## CHAPTER 12

### STRESS IN PREFIXES, SUFFIXES, AND COMPOUNDS

**12.1** This chapter will look at the stress rules for words with prefixes or suffixes, as well as compound words. These words are morphologically complex. For example, the word *un/reason/able* contains three morphemes: the prefix *un-*, the base *reason*, and the suffix *-able*. The compound *sun/rise* contains two morphemes: the base *sun* and the base *rise*.

The task of this chapter is to see how these morphological operations (prefixing, suffixing, and compounding) affect the place of stress. It is equally important to know when this does not happen, namely, which morphological operations do not cause any change to the word (for example, the *-ing* suffix never influences the stress).

A change in stress may cause further changes, such as the appearance of a secondary stress, vowel weakening, or palatalization (compare the *-ci-* in *sociéty* /-sar-/ but *sócial* /-f-/).

### Basic morphological notions

**12.2** **Prefixes** (H ‘előképző’) and **suffixes** (H ‘rag, jel, képző’) together are called **affixes** (H ‘toldalék’). An affix is always attached to a **stem** (H ‘tő’). For example, *person* is the stem of *person/ify*, and *personify* is the stem of *personify/ing*. The **base** (H ‘alapszó’) is the innermost stem that remains when all affixes are removed, so *person* is the base of *personifying*.

In the above examples the stems are **free stems**, because they are existing words: *person*, *personify*. However, many words also have a **bound stem**, used when they occur with certain suffixes. The word *CRIME*, for example, has a free stem *crime* (as in *crime*, *crime/s*), and a bound stem *crimin-* (as in *crimin/al*, *crimin/ology*). The verb *SATISFY* has a free stem *satisfy* (as in *satisfy*, *satisfi/ed*, *satisfy/ing*), and a bound stem *satisfact-* (as in *satisfact/ion*, *satisfact/ory*). Compare H *LÓ* ‘horse’, which has a free stem *ló* (as in *ló*, *ló|hoz*, *ló|ért*), and a bound stem *lov-* (as in *lov/ak*, *lov/agol*).

A subclass of bound stems only ever occur with suffixes, never as independent words. Such forever-bound stems are called **bound roots** (H ‘gyök’ or ‘fiktív tő’). For example, “*soci*” is the bound root in *soci/al*, *as/soci/ate*, *soci|ety*; “*vent*” is the bound root in *in/vent*, *pre/vent*; H “*nyug*” is the bound root in *nyug/szik*, *nyug/alom*. In English, bound roots often have very vague meaning or no meaning at all.

**12.3** To illustrate these morphological categories, let us take the words *inventions* and *re-invent*. These can be analysed into a meaningless bound root “*vent*”, with an integrated verbal prefix *in-* (equally meaningless). The two together give a meaningful base word *in/vent*, to which we attach the suffix *-ion* to get *invent/ion*, and to this we attach the plural suffix *-s* to get *invention/s*. Or we may add the prefix *re-* (meaning ‘again’) to the stem *invent* to get *re/invent*.

	<u><b>in</b></u>	<u><b>vent</b></u>		
	PREF	ROOT		
	<u><b>in</b></u>	<u><b>vent</b></u>	<u><b>-ion</b></u>	
	STEM	STEM	SUFF	
	<u><b>in</b></u>	<u><b>vent</b></u>	<u><b>ion</b></u>	<u><b>-s</b></u>
		STEM		SUFF
<u><b>re-</b></u>	<u><b>in</b></u>	<u><b>vent</b></u>		
PREF		STEM		

The word *in/vent/ion/s* is made up of four morphemes, and includes one root and two stems. The base in all these words is *invent*, the bound root is “*vent*”.

**12.4 Boundaries.** — Each affix has a boundary symbol which shows what type of stem it can be attached to. There are two boundaries: the cross-hatch boundary (#) and the plus boundary (+).

An affix with the **cross-hatch boundary** (#) can only be attached to existing words (= free stems). Neither the affix nor the stem undergo any change in pronunciation. For example, the prefix *un#* and the suffix *#ness* are “cross-hatch affixes”: *un#kind*, *un#eventful*, *un#organized*, *un#natural*; *kind#ness*, *lazi#ness*, *dangerous#ness*. The # boundary is like a high wall, so the sounds on its two sides cannot influence each other. “Cross-hatch affixes” do not completely become a part of the word. In *un#natural*, for example, both /n/ sounds are pronounced: /,ʌn'nætʃərəl/, which would not be possible within an ordinary English word.

**12.5** The **plus boundary** (+) is a more intimate link. Stem and affix often undergo some change in pronunciation. A “plus-boundary affix” can appear with bound stems or roots as well as with existing words. For example, the prefix *sur+* and the suffix *+ic* are “plus-boundary affixes” (see table below).

The plus boundary is like a low wall, which does not separate things from each other. It allows the affix to be integrated in the word.

Note that these phenomena are not spelling-based but pronunciation-based. Spelling change is not necessarily stem change, and vice versa. For example, *scene* loses its final *-e* before *-ic*, but we do not consider this to be stem change because the pronunciation is the same: /si:n/. On the other hand, the word *plus* /plʌs/ appears as /pləs/ in *surplus*, so this counts as stem change even though the spelling remains the same.

A t t a c h e d   t o			
	a free stem (an existing word)	a bound stem	
		bound alternant of free stem	bound root
<b>sur+</b>	<i>sur+pass</i> /sə'pɑ:s/ ( <i>pass</i> is an existing word)	<i>sur+plus</i> /'sɜ:pləs/ (/pləs/ is the bound alternant of <i>plus</i> )	<i>to sur+vey</i> /sə'veɪ/ (“ <i>vey</i> ” is not a word)
<b>+ic</b>	<i>scen+ic</i> /'si:nɪk/ ( <i>scene</i> is an existing word)	<i>dramat+ic</i> /drə'mæɪtɪk/ ( <i>dramat-</i> is the bound stem of <i>drama</i> )	<i>hect+ic</i> /'hektɪk/ (“ <i>hect</i> ” is not a word)

The free and bound stems mentioned in [12.2](#) can now be represented as follows:

*crime*# ~ *crimin*+                      +*soci*+                      *H ló*# ~ *lov*+  
*satisfy*# ~ *satisfact*+                      +*vent*+                      *H nyug*+

For phonological purposes the + boundary behaves as if it was not there, so we will not always indicate it; but it is useful to show the # boundary when there is one. (Often we shall use a vertical line to show any kind of morpheme boundary: *un/natural*, *sur/plus*, etc.)

Note. The # boundary is also called strong boundary, or word-boundary, or hatch-mark; the + boundary is also called weak boundary, or root-boundary.

**12.6** We said that a cross-hatch affix does not influence the stem in any way. This is not quite true, inasmuch as it may change the degree of stress in the stem (but not the place of stress or the sound segments). For example, the word *pour*, being a verb, is primary-stressed (though we do not indicate this in isolation as it is a one-syllable word). But when we attach the prefix *down*# to form the noun *dówn#pour* ‘heavy rain’, the prefix takes the stress on itself and the stress of *pour* is degraded to strong-unstressed: /'daʊnpɔ:/. This does not affect the pronunciation of stems or words very strongly, as demonstrated in [12.8](#) below.

Note. Some authors claim that *dównpour*, *úps*hot, *únderwear*, etc. are compounds rather than prefix-plus-stem combinations; but cf. [12.42](#).

## THE STRESSING OF PREFIXES

**12.7** Prefixes are of two types (as explained in [11.27](#)): integrated and independent. **Integrated prefixes** ([11.32](#)) are attached with a + boundary, and have no clear meaning (*sup+pose*, *in+vent*, *be+gin*, *re+mote*). They become part of the base word. They are normally unstressed, unless some rule fixes stress on them (*rè+pre+sént*, *dé+vastate*).

**Independent prefixes** have a clear and constant meaning, and are always attached to existing words, with a # boundary. (In spelling they are sometimes separated from the stem with a hyphen: *co-author*, *de-ice*, *sub-section*.) They are productive, you may use them to

create words which you have not heard before, such as *underdecorated*, *pseudo-teenager*, or *untitillating*. They cause no changes to the stem, and present no difficulty in pronunciation. They are always stressed. Their stress is of course secondary, as they are followed by a stressed stem which takes the primary stress (for a regular exception see 12.8). Here are a few examples of words with independent prefixes:

to <i>rè#write</i> /,ri:'raɪt/	<i>sùb#stándard</i> /,sʌb'stændəd/
<i>mìs#beháviour</i> /,mɪsbɪ'heɪvjə/	<i>òver#shádow</i> /,oʊvə'ʃædɔʊ/
<i>ìn#corrèct</i> /,ɪnkə'rekt/	<i>dè#máagnetize</i> /,di:'mægnətáɪz/
<i>prè#sùpposition</i> /,pri:,sʌpə'zɪʃn/	<i>ùp#hóld</i> /,ʌp'hould/
<i>psèudo#sciéntífic</i> /,sju:doʊ,saiən'tɪfɪk/	<i>èxtra#terréstrial</i> /,ekstrətə'restriəl/

**12.8** There is one exception to the above: in two-syllable nouns with independent prefixes the primary stress is on the prefix, and the stem becomes unstressed. This is the classic [1 0] stress pattern preferred by two-syllable nouns (11.35). The unstressed stem remains a strong syllable, full-vowelled (not weakened). Here are some examples for such two-syllable nouns:

an <i>óut#post</i> /'aʊtpoʊst/	a <i>rè#fill</i> /'ri:fil/	a <i>dí#graph</i> /'daɪgrɑ:f/
a <i>có#ed</i> /'koʊəd/	a <i>dówn#pour</i> /'daʊnpɔ:/	a <i>mís#count</i> /'mɪskaʊnt/
some <i>dé#caf</i> /'di:kæf/	an <i>úp#shot</i> /'ʌpʃɒt/	a <i>pré#view</i> /'pri:vju:/

Because of this, there are many two-syllable noun/verb pairs with independent prefixes, written the same way but stressed differently. The noun has primary stress on the prefix (*a réfill*), the verb has secondary stress on the prefix, and primary on the stem (*to rèfill*). The sound segments, however, are the same, as neither syllable is weakened. (Cf. 11.36.)

In longer nouns the general rule applies (12.7): secondary stress on the prefix, primary on the stem, as in verbs: *mìs#beháviour*, *cò-#áuthor*, *prè#sùpposition*.

**12.9** It follows from the above that many words with an independent prefix have stress both on their first syllable (the prefix) and on the second (if the stem is stressed on its first syllable), e.g. *ùp#hóld*, *sùb#stándard*, *dè#máagnetize*. This produces a [2 1...] stress pattern, which we said to be dispreferred in English because it contains a stress clash (11.13). Now we can tell the whole truth: the restriction only applies to base words, and not to words with a # boundary in them. Compare *mònsóon* and *ùp#hóld*. *Mònsóon* is irregular [2 1] because it is a base word beginning with two stressed syllables, but *ùp#hóld* is regular [2#1] since its first syllable is an independent prefix.

**12.10 Prefix homographs.** — A major difficulty with independent prefixes is that some of them also occur as integrated prefixes. Table 12.10 lists the most important prefixes that are used both as independent and as integrated: *a-*, *de-*, *dis-*, *ex-*, *in-*, *pre-*, *pro-*, *re-*, *sub-*.

TABLE 12.10 PREFIX HOMOGRAPHYS: INDEPENDENT AND INTEGRATED

	<b>Independent prefix</b> (constant meaning, constant pronun.)	<b>Integrated prefix</b> (vague or no meaning, changeable pronun.)
<b>a-</b>	/,eɪ-/ ‘without, lacking’ <i>à#móral, à#theístic, à#symmétrical</i>	/ə-/ <i>awáy, aríse, aspíre, alígn</i> /’æ-/ <i>ásperate</i> /,æ-/ <i>àspirátion</i>
<b>de-</b>	/,di:-/ ‘do the opposite; remove’ <i>dè-#íce, dè#mágnétize, dè-#accént</i>	/dɪ-/ <i>defénd</i> /’de-/ <i>dévastate</i> /,de-/ <i>dèvastátion</i>
<b>dis-</b>	/,dɪs-/ ‘opposite, negative, wrong’ <i>dis#líke, dɪs#agrée, dɪs#ínterest</i>	/dɪ(s)-/ <i>distúrb, díssént; /dɪz-/ dísáster</i> /’dɪ(s)-/ <i>dísparate, díssident</i> /,dɪ(s)-/ <i>dísposítion, díssertátion</i>
<b>ex-</b>	/,eks-/ ‘former, past’ <i>èx-#wífe, èx-#cháirman, èx-#oppónent</i>	/ɪks-/ <i>expláin; /ɪgz-/ exámple</i> /’eks-/ <i>éxecute</i> /,eks-/ <i>èxecútion</i>
<b>in-</b>	(1) adverbial /,ɪn-/ ‘inwards’ <i>ín#láid, ín#dóors, ín#síde, ín#trénch</i> (2)* negative /,ɪn-/ ‘not’ <i>ín+corréct, ín+jústice, ín+orgánic</i>	/ɪn-/ <i>ínvéstigate; /ɪm-/ ímpóse</i> /ɪ-/ <i>ímmeñse, íllúsióñ, írrádiáte</i> /’ɪ(n)-/ <i>ínstigate, ínnocent</i> /,ɪ(n)-/ <i>íntuítion, ínnovátióñ</i>
<b>pre-</b>	/,pri:-/ ‘earlier, before(hand)’ <i>prè-#páy, prè-#exístence, prè#wár</i>	/prɪ-/ <i>prevént</i> /’pre-/ <i>président</i> /,pre-/ <i>prèsentátion</i>
<b>pro-</b>	/,prɒʊ-/ ‘in favour of’ <i>prò-#Brítish, prò-#chúrch, prò-#taxátion</i>	/prə-/ <i>províde</i> /’prɒʊ-/ <i>própagate; /’prɒʊ-/ prótest</i> /,prɒʊ-/ <i>pròpagánda</i>
<b>re-</b>	/,ri:-/ ‘again, anew, over’ <i>rè#wríte, rè#décorate, rè#appéar</i>	/rɪ-/ <i>remínd</i> /’re-/ <i>récognize</i> /,re-/ <i>rèvolútióñ</i>
<b>sub-</b>	/,sʌb-/ ‘under, below’ <i>sùb#stándard, sùb#lét, sùb#éditor</i>	/səb-/ <i>submít</i> /’sʌb-/ <i>sùbstitute</i> /,sʌb-/ <i>sùbstítuítion</i>

\* The negative prefix *in-* (2) is a transitional type. See [12.13](#).

In the left-hand column all the prefixes have a constant pronunciation with a full vowel, always secondary stressed. (They would be primary stressed in two-syllable nouns, as in *a réfill*; this is not shown in the table.) In the right-hand column no meaning is given, since integrated prefixes are practically meaningless. They, however, have several pronunciations: a weak one with /ə/ or /ɪ/ when they are unstressed, and a strong one with a full vowel when they are stressed, primary or secondary, depending on how the rules will place stress on them (11.34). (The vowel /ɪ/ of *dis-* and *in-* functions both as full and weak.)

Take, for example, the prefix *re-*. In *to reduce* /rɪ'dju:s/ it is an integrated meaningless prefix, unstressed, with a weak vowel, attached to a bound root *-duce*. But in *to rewrite* /,ri:'raɪt/ it is an independent prefix meaning 'again, anew', secondary stressed, with a full vowel, attached to the existing word *write*. The first is *re+duce*, the second is *re#write*. (It may be spelt with a hyphen: *re-write*.) Remember that independent prefixes are always attached to existing words (*a#moral*, *de#magnetize*), while integrated prefixes may be attached to free (*a+way*, *re+mind*) or bound stems (*de+fend*, *re+cognize*). The two prefix types may be combined in one word, as in *resubmit* /,ri:səb'mɪt/ 'to hand in again': *rè#sub+mit*.

**12.11** The prefixes *de-*, *pre-* and *re-* are very frequent both as independent and as integrated. All three end in the letter *e*, which has three pronunciations: /i:/, /e/, /ɪ/. We take the relevant data from Table 12.10 and re-present (!) it in the table below:

TABLE 12.11 PRONUNCIATIONS OF *DE-*, *PRE-*, *RE-*

	As independent prefix		As integrated prefix		
	Primary str.	Second. str.	Primary str.	Second. str.	Unstressed
	/i:/		/e/		/ɪ/
<b>de-</b>	<i>dé#caf</i> (n.)	<i>dè#magnetize</i>	<i>dé+vastate</i>	<i>dè+vastation</i>	<i>de+fénd</i>
<b>pre-</b>	<i>pré#view</i> (n.)	<i>prè#historic</i>	<i>pré+sent</i>	<i>prè+sentation</i>	<i>pre+vént</i>
<b>re-</b>	<i>rè#fill</i> (n.)	<i>rè#fill</i> (v.)	<i>rè+cognize</i>	<i>rè+comménd</i>	<i>re+mínd</i>

The long (tense) pronunciation with /i:/ occurs in the independent prefixes: their *-e* is stressed and counts as final because it is followed by a # boundary, so the rule of Final Vowel Length (8.22) applies. In the integrated prefixes the *-e* does not count as final because there is no # boundary after it: the prefix is followed by a consonant. If stress falls on it, the vowel is short (lax) /e/; if it is unstressed, it weakens to /ɪ/. (Before a vowel this weak /ɪ/ is automatically replaced by /i/ (8.31), e.g. *prééminent*, *réáct*).

**12.12** As a further example, let us analyse the pronunciation of four verbs beginning with the prefix *re-*.

	<u>Transcription</u>	<u>Stress</u>	<u>Morphology</u>
remember	/rɪ'membə/	[0 1 0]	<i>re+mémber</i>
represent	/,reprɪ'zɛnt/	[2 0 1]	<i>rè+pre+sént</i>
recognize	/'rekəgnəɪz/	[1 0 0]	<i>rè+cognize</i>
relocate	/,ri:ləʊ'keɪt/	[2 0 1]	<i>rè#locáte</i>

*Remember* is a verb with a light ult, so its stress falls on the penult (11.29). This coincides with the preference of the integrated prefix *re-* to be unstressed. The prefix vowel weakens to /ɪ/.

*Represent* is a verb ending in two consonants, so its stress falls on the ult (11.28). This coincides with the morphological rule of stressing the root (*-sent*), and the preference of the integrated prefixes *re-* and *pre-* to be unstressed. However, when the third syllable has the primary stress, the first syllable must get secondary stress (11.14), no matter whether it is a prefix or not, so *re-* becomes secondary stressed, and its vowel cannot weaken. It is lax /e/ due to Trisyllabic Laxing.

*Recognize* is a three-syllable verb with a long-vowelled ult, so its stress falls on the antepenult (11.30). Because *re-* gets the primary stress here, its vowel cannot weaken. It is lax /e/ due to Trisyllabic Laxing.

*Relocate* is composed of the independent prefix *re#* (‘again, anew, over’) and a free stem: the existing verb *locate*. Their combination has the expected meaning ‘put to a new place, locate anew’. The independent prefix has its own secondary stress, and does not interfere with the stressing of the verb. *Locate* is a two-syllable verb with a long-vowelled ult, so it is end-stressed (11.30). The prefix has a stressed vowel which counts as final (as it stands before a # boundary), so it is tense /i:/ because of Final Vowel Length (8.22).

**12.13 The negative prefixes *in-* and *un-*.** — These two prefixes mean the same, but they behave differently.

- The negative prefix **un#** is an independent prefix, always secondary stressed. It attaches only to existing words, e.g. *ùn#kínd*, *ùn#pléasant*, *ùn#dó*, *ùn#prepáred*, *ùn#imáginable*, *ùn#náatural* (both /n/’s pronounced!), *ùn#pèdagógical*, *ùn#gèntlemanlike*.
- The negative prefix **in+** has constant meaning and is secondary-stressed. However, it is sometimes attached to bound stems and roots, as in *in+númerable* (there is no word “*numerable*”), *in+víncible* (there is no word “*vincible*”); and it has three different pronunciations depending on the first sound of the stem, as shown below. Because of this we have to regard it as an integrated (plus boundary) prefix.

(1) It is generally pronounced /ɪn-/, e.g. *in+jústice*, *in+corréct*, *in+exáct*, *in+vísible*.

(2) Before /p b/ it changes to /ɪm-/ (spelt *im-*), which is a case of place-assimilation, e.g. *im+púre*, *im+próper*, *im+báalance*.

(3) Before the sonorants /m n l r/ it shortens to /ɪ-/ (spelt *im-*, *in-*, *il-*, *ir*), e.g. *im+móral* /ɪˈmɔrəl/, *in+númerable*, *il+légál* /ɪˈli:gl/, *ir+respónsible*. — In all these, the *mm nn ll rr* are pronounced as single consonants!

Remember that there exist two other *in-* prefixes (Table 12.10): one is the adverbial *in#* (*in-doors*), the other the meaningless integrated *in+* (*invent*, *indicate*).

Note. In a few words negative *in-* has primary stress: *ínfinite*, *ínfamous*, *ímpotent*. Note also the regular adjective *in+válid* /ɪnˈvælið/ ‘not valid’, but the noun *ínvalid* /ɪnˈvælið/ ‘disabled person’.



**12.14 Summary of prefixes.** — The chart below lists the main characteristics of the pronunciation of prefixes. There are many other prefixes, both independent and integrated, which we did not mention because they cause no pronunciation difficulty or are relatively rare.

Note. The distinction between independent and integrated prefixes is not always clear-cut. For example, *sub-* is independent in *sùb#éditor*, meaning ‘under’ (‘segédszerkesztő’), and integrated in *súb+urb* (‘kertváros’), where it has no meaning. But in *sùb|terránean* (‘földalatti’) its meaning is clear, yet it is attached to a bound root.

Independent prefixes	Integrated prefixes
E.g. off#, anti#, un#, mis#, re# (‘again’)	E.g. re+, be+, per+, ob+, sur+
e.g. rè#création /ri:-/ ‘creating anew’	e.g. rè+création /re-/ ‘amusement’
attached with cross-hatch boundary #	attached with plus boundary +
have constant, definable meaning	have vague or no meaning
have constant pronunciation	pronunciation may vary according to stem
attached to existing words only	attached to bound or free stems
productive (can form new words)	not productive (though frequent)
always stressed (usually secondary, but primary in 2-syllable nouns: <i>a réfill</i> )	generally unstressed (but may get stress in antepenult position by rule: <i>rèprésént, dévastate, prémature</i> )

## THE STRESSING OF SUFFIXES

**12.15** Suffixes fall into two main groups from the stressing point of view: neutral (cross-hatch boundary) suffixes, which do not influence the place of stress, and nonneutral (plus boundary) suffixes, which do. Nonneutral suffixes can be self-stressed, stress-fixing, or weak.

- *Neutral:*

(1) **Neutral suffixes.** They are unstressed, and do not influence the pronunciation of the stem. They are attached to existing words, always with a # boundary, e.g. *órang#es*, *límit#ed*, *invéstígat#íng*.

- *Nonneutral:*

(2) **Self-stressed suffixes.** They always bear the primary stress, e.g. *par+áde*, *techn+íque*, *Jàpan+ése*.

(3) **Stress-fixing suffixes.** They are unstressed, but require the primary stress to fall on the immediately preceding syllable. E.g. *dramát+ic*, *persón+ify*, *dècorát+ion*.

(4) **Weak suffixes.** They are unstressed, do not fix the stress in any particular place, but they may influence the place of stress because they become part of the word. E.g. *photograph+y*, *mirácul+ous*, *parént+al*.

Not every ending that we discuss here is a true grammatical suffix. Yet from a pronunciation point of view it will be practical to include all these in the category of suffixes, since their behaviour is similar. This is why we consider *par|ade*, *eleg|ant*, *cass|ette*, etc., to be root+suffix combinations.

**12.16 Lexical stress-shift.** — Nonneutral suffixes may cause the stress to shift to another syllable, or a secondary stress to appear, e.g. *átom* → *atóm|ic*, *Japán* → *Jàpan|ése*. This is called lexical stress-shift. Since stress and vowel quality are closely linked in English, lexical stress-shift usually affects vowel quality. If the stress goes to a previously weak syllable, its vowel has to become full. If the stress goes away from a syllable, its vowel usually weakens.

The following examples are given both in spelling and in transcription. The words under (3-4) are especially interesting because they show Iambic Reversal (11.16). The arrows show weakening caused by lack of stress. Full vowels are underlined.

(1)	$\begin{array}{c} \underline{á} \quad tom \\ \downarrow \quad \uparrow \\ a \quad \underline{tó}m \quad ic \end{array}$	$\begin{array}{c} /'æ \quad təm/ \\ \downarrow \quad \uparrow \\ /ə \quad 'tə \quad mɪk/ \end{array}$
(2)	$\begin{array}{c} ph\underline{ó} \quad to \quad gra\underline{ph} \\ \downarrow \quad \uparrow \quad \downarrow \\ pho \quad \underline{tó} \quad gra \quad phy \end{array}$	$\begin{array}{c} /'fou \quad tə \quad grɑ:f/ \\ \downarrow \quad \uparrow \quad \downarrow \\ /fə \quad 'tə \quad grə \quad fi/ \end{array}$
(3)	$\begin{array}{c} Ja \quad p\underline{án} \\ \uparrow \quad \downarrow \\ J\underline{à} \quad pa \quad n\underline{ése} \end{array}$	$\begin{array}{c} /dʒə \quad 'pæn/ \\ \uparrow \quad \downarrow \\ /,dʒ\underline{æ} \quad pə \quad 'ni:z/ \end{array}$
(4)	$\begin{array}{c} de \quad m\underline{ó} \quad cra \quad cy \\ \uparrow \quad \downarrow \quad \uparrow \\ d\underline{è} \quad mo \quad cr\underline{á} \quad tic \end{array}$	$\begin{array}{c} /dɪ \quad 'mɒ \quad krə \quad si/ \\ \uparrow \quad \downarrow \quad \uparrow \\ /,d\underline{e} \quad mə \quad 'kr\underline{æ} \quad tɪk/ \end{array}$

Lexical stress-shift is one of the major difficulties of English pronunciation.

**12.17** There are some spelling adjustments in suffixation. Words that end in silent *-e* drop this before a vowel-initial suffix, e.g. *take* → *tak|ing*. Words ending in consonant plus *y* change the *y* to *i*, e.g. *happy* → *happi|ness*. Certain words double their final consonant (9.28), e.g. *swim* → *swimm|er*. These are not stem changes since they do not affect pronunciation. On the other hand, lexical stress-shift (including Iambic Reversal), which is real stem change, is normally ignored in spelling, because the spelling sticks to the principle of morpheme identity (3.3.c).

## Neutral suffixes

**12.18** Neutral suffixes do not influence the place of stress. All inflectional suffixes belong here, as well as some derivational suffixes.

Some neutral suffixes are always neutral, added to existing words only: *móther#hood*, *décorat#ing*. Other neutral suffixes may — less frequently — be added to bound stems, in which case they behave nonneutrally. For example, *-able* is neutral in *públish#able*, *ór-ganiz#able*, where it is added to existing words, but nonneutral in *prób+able*, *tóler+able*, where it is added to bound stems, or in *préfer+able*, where it causes stress-change.

If the stem ends in silent *r* and the suffix begins with a vowel, the *r* will of course be pronounced (Linking-R), e.g. *hear* /hɪə/ → *hear#ing* /'hɪərɪŋ/.

Those suffixes that do not cause problems to Hungarian learners are left unmentioned, like comparative *-er* (*pleasant/er*) or adjectival *-y* (*water/y*). Exceptions are mentioned where necessary.

TABLE 12.18 NEUTRAL SUFFIXES

### (a) Neutral Suffixes that are always neutral

**#al<sub>N</sub>** /-əl/ (forms nouns from verbs) *arrív|al*, *refús|al*, *dení|al*, *recít|al*, *búri|al* /'berɪəl/

**#ed** /-ɪd/ *límit|ed*, *debát|ed*, *súpplement|ed*, *décorat|ed*, *offénd|ed*, *súbstítut|ed*

**#er<sub>N</sub>** /-ə/ (forms nouns from verbs) *mánag|er*, *annóunc|er*, *stábiliz|er*, *intérpret|er*

**#es** /-ɪz/ *órang|es*, *advántag|es*, *cómpromis|es*, *páradox|es*, *sábotages* /-ɑːʒɪz/, *refús|es*, *cátégoriz|es*, *abólísh|es*, *he ánalis|es*

Note. The plural of *analysis* is *anályses* /ə'næləsiːz/ (see 4.45).

**#ful<sub>A</sub>** /-fəl, -fl/ (forms adjectives) *béauti|ful*, *púrpose|ful*, *repróach|ful*

Note. This adjective-forming suffix *-ful* is always pronounced weak, usually with no vowel but a syllabic /l/, e.g. *beautiful* /'bjuːtəfl/. There exists another *-ful*, a noun-forming suffix meaning ‘quantity’, e.g. *spóon|ful*, *búcket|ful*; this is always pronounced with a full vowel /ʊ/, so /'spuːnfʊl/.

**#hood** /-hʊd/ *móther|hood*, *pòlitician|hood*, *líkeli|hood*

**#ing** /-ɪŋ/ *cárry|ing*, *xérox|ing*, *admítt|ing*, *décorat|ing*, *cátégoriz|ing*, *abólísh|ing*, *ánalys|ing*, *persónify|ing*

**#ish** /-ɪʃ/ (forms adjectives) *yéllow|ish*, *old-wóman|ish*, *ámateur|ish* /'æmətəriʃ/

**#less** /-ləs/ *pénni|less*, *regárd|less*, *prótein|less*, *mérci|less*, *refléction|less*

**#ly** /-li/ *béautifú|ly*, *sevère|ly*, *ínfínite|ly*, *cohérent|ly*, *símilar|ly*, *mérciless|ly*, *cústomari|ly*

Note. When *-ly* is added to words ending in *-l(e)*, we pronounce only one /l/, e.g. *simply* /'sɪmpli/, *doubly* /'dʌbli/, *generally* /'dʒenrəli/. The suffix-combination *-fully* is one syllable /-fli/, e.g. *carefully* /'keə.fli/ (see 12.32).

**#ness** /-nəs/ *pólíte|ness*, *lázi|ness*, *défníte|ness*, *mérciless|ness*, *cónscíous|ness*

**(b) Neutral Suffixes that occasionally appear with bound stems**

**#Vry (-ary/-ery/-ory)** /-əri/ *cústom|ary, rèvolútion|ary, légend|ary, sávag|ery, advís|ory*

• With bound stem: *cémet|ery, lávat|ory*

**#able** /-əbl/ *mánage|able, públish|able, presént|able, dócument|able, compánion|able*

Exc.: *admíre* → *ádmir|able* /'ædmərəbl/, *compáre* → *cómpar|able* /'kɒmpərəbl/,  
*prefér* → *préfer|able* /'prefərəbl/. See also [12.25](#).

• With bound stem: *prób|able, tóler|able*

**#age** /-ɪdʒ/ *párent|age, ánchor|age, percént|age*

• With bound stem: *advánt|age, hérit|age*

**#ism** /-ɪzəm/ *módern|ism, detérmin|ism, rádical|ism, ábsentée|ism, còsmopólitán|ism*

• With bound stem: *áphor|ism, áthe|ism*

**#ist** /-ɪst/ *párachut|ist, detérmin|ist, cápítal|ist*

• With bound stem: *Bápt|ist, òpportún|ist*

**#ize** /-aɪz/ (also spelt *-ise*) *fínal|ize, cháracter|ize, nátionál|ize*

• With bound stem: *récogn|ize, cátegor|ize*

**#ment** /-mənt/ *encóurage|ment, agrée|ment, accómplish|ment, resént|ment*

Exc.: *ádvértise* → *advértisement* /əd'vɜ:ɪzɪsmənt/ (AmE regularly /'ædvɜ:ɪzɪsmənt/).

• With bound stem: *expéri|ment, dócu|ment*

**#or** /-ə/ *contráct|or, décorat|or, advís|or, dictát|or, súpervis|or*

• With bound stem: *compétit|or, prédecess|or*

A special case is the **abstract suffix +y** when added to words ending in *-t*. It is neutral from the stress point of view, but it causes stem-change, replacing the final *-t* of the stem by *c* (= /s/): *ídioct|y, prégnanc|y, présidenc|y, délicac|y*. (Exceptionally, it causes stress change in *díplomat* → *díplomac|y* /dɪ'plɒməsi/, *démocrat* → *demócrac|y* /dɪ'mɒkrəsi/.)

**12.19** Neutral suffixes should present no difficulty, since they don't cause any change to the stem. However, learners often make the mistake — especially in longer words — of moving the stress towards the neutral suffix, mispronouncing *decorated* as \*/,dekə'reɪtɪd/ instead of the correct /'dekərəɪtɪd/. This mistake is due to two factors. On the one hand, learners confuse the neutral suffixes with stress-fixing suffixes, which often pull the stress towards themselves, e.g. *decorat+ion* /,dekə'reɪʃn/. On the other hand, they remember words where a long-vowelled penult syllable is primary-stressed, as in *diagnósis, pànoráma, intervéníng, sùpersédéd*. What they do not know is that the # boundary blocks stress-movement, so the stress must be in the same place in *décorate* and *décorat#ed*.

<u>Stem</u>	<u>Neutral suffix, stress unchanged</u>	<u>Nonneutral suffix, stress shifted</u>
décorate	décorat#ed /'dekərəɪtɪd/	— dècorát+ion /,dekə'reɪʃn/
párent(s)	párent#hood /'peərənthʊd/	— parént+al /pə'rentl/
díagnose	díagnos#able /'daɪgnəʊzəbl/	— dìagnóst+ic /,daɪəg'nɒstɪk/

dictátor	dictátor#ship /dɪk'tetəʃɪp/	—	dictat <sup>ó</sup> rial /,dɪktə'tɔ:riəl/
súpervise	súpervis#or /'su:pəvaɪzə/	—	sùperv <sup>ís</sup> +ion /,su:pə'vɪʒn/

The stress-change in the right-hand column is accompanied by various changes in sounds.

It is useful to practise the unchanged stress with neutral suffixes, then add a form where the stress really shifts because of a nonneutral suffix:

	inv <sup>é</sup> stigate	st <sup>á</sup> bilize	s <sup>ú</sup> bstitute	ch <sup>á</sup> racter	ábsolute
	inv <sup>é</sup> stigat#ing	st <sup>á</sup> biliz#es	s <sup>ú</sup> bstitut#ed	ch <sup>á</sup> racter#ize	ábsolute#ly
	inv <sup>é</sup> stigat#or	st <sup>á</sup> biliz#er	s <sup>ú</sup> bstitut#ing	ch <sup>á</sup> racter#iz#able	ábsolut#ism
<b>but:</b>	inv <sup>è</sup> stig <sup>á</sup> t+ion	stab <sup>í</sup> l+ity	sùbstitú <sup>t</sup> +ion	chàracter <sup>í</sup> st+ic	àbsolú <sup>t</sup> +ion

## Self-stressed suffixes

**12.20** Self-stressed suffixes take the primary stress on themselves. We list the most frequent ones below. If there is more than one syllable before the suffix, a secondary stress automatically appears.

TABLE 12.20 SELF-STRESSED SUFFIXES

**-ade** /-eɪd/ *par|áde, lèmon|áde, èscap|áde*

**-aire** /-eə/ *quèstionn|áire, million|áire, dòctrin|áire*

**-ee** /-i:/ *degr|ée, rèfug|ée, àbsent|ée, chimpanz|ée*

Exc.: *emplóyee /ɪm'plɔɪ:/, pédigree /-i:/, cóffee /-i:/, commíttee /-i:/.*

**-eer, -ier** /-ɪə/ *èngin|éer, vòlunt|éer, car|éer; cash|íer*

**-ese** /-i:z/ *Pòrtugu|ése, Chìn|ése, Jàpan|ése*

**-esque** /-esk/ *pìctur|ésque, Ròman|ésque, grot|ésque*

**-ess** /-es/ (forms feminine nouns) *pòet|éss, mànager|éss, lìon|éss, princ|éss*

Exc.: two-syllable nouns with *-ess* are usually front-stressed, with the suffix weakened to /-ɪs/: *áctr|ess, hóst|ess, cóunt|ess, émpr|ess.*

**-ette** /-et/ *cass|éte, làunder|éte, cìgar|éte*

**-ique** /-i:k/ *techn|íque, ant|íque, crit|íque*

**-oon** /-u:n/ *ball|óon, cart|óon, mons|óon*

Note. Self-stressed suffixes are also called “accent-attracting” or “autostressed” suffixes, or “tonic endings”.

## Stress-fixing suffixes

**12.21** Stress-fixing suffixes require the stress to be on the preceding syllable, that is, on the last syllable of the stem. If they are added to an end-stressed stem, no stress-change is necessary, e.g. *absúrd* → *absúrd|ity*. But if the stem is not end-stressed, the stress will shift to the syllable before the suffix, e.g. *húman* /'hju:mən/ → *humán+ity* /hju:'mænəti/. This usually changes the pronunciation of the vowels as well. In the following lists we will not mention this explicitly (see 12.16).

The stress-fixing suffixes are *-ible*, *-ic*, *-ify*, *-ity*, as well as all suffixes beginning with Glide-i or Glide-u, e.g. *-ion*, *-ian*, *-ual*, *-uous*. Glide-i may disappear in pronunciation (4.26) when it has palatalized the preceding consonant, e.g. *vision* /'vɪʒn/, *racial* /'reɪʃl/, but its effect on stress is still the same.

If a suffix beginning with *-i-* is added to a word ending in *-y*, the *-y* drops out: *hístory* → *hístór+ic*, *víctory* → *victór+ious*. (Of course this does not hold for neutral suffixes, where nothing happens, e.g. *carry#ing* /-iɪŋ/, *monkey#ish* /-iʃ/.)

All stress-fixing suffixes have laxing effect on the stressed vowels *a*, *e*, *i*, *o* (9.20-23), with the exception of those beginning with Glide-i, which regularly cause CiV tensing of *a*, *e*, *o* (9.26), for example *Cánada* /'kænədə/ → *Canád+ian* /kə'neɪdiən/. Stressed *u* is always tense in free position, e.g. *cubic*, *duplicate* /ju:/ (9.18).

Note. Stress-fixing suffixes are also called “stress-imposing” or “pre-stressed” or “post-tonic” suffixes.

## 12.22 Examples.

TABLE 12.22 STRESS-FIXING SUFFIXES

**-ible** /-əbl/ *térr|ible*, *divís|ible*, *còmprehéns|ible*, *permiss|ible*, *irresíst|ible* (see 12.25)

**-ic** /-ɪk/ *stát|ic*, *hístór|ic*, *semánt|ics*, *barbár|ic*, *grammát|ical*, *àcadém|ic*, *dèmochrát|ic*, *heró|ic*, *èconóm|ic*, *anàchroníst|ic*, *màsochíst|ic*, *àristocrát|ic*, *càrdiológ|ical*

Exc.: 8 words, see next section.

**-ify** /-ɪfaɪ/ *solíd|ify*, *persón|ify*, *inténs|ify*, *sylláb|ify*

**-ity** /-ɪti/ (also spelt *-ety*) *real|ity*, *varí|ety*, *pròbabíl|ity*, *heréd|ity*, *simplic|ity*, *àmbigú|ity*, *cùriós|ity*, *socí|ety*

### • All suffixes beginning with Glide-i:

**-ial** /-(i)əl/ *tutór|ial*, *impér|ial*, *mànagér|ial*, *còntrovérs|ial*

**-ian** /-(i)ən/ *Hungár|ian*, *Canád|ian*, *grammár|ian*, *París|ian*, *màthematíc|ian*, *Lillipút|ian*

**-ion** /-(i)ən/ *dècorát|ion*, *òpposít|ion*, *sàtisfáct|ion*, *compùterizát|ion*, *sùpervís|ion*, *opín|ion*

**-ious** /-(i)əs/ *melód|ious*, *luxúr|ious*, *victór|ious*, *prestíg|ious*, *cònsciént|ious*

*Others:* *urán|ium*, *aquár|ium*, *supér|ior*, *pecúl|iar*, *famíl|iar*, *infúr|iate*, *obéd|ient*, *Índonés|ia*

• **All suffixes beginning with Glide-u:**

**-ual** /-(j)uəl/ *intelléct|ual, perpét|ual, hábit|ual, contéxt|ual, indivíd|ual*

Exc.: *spíritual*.

**-uous** /-(j)uəs/ *contín|uous, conspíc|uous, presúmp|uous, ingén|uous, promísc|uous*

**Others:** *constít|uent, áffl|uent, púrs|uant*

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**12.23 Notes on the suffix -ic.** — The suffix *-ic* is extremely regular; only the eight words below have their stress in the “wrong” place: they are stressed, not on the syllable before *-ic* but one syllable earlier:

*Árab|ic, aríthmet|ic, ársen|ic, cáthol|ic, héret|ic, lúnat|ic, pólit|ics, rhétor|ic.*  
(But regularly *cathól|icism, polít|ical, rhetór|ical!*).

The suffix *-ic* is often followed by *-al* (*histórical*) or *-ally* (*histórically*) or *-s* (indicating disciplines, as *physics*). These make no difference to stress, which is regularly before *-ic*.

When a word ends in *-ic* and we add certain suffixes beginning with *-i-* (*-ity, -ian, -ize*), the /k/ of *-ic* “softens” to /s/ (e.g. *publ|icity, publ|icize, 4.50*); this /s/ is regularly palatalized to /ʃ/ before Glide-i (*mus|ician*).

When an adjective ends in *-ic*, we cannot add *-ly* directly to this but have to insert *-al-*, e.g. *static* plus *-ly* does not become *\*staticly* but *statically*. This inserted *-al-*, however, is usually left out in pronunciation, so *-ically* is normally pronounced /-ɪkli/, e.g. /'stætɪkli/.

Recall that *-ic* is a laxing ending (see 9.21).

**12.24 Suffixes combined.** — A word may have more than one suffix, in which case the last nonneutral suffix will decide the place of stress. In the examples below we have underlined the suffix responsible for stress-placement. (Secondary stress appears automatically when needed.)

hístory	/ˈhɪstəri/	Ítaly	/ˈɪtəli/
histór+ <u>ic</u>	/hɪˈstɔrɪk/	Itál+ <u>ian</u>	/ɪˈtæljən/
hístor+íc+ <u>ity</u>	/,hɪstəˈrɪsəti/	Ità+ian+izát+ <u>ion</u>	/ɪˌtæljənərˈzeɪʃn/

As we see, suffixes that are normally unstressed may have to bear the stress, fixed on them by the next stress-fixing suffix. The most frequent such combinations are *-ícian, -ícity, -álicity, -ability, -íbility, -ósity* (from *-ous*), *-átion*.

Remember that neutral suffixes have no such effect, no matter how they are combined: *nátion+al#iz#ing* is stressed like *nátion+al*, and *dramát+ic#ness* is stressed like *dramát+ic*.

**12.25 #able and +ible.** — These two suffixes have the same meaning and are both pronounced /-əbl/, so they might seem to be just spelling variants. However, they behave differ-

ently. While *#able* is typically attached to existing words, *+ible* is typically attached to bound stems or roots.

- *#able* neutral suffix (12.18), does not influence stress, does not cause Trisyllabic Laxing.

idéntifi#able /aɪ'dentəfaɪəbl/	vári#able /'veəriəbl/
ánalys#able /'ænəlaɪzəbl/	depénd#able /dɪ'pendəbl/
blám(e)#able /'bleɪməbl/	detérmin#able /dɪ'tɜ:mɪnəbl/
généraliz#able /'dʒenrəlaɪzəbl/	desír#able /dɪ'zaɪərəbl/

Occasionally *-able* is attached to bound stems, e.g. *inévit+able*, *prób+able*, *cáp+able*. It irregularly influences the stress of a few stems: *ádmir+able*, *cómpar+able*, *préfer+able*. When *-able* is added to verbs in *-ate*, the *-ate* often drops: *séparate* → *sépar|able*, *tólerate* → *tóler|able*.

- *+ible* stress-fixing suffix (12.22), causes Trisyllabic Laxing, and often stem-change as well. Most of these stems are bound (*terr-*, *compat-*):

térr+ible /'terəbl/	accéss+ible /ək'sesəbl/
compát+ible /kəm'pætəbl/	póss+ible /'pɒsəbl/
deféns+ible /dɪ'fensəbl/	vís+ible /'vɪzəbl/

- Both suffixes change slightly when *-ity* is added to them: *-able* → *-abil+ity*, *-ible* → *-ibil+ity*, e.g. *depénd+abil+ity* /dɪ.pendə'bɪləti/, *póss+ibil+ity* /pɒsə'bɪləti/.
- When *-ly* is added to *-able*, *-ible*, the result is *-ably*, *-ibly*, pronounced /-əbli/.

## Weak suffixes

**12.26** The suffixes *-al* (*-ar*), *-ant* (*-ent*), *-ous*, and “abstract” *-y*, which appear in nouns and adjectives, are called “weak suffixes”. They all consist of one syllable with a weak vowel /-əl, -ə, -ənt, -əs, -i/ e.g. *cápit+al*, *éleg+ant*, *treménd+ous*, *ecónom+y*. These suffixes have no stress-fixing effect, but as they are integrated into the word, their presence may influence the placement of stress.

When a word ends in one of the weak suffixes, the stress is mostly on the antepenult — as required by the “cínema/acádemy” rule (11.19-20), e.g. *orígín|al*. In words with a heavy penult the stress falls on the penult, following the “agéndá” rule (11.24, e.g. *òríént|al*), or the “horízón” rule (11.25, e.g. *ànecdót|al*). Table 12.26 presents all types.



TABLE 12.26 WORDS WITH WEAK SUFFIXES

	<i>Stress on antepenult</i> [...1 0 0]	<i>Stress on penult</i> [...0 1 0]	
	<i>like “cínema”</i>	<i>like “agénda”</i>	<i>like “horizon”</i>
<b>-al/-ar</b> /-əl/, /-ə/	original cápital partícular famíliar	òriéntal ùnivérsal paréntal hòrizóntal	ànecdótal àlveólar
<b>-ant/-ent,</b> <b>-ance/-ence,</b> <b>-ancy/-ency</b> /-ənt/, /-əns(i)/	élegant, -ce partícipant président, -cy signíficant, -ce	resístant, -ce emérgency impórtant, -ce triúmphant	cohérent, -ce interférence defíant, -ce compónt
<b>-ous</b> /-əs/	ridículous anómalous vénomous synónymous	treméndous stupéndous moméntous	desírouis
<b>-y</b> /-i/	photógraphy análogy ecónomy geómetry	—	—

Let us show a few examples in transcription:

órigín – orígín al	/ˈɒrədʒɪn/ – /əˈrɪdʒənəl/
mólecule – molécul ar	/ˈmɒləkjʊ:l/ – /məˈleɪkjʊlə/
párent – parént al	/ˈpeərənt/ – /pəˈrentl/
órchestra – orchéstr al	/ˈɔ:kɪstrə/ – /ɔ:ˈkeɪstrəl/
sýnonym – synónym ous	/ˈsɪnənɪm/ – /sɪˈnɒnɪməs/
míracle – mirácul ous	/ˈmɪrəkl/ – /məˈrækjʊləs/
phótograph – photógraph y	/ˈfəʊtəgrɑ:f/ – /fəˈtɒgrəfi/
ánalog – análog y	/ˈænələg/ – /əˈnælədʒi/

If the base word has its stress in a place where it may remain, no change is necessary:

históric – históric al	/hɪˈstɒrɪk/ – /hɪˈstɒrɪkl/
oppóse – oppón ent	/əˈpəʊz/ – /əˈpəʊnənt/
lúnatic – lúna cy	/ˈlu:nætɪk/ – /ˈlu:nəsi/

**12.27** Words with weak suffixes follow the stress rules for unsuffixed words. In *órigín* /ˈɒrədʒɪn/ stress is regularly on the antepenult (the “cínema” type). In *orígín+al* /əˈrɪdʒənəl/ stress is again regularly on the antepenult (the “acádemy” type). It looks as if the suffix *-al* has pulled the stress towards itself, but in fact *-al* is just added to the word, and this extra syllable requires a new “syllable count” from the end, with *-ri-* being the new antepenult and therefore receiving stress. Observe how the “three-syllable window” (11.20) is shifted right-

wards by the appearance of the suffix. The stress in all six words below falls on the antepenult:

ó ri gin	
o <span style="border: 1px solid black; padding: 2px 10px;">rí gi nal</span>	
mí ra cle	
mi <span style="border: 1px solid black; padding: 2px 10px;">rá cu lous</span>	
phó to graph	
pho <span style="border: 1px solid black; padding: 2px 10px;">tó gra phy</span>	

To sum up: when we attach a weak suffix, we increase the word by one syllable without a # boundary. This is why weak suffixes may lead to lexical stress-shift.

### **12.28** A few comments may be added on weak suffixes.

The suffix *-ant* has an alternant *-ent*: *éleg|ant*, *évid|ent*. The pronunciation is the same /-(ə)nt/. These may be further suffixed, replacing the final *-t* with *-ce* (*éleg|ance*, *évid|ence*), or with the neutral suffix *#cy* (*prégn|an#cy*, *présid|en#cy*). All of these behave identically from the point of view of stress, so we can speak of the “-ANT suffix family” consisting of *-ant/-ent/-ance/-ence/-ancy/-ency*.

The suffix *-ous* /-əs/ is sometimes added to existing words as a neutral suffix (*dánger#ous*, *házar#ous*). The combination *-ous* + *-ity* gives *-ócity-* /-ɒsəti/, e.g. *géner+ous* → *gener+ós+ity* /,dʒenə'rosəti/.

The suffix *-y* belongs here only when it is the “abstract -y”, that is, when it forms nouns with a more or less abstract meaning. (This corresponds to H *-ia*, e.g. *filozóf|ia*, *analog|ia*.) There exist other *-y* suffixes, which do not behave like this: the adjective-forming *-y* (*water#y*), and the diminutive *-y* (*dogg#y*).

When these suffixes are introduced by Glide-i or Glide-u, they are stress-fixing (*-ial*, *-iant*, *-ient*, *-ious*; *-ual*, *-uant*, *-uent*, *-uous*), see [12.22](#).

Note. A few words have unusual stress: *círcumst|ance*, *díscot|ent*, *Prótest|ant*; *ádvantáge|ous* /,ædvən'teɪdʒəs/, *couráge|ous* /kə'reɪdʒəs/.

**12.29 The suffix *-ive*.** — This suffix is similar to the weak suffixes, as it is not self-stressed, nor stress-fixing, and is usually added to bound stems. It is always pronounced /-ɪv/, e.g. *relat+ive* /'reləɪv/, *aggress+ive* /ə'gɹesɪv/, never \*/-i:v/, which is a common mistake on the model of H *-ív* (*relatív*, *agresszív*). The following stress patterns exist with *-ive*:

(a)	(b)	(c)	(d)	(e)	(f)
[1 0]	[0 1 0]	[1 0 0]	[0 1 0 0]	[1 0 0 0]	[0 1 0 0 0]
áctive	colléctive	pósitive	consérvative	quálitative	imáginative
mássive	decísive	rélative	dimínutive	óperative	admínistrative
pláintive	expénsive	téntative	compétitive	íllustrative	commúnicative
réstive	destrúctive	táلكative	demónstrative	méditative	invéstigative

As we see, in columns (a-d) the suffix *-ive* behaves as a weak suffix; but in (e-f) the stress is on the fourth-last syllable. In these two columns the ending *-ative* is pronounced /-ətɪv/ in BrE, but in AmE it is often /-etɪv/.

## Greek-type compounds

**12.30** Words like *mónograph*, *análogy*, *thermómeter* are called “Greek-type compounds”, because they are made up of two fairly independent components coming from Greek, like *mono-*, *ana-*, *thermo-*, and *-graph*, *-logy*, *-meter*. They are also called “learned constructions”, as they are mostly scientific or scholarly terms. They are not real compounds because both components are bound stems. Many of these combinations are used in Hungarian as well, but their English stressing (and their whole pronunciation) can be so different that they are a source of difficulty. Their primary stress is always on the antepenult.

- When the second component is one syllable, stress is on the first syllable of the first component (= the antepenult of the whole word):

móno+graph	díno+saur	cáta+logue	chrómo+some
áuto+graph	téle+phone	árchitect	póly+thene
ástro+naut	téle+scope	día+logue	épi+logue

In these words the second component, though unstressed, remains strong, i.e. its vowel is not reduced: /'mɒnəgrɑ:f/, /'daɪnəsɔ:/, /'kætəlɒg/.

Note. Though not exactly Greek scholarly terms, *micro+wave* and *sáxo+phone* also belong here.

### 12.31

- When the second component is two syllables, stress again falls on the antepenult of the whole word, e.g. *sým+pathy* /'sɪmpəθi/, *hóm+onym* /'hɒmənɪm/, *éu+logy* /'ju:lədʒi/.

When the first component is also two syllables, the stressed antepenult will have to be the final vowel of the first element: *análogy* /ə'nælədʒi/, *thermó+meter* /θə'mɒmɪtə/. This is very surprising to Hungarians, who feel that the stress is “in the wrong place”, and would rather stress the beginning of both components: *\*ána-lógy*, *\*thérmo-méter* (cf. H *análogia*, *termométer*).

The second component may have one of the weak suffixes *-al*, *-ous*, *-y*, as well as *-er*, *-ist* indicating profession. It is possible to regard these two-syllable second components (*-pathy*, *-meter*, *-logist*, etc.) as stress-fixing suffixes, since the stress is practically always on

the syllable before them. The most frequent second component is *-logy*, and since this is usually preceded by a stressed *-ó-*, in practical teaching one may even treat *-ólogy* as a self-stressed suffix.

The following are Greek-type compounds in which both components are two syllables. They all have stress on the antepenult (a few are given in transcription too). The stressed vowel in all such words is lax, being affected by Trisyllabic Laxing.

hyp <u>ó</u> +crisy /hɪ'pɒkrəsi/	astr <u>ó</u> +logy /æ'strɒlədʒi/
psych <u>ó</u> +logist /sɑ'kɒlədʒɪst/	cat <u>á</u> +strophe /kə'tæstrəfi/
mon <u>ó</u> +tonous /mə'nɒtənəs/	di <u>á</u> +meter /daɪ'æmɪtə/
tel <u>é</u> +pathy /tɪ'lepəθi/	ant <u>í</u> +thesis /æn'tɪθəsis/

metró+polis, philó+sopher, astró+nomy, astró+logy, ecó+nomist, aná+lysis, pa-rá+meter, perí+phrasis, polý+gamy, apó+strophe...

The same, with 3+2 syllables:

chòreó+grapher /,kɒrɪ'ɒgrəfə/, dèrmató+logy, càrdió+logy...

Adding a stress-fixing suffix like *-ic* will of course change the stress pattern, e.g. *demócracy* → *dèmocrát+ic*, *ecónomy* → *èconóm+ic* (see 12.24).

A small number of similar words are exceptions, not stressed on the antepenult but on the fourth-last syllable: *árchitecture*, *cátégory*, *mélodrama*, *millimetre*, etc. (see 11.21).

## Syllable loss before suffixes

**12.32** In natural spoken English a schwa is often dropped if it stands between two other syllables and is followed by /l, r, n/, e.g. *camera* /'kæ.mə.rə/ → /'kæm.rə/. The dropping of the vowel in such cases means that a syllable gets lost. (It may be useful to compare this with Syllabic Consonant Formation, 5.18-20.) Syllable loss does not affect stress, it just shortens the word in pronunciation. The words *evening*, *every*, *business* are examples of historically established syllable loss: it is now obligatory to drop their middle vowel.

Below we present the main types. The word must end in schwa plus /l, r, n/, and the suffix must begin with a vowel.

- In some cases syllable loss is shown in spelling too:

entrer → entr|ance (*not* \*enterance)      actor → actr|ess (*not* \*actress)

- In other cases spelling does not show much, but the dropping is obligatory:

probable /-bəl/ → probab|ly /-bli/  
 cycle /-kəl/ → cycl|ist /-klɪst/  
 centre /-tə/ → centr|ist /-trɪst/      simple /-pəl/ → simpl|est /-plɛst/  
 handle /-dəl/ → handl|ing /-dlɪŋ/  
 fibre /-bə/ → fibr|ous /-brəs/

- In the majority of cases syllable loss is optional, but very natural in current English:

carefully /'keəfəli/ ~ /'keəfli/  
 honour|able /'ɒnərəbl/ ~ /'ɒnrəbl/      practically /'præktɪkəli/ ~ /'præktɪkli/  
 poison|ous /'pɔɪzənəs/ ~ /'pɔɪznəs/

monitoring /'mɒnɪtərɪŋ/ ~ /'mɒnɪtrɪŋ/	traveller /'trævələ/ ~ /'trævlə/
sensational /sen'seɪʃənəl/ ~ /sen'seɪʃnəl/	frightening /'fraɪtənɪŋ/ ~ /'fraɪtnɪŋ/
fastener /'fɑ:sənə/ ~ /'fɑ:snə/	original /ə'ɹɪdʒənəl/ ~ /ə'ɹɪdʒnəl/

The shorter forms are becoming increasingly common. The frequent combination *-tional* is /-ʃnəl/. Let us mention that in the endings *-Vry* (that is, *-ary/-ery/-ory*) the vowel before the *r* is normally dropped, e.g. *cemetery* /'semətəri/.

Note. Syllable loss is also called “syncope” or “compression”.

## Summary of the stressing of suffixes

**12.33** There are two main types of suffix from the point of view of stress. **Neutral** (or “cross-hatch boundary”) suffixes are typically added to existing words, and do not influence the stress or other features of the stem (e.g. *#ing*, *#ly*, *#able*). **Nonneutral** (or “plus boundary”) suffixes are added either to bound stems (e.g. *satisfact-*, *crimin-*), or to existing words, and they may influence the stress and sounds of the stem. Nonneutral suffixes are of three subtypes: **self-stressed suffixes**, which take the primary stress on themselves (e.g. *+ése*, *+óon*); **stress-fixing suffixes**, which fix the primary stress immediately before themselves (e.g. *+ic*, *+ion*); **weak suffixes** are not stress-fixing, but are added with a + boundary, so they may cause the stress to occupy a new place (e.g. *origin+al*).

All suffixes beginning with glides are stress-fixing (e.g. *+ian*, *+ion*, *+ual*, *+uous*).

When several suffixes are added to the word, the place of stress will be determined by the last nonneutral suffix (e.g. *person+ál+ity*).

**Greek-type compounds** consist of two bound components. Their stress is on the antepenult; this means that when both components are of two syllables (e.g. *demó+cracy*), the stress has to fall on the final vowel of the first component.

Nonneutral suffixes may cause **Lexical Stress-Shift** if the original stress of the stem does not correspond to their requirements (e.g. *átom* → *atóm+ic*, *párent* → *parént+al*). This usually leads to a change in the pronunciation of the vowels as well.

## THE STRESSING OF COMPOUNDS

**12.34** A compound (H ‘összetett szó’) is a lexical unit made up of two existing words, e.g. *súnrise*, *ill-tréat*, *fire alarm*. Some compounds consist of more than two words, e.g. *póst office box*, *fòreign lánguage teacher*; these are really compounds within compounds, and will be discussed later (12.47).

The spelling of compounds in English is not consistent. Some are written as one word (*schóolboy*, *súnbathe*, *áirtight*), some with a hyphen (*háir-raising*, *wòrd-final*, *sèlf-*

*discipline*), but the majority are written as two words (*fire alarm, double chin, geography teacher*). In Hungarian compounds are usually written as one word (compare E *income tax* with H *jövedelemadó*), though some Hungarian lexical units, which are grammatically and semantically compounds, are spelt as two words, e.g. *túrós csusza, rendőr százados, rövid ujjú, bérbe ad*. Spelling, as we have often said, is more a matter of tradition than of phonology.

Compounds often have a specialized meaning: a *blackbird* is a special type of bird, not any bird that is black. Compounds also behave as units from a grammatical (syntactic) point of view. Our task now is to see which of the two elements is primary-stressed.

**12.35** English compounds are either **initially-stressed** (primary stress on the first element, e.g. *sún*rise, *compú*ter virus, *háir*-raising) or **finally-stressed** (primary stress on the second element, e.g. *trà*de *ú*nion, *Victò*ria *Stát*ion, *ill*-*tréat*). The length of the components (their number of syllables) is not relevant; the stress pattern depends more on the logical relationship between the two elements, their frequency, or their “established” nature in the language. Most compounds function as nouns.

In the following examples we use accent marks to indicate primary and secondary stress (as we have done so far).

Note. Instead of the terms “initially-stressed” and “finally-stressed” compound, some authors use “true compound” and “pseudo-compound”, respectively.

## Initially-stressed compounds

**12.36** Initially-stressed compounds are really true compounds. The first element is primary-stressed, the second element loses its stress (since no stress is possible after the primary, 11.8). The original stressed syllable of the second element does not weaken but keeps its full vowel, i.e. it survives as a strong-unstressed syllable. For example:

<u>sún</u> rise /'sʌnrʌɪz/	<u>compú</u> ter virus /kəm'pjʊ:tə vaɪərəs/
<u>fire</u> alarm /'faɪər əlɑ:m/	<u>ùn</u> emplóyment benefit /,ʌnɪm'plɔɪmənt benəfɪt/
<u>péar</u> -shaped /'peəʃeɪpt/	<u>té</u> lephone directory /'teləfoʊn daɪrektəri/

This pattern is the same as in Hungarian (e.g. *szá*mitógép*virus, té*lefon*név*jegyzék) and should cause no difficulty. Yet learners often feel uneasy with having so many unstressed syllables after the stress (four in *unemplóy.ment.be.ne.fit*, six in *té.le.phone.di.rec.to.ry*), and are therefore inclined to stress the second element too. Learners are also misled by other compounds that are indeed finally-stressed (*trà*de *ú*nion). It is important to explain that initially-stressed compounds are truly “pronounced like one word”, whether they are spelt so or not.

**12.37** Let us see some examples, arranged according to the word class of the whole compound:

- The whole compound is a noun:

<b>wáter</b> fall	<b>cár</b> -ferry	<b>chócolate</b> cake	<b>violín</b> concerto	<b>séason</b> ticket
<b>snów</b> man	<b>órange</b> juice	<b>Cánon</b> Street	<b>drínging</b> water	<b>póp</b> music
<b>sún</b> flower	<b>políce</b> force	<b>drúg</b> abuse	<b>buílding</b> society	<b>dréam</b> world
<b>skáte</b> board	<b>páy</b> cut	<b>cow's</b> milk	<b>móuntain</b> bike	<b>dísc</b> jockey
<b>é</b> -mail	<b>státes</b> person	<b>Secú</b> rity Council	<b>stóck</b> exchange	<b>w héel</b> clamp
<b>hígh</b> brow	<b>exám</b> paper	<b>convéy</b> or belt	<b>Chrístmas</b> present	<b>ríver</b> bank
	<b>fréezing</b> point		<b>Móther's</b> Day	<b>èxclamátion</b> mark
	<b>còncetrátion</b> camp		<b>deficiency</b> disease	<b>wéather</b> forecast
	<b>Dówn's</b> syndrome		<b>ecónomy</b> class	<b>depártment</b> store
	<b>Consérvative</b> Party		<b>púrchasing</b> power	<b>ráilway</b> station

Compound nouns whose second element is Verb+*-er* or Verb+*-ing*:

<b>cán</b> -opener	<b>óver</b> seer	<b>scréens</b> aver	<b>théat</b> regoer	<b>fólk</b> singer
<b>shópl</b> ifting	<b>wáterski</b> ing	<b>háir</b> -splitting	<b>bélly</b> landing	<b>jób</b> sharing
<b>cònciousness</b> raising		<b>lánguag</b> e teaching	<b>páperback</b> writer	

Compound nouns converted from a phrasal verb, e.g. *to lèt dówn* → *a létdown* (always spelt as one word or with a hyphen):

a <b>sét</b> back	a <b>wríte</b> -up	a <b>shówd</b> own	a <b>búy</b> out	a <b>sít</b> -in
a <b>frý</b> -up	a <b>dríve</b> -in	a <b>túrno</b> ff	a <b>sétu</b> p	a <b>wríte</b> -off

- The whole compound is an adjective:

<b>wáter</b> proof	<b>séa</b> sick	<b>wéather</b> -beaten	<b>trúst</b> worthy	<b>cáre</b> free
<b>sún</b> lit	<b>fún</b> -loving	<b>chócolate</b> coloured	<b>mélon</b> -shaped	<b>áirt</b> tight

- The whole compound is a verb:

to <b>síde</b> step	to <b>báby</b> -sit	to <b>mán</b> handle	to <b>báck</b> bite	to <b>wáter</b> -ski
to <b>héad</b> hunt	to <b>bélly</b> -dance	to <b>áir</b> -condition	to <b>cháin</b> -smoke	to <b>sún</b> bathe

**12.38** Initially-stressed compounds, as the examples show, may be spelt as one word, or with a hyphen, or as two words. Those spelt as two words (*fire alarm*, *móuntain bike*, *un-emplóyment benefit*, *lánguag learning*) are called “**invisible compounds**”, since the spelling does not show that they are to be pronounced as one word.

When two words stand next to each other as a phrase and not as a compound, both words must of course be stressed. Compare the following pairs, where the same words appear, once as a phrase and once as a compound:

Ordinary phrase (both words stressed)	Initially-stressed compound (first word stressed)
Some people have <b>réd skín</b> . (adjective + noun)	He is a <b>rédskin</b> . (‘an Indian’)
<b>This is the gírls’ schóol</b> . (‘where our daughters go’, H a lányok iskolája)	This is the <b>gírls’ school</b> . (‘a school where only girls can go’, H a lányiskola)
I met an <b>Énglish téacher</b> . (teacher who is English, teaching whatever subject)	I met an <b>Énglish teacher</b> . (teacher who teaches English)
Who gives the <b>dóg fóod</b> ? (indirect object + direct obj.)	Have you seen the <b>dóg food</b> ? (‘food meant for dogs’)
We watched the <b>sún rise</b> (noun + infinitive)	We watched the <b>súnrise</b> . (‘the morning’)

**12.39 Obscured compounds.** — A small group of initially-stressed compounds has the second element weakened in pronunciation, e.g. *póst|man* /'pəʊstmən/, *wél|come* /'welkəm/. They are called “obscured” (or “reduced”) compounds because in pronunciation they have become one word, and only the spelling shows that the second element used to be an independent word (shown in italics in the examples below). Obscured compounds are a limited group of words which must be memorized. They are always spelt as one word. Especially the elements *-man*, *-land*, *-berry*, *-son*, *-shire*, *-ham* are pronounced weak. Some typical examples:

<i>póstman</i> /'pəʊstmən/	<i>víneyard</i> /'vɪnjəd/	<i>nónsense</i> /'nɒnsəns/
<i>cúpboard</i> /'kʌbəd/	<i>bréakfast</i> /'brekfəst/	<i>nóbodý</i> /'nəʊbədɪ/
<i>Éngland</i> /'ɪŋglənd/	<i>sáucepan</i> /'sɔ:spən/	<i>stráwberrý</i> /'strɔ:bəri/
<i>nécklace</i> /'nekləs/	<i>Jóhnson</i> /'dʒɒnsn/	<i>wélcome</i> /'welkəm/
<i>Yórkshire</i> /'jɔ:kʃə/	<i>báckwards</i> /'bækwədz/	<i>Clapham</i> /'klæpəm/

Other, less established, compounds are not obscured but have a full-vowelled second element, e.g. *snówman* /'snəʊmæn/, *Swáziland* /'swɑ:zilænd/, etc. A few words can be pronounced either way, e.g. *wáistcoat* /'weɪskəʊt/ or obscured /'wesket/; *fórehead* /'fɔ:hed/ or obscured /'fɔrɪd/.

## Finally-stressed compounds

**12.40** In this type of compound the second element is primary-stressed, while the first element has secondary stress, e.g. *tráde únion*, *Victòria Státion*. This stressing is similar to that of phrases (two words occasionally put together, e.g. *ínteresting bóok*, *Amánda’s fáther*). The reason we call *trade union*, *Victoria Station*, etc. compounds is that their meaning and grammatical behaviour shows them to be lexical units rather than ordinary phrases. It must be said,



however, that the borderline between ordinary phrases and finally-stressed compounds is not always clear: for example, *glòbal wármíng* looks like an ordinary noun phrase both in its stressing and syntactic behaviour, yet its specialized meaning might qualify it as a compound.

Some typical finally-stressed compounds are:

tráde <b>ú</b> níon /,treɪd 'ju:njən/	Victòria <b>St</b> átíon /vɪk,tɔ:riə 'steɪn/
bríck <b>w</b> áll /,brɪk 'wɔ:l/	còmpect <b>d</b> ísc /,kɒmpækt 'dɪsk/
ùser- <b>f</b> ríendly /,ju:zə 'frendli/	to ìll- <b>t</b> réat /,ɪl 'tri:t/

Finally-stressed compounds are a source of difficulty for Hungarian learners, who feel that if something is a lexical unit, it ought to be initially-stressed (i.e. pronounced as one word), and so they make mistakes like \**tráde uníon*, \**bríck wáll*, \**Victòria Státíon*.

Unfortunately, there are no overall guidelines as to which compounds are finally-stressed and which initially-stressed. If the compound is spelt as one word, you can be sure it is initially-stressed (*súnrise*), but if it is spelt with a hyphen or separately, you just have to know which pattern it is. Good dictionaries give the stress pattern of compounds even if they are spelt as two words.

Note. A few finally-stressed compounds are exceptionally spelt as one word, e.g. *wèkénd*, *aròmathérapie*.

**12.41** Here are some finally-stressed compounds, arranged according to word class and the sense-relationship between the two elements:

- The whole finally-stressed compound is a noun:

– the “*Y is made of X*” relationship:

bríck <b>w</b> áll	frùit <b>s</b> álad	màrble <b>st</b> átue	stràw <b>m</b> án	potàto <b>cr</b> ísp
àpple <b>p</b> íe	pàper <b>b</b> ág	chèese <b>b</b> íscuit	plàstic <b>co</b> ntàiner	rùbber <b>b</b> óots

– the “*Y is (an) X*” relationship:

àcid <b>r</b> áin	tòy <b>s</b> óldier	twìn <b>br</b> óther	wòman <b>w</b> rítter	bòy <b>sc</b> óut
Kíng <b>J</b> óhn	quèen <b>b</b> ée	Lòrd <b>M</b> áyor	màn <b>F</b> rídáy	chíld <b>á</b> ctor
jùnk <b>f</b> óod	pòund <b>n</b> óte	gàrden <b>s</b> úburb	híre <b>p</b> úrchase	gírl <b>g</b> uíde

– names of places (but not those ending in “Street”, which are initially-stressed!)

Cròmwell <b>R</b> óad	Fífh <b>Á</b> venue	Píccadilly <b>C</b> írcus	Còvent <b>G</b> árden
Hèroes’ <b>S</b> quáre	Brítish <b>Í</b> sles	Àcre <b>L</b> áne	Lòndon <b>B</b> rídge
Scòtland <b>Y</b> árd	Nòrth <b>P</b> óle	Niàgara <b>F</b> álls	Màrgaret <b>Í</b> sland
Thàmes <b>v</b> álléy	Dànube <b>d</b> élta	Nèw <b>Y</b> órk	Wèst <b>C</b> óast

– adjective + noun, or Verb+ing + noun:

Sòcial <b>D</b> émocrat	blàck <b>m</b> árkét	cívil <b>w</b> ár	drý <b>cl</b> éaner’s
Thírd <b>W</b> órlđ	hàrd <b>d</b> ísk	pùblic <b>sch</b> óol	príme <b>m</b> íníster
wòrkíng <b>cl</b> áss	rèínfórced <b>c</b> óncrète	rùníng <b>w</b> áter	lívíng <b>co</b> ndítíons

– various others:

thréè- <b>w</b> héeler	Còca <b>C</b> óla	còttage <b>ch</b> éese	gàs <b>f</b> íre
dòuble- <b>d</b> écker	Belísha <b>b</b> éacon	stàge <b>m</b> ánager	wèekénd

Brussels **spróuts**      ice **créam**      tòwn **plánnig**      hàlf **móon**  
 fàfamily **dóctor**      Wòrcester **sáuce**      Christmas **púdding**      squàre **róot**

– “initialisms” (words consisting of letters pronounced as their alphabetical names):

DJ /,di: 'dʒeɪ/      OK /,oʊ 'keɪ/      GCSE /,dʒi: si: es 'i:/  
 EU /,i: 'ju:/      HIV /,eɪtʃ aɪ 'vi:/      BBC /,bi: bi: 'si:/

#### 12.42 Finally-stressed compounds belonging to other word-classes:

- The whole compound is an adjective (here belong most compounds whose second element ends in *-ed*):

èagle-**éyed**      bàd-**témpèred**      èasy-**góing**      dirt **chéap**      ùser-**fríendly**  
 clèar-**cút**      àbsent-**mínded**      dùty **frée**      stòne **déaf**      dàrk **brówn**

- The whole compound is an adverb:

hèad-**first**      dònwn-**stréam**      ùpstáirs      òffhánd  
 wèll-**óff**      wày **óut**      fàr **awáy**      Nòrth-**Éast**

- There are very few finally-stressed compound verbs: *to ill-tréat*, *to còld-shóulder*. They are always spelt as one word or with a hyphen. Actually, most verbs that could be cited here begin with an adverb which is better considered a prefix (see 12.7), e.g. *to dònwn|gráde*, *to cròss-|exámine*, *to òut|númber*, *to òver|sléep*, *to bàck-|pédal*, *to ùnder|éstimate*.

**12.43** As we have said, there are no clear-cut rules as to which compound belongs to which stress pattern, and spelling is no reliable guide either. Still, as a general principle we can say that if the relationship between the two elements expresses the idea of “for...” (that is, a kind of object relationship), the compound is usually initially-stressed. When the relationship expresses the idea of “is a...”, “is made of...”, “is characterized by...” (that is, a kind of subject relationship), the compound is usually finally-stressed.

Initially-stressed compound (“for...”, object)	Finally-stressed compound (“is a...”, subject)
<b>dóg</b> food (food for dogs)	jùnk <b>fóod</b> (food that is junk)
<b>tóy</b> factory (factory producing toys)	tòy <b>sóldier</b> (soldier which is a toy)
<b>drínking</b> water (we drink the water; object)	rùnning <b>wáter</b> (the water runs; subject)
<b>láwn</b> mower (it mows the lawn; object)	làwn <b>ténnis</b> (belonging to lawns)
<b>blóod</b> donor (he gives blood; object)	blòod <b>bróther</b> (is “made of” the same blood)
Sec <u>ú</u> rity Council (council for security)	còunty <b>cóuncil</b> (belonging to the county)
<b>végetable</b> knife (cuts vegetables; object)	végetable <b>márrow</b> (is a vegetable; subject)

<u>pá</u> per bag (bag for newspapers)	pàper <u>bá</u> g (bag made of paper)
<u>milk</u> tooth (good for sucking milk)	milk <u>chó</u> colate (made of/with milk)

Hungarian makes no such distinction, pronouncing both types as initially-stressed compounds (and spelt as one word): *ivónív, folyónív; tejfog, tejsokoládé*.

**12.44** In many cases, however, such a rational explanation is not easy to find, and the two types of stressing seem to be simply a matter of tradition. Compare, for example:

<b>Fó</b> reign Office – Fòreign <b>Mín</b> ister	<b>Ó</b> xford Street – Òxford <b>Ró</b> ad
<b>Chá</b> nnel Islands – British <b>Í</b> sles	<b>só</b> cial work – sòcial <b>sci</b> ence
<b>Christ</b> mas tree – Christmas <b>É</b> ve	<b>bí</b> rthday party – Christmas <b>pár</b> ty
<b>Í</b> ron Age – Ìron <b>Cúr</b> tain	<b>fá</b> mily man – fàmily <b>tré</b> e
<b>snó</b> wman – bèst <b>mán</b> (‘esküvői tanú’)	<b>prí</b> mary school – prìmary <b>stré</b> ss

Neither the length of the single elements, nor the place of stress within them matters. The meaning or communicative “importance” of the elements is also irrelevant: the stress pattern of a compound is a lexically given feature that must be obeyed in pronunciation, whether we consider an element “important” or not. We cannot say, for example, that the element *mask* in *gàs mask* (unstressed) is less important than the element *fire* in *gàs fire* (stressed).

### **Additional remarks on compounds**

**12.45** **Compound vs. contrastive phrase.** — When we want to contrast the first word of a phrase, we do this by de-stressing the second word, so only the first word is stressed:

Most babies have pale pink skin, but some have RÉD skin.  
(contrastive phrase; ‘skin that is red, not pink’)

A teacher in Norway earns more than an ÉNGLISH teacher.  
(contrastive phrase; ‘a teacher who is English, not Norwegian’)

Observe that here the phrases “*RÉD skin*”, “*É*NGLISH teacher” are pronounced exactly like the initially-stressed compounds *rédskin* ‘Indian’ and *É*nglish teacher ‘teacher of English’. This may lead to misunderstandings, since it neutralizes a difference in pronunciation. Fortunately, we find the same in Hungarian. For example, *Fűtött konyhában jobb dolgozni, mint HIDEG konyhában* (‘in a cold kitchen’), where the de-stressing of *konyhában*, due to contrast, makes the phrase sound exactly like the compound *hidegkonyhában* ‘in a buffet kitchen’.

**12.46** **Contrastively stressed compounds.** — For the sake of contrast we may stress the “wrong” element of a compound, that is, the one which is not stressed in normal circumstances. For example, *river bank* or *fólk singer* are initially-stressed compounds, but we may say:

(Was it on the **rí**ver bank?) — It wasn't on the ríver **BÁNK**, it was in the river itself.

(Is he a **fól**k singer?) — He isn't a fólk **SÍNGER**, he dances in a folklore show.

In these answers we see that an initially-stressed compound (*ríver bank*) may be contrastively pronounced with stress on its second element (*ríver BÁNK*), sounding like a finally-stressed compound or a phrase.

The opposite may equally happen: a finally-stressed compound (*frúit sálad*) may be pronounced with stress on its first word only, sounding like an initially-stressed compound:

(Are you making some frúit **sálad**?) — It isn't **FRÚIT** salad, it's **CÚCUMBER** salad.

To illustrate the stress types of compounds and two-word phrases, let us compare some combinations with *man* as their second element.

	<i>type of expression</i>	<i>example</i>	<i>pronunc.</i>	<i>stress</i>
(1)	compound, obscured; initially-stressed	<b>póst</b> man	/ˈpoustmən/	[1 + 0]
(2)	compound; initially-stressed	<b>snó</b> wman	/ˈsnoumæn/	[1 # 0]
(3)	compound; finally-stressed	bèst <b>mán</b> ('esküvói tanú')	/ˌbest 'mæn/	[2 # 1]
(4)	phrase; both words stressed	Joe is the <b>bést mán</b> I know. (‘a legjobb ember’)	/ˈbest 'mæn/	[1 # 1]
(5)	phrase; contrastive, <i>man</i> is de-stressed	Jim is a <b>good</b> man, but the <b>BÉST</b> man I know is Joe.	/ˈbest mæn/	[1 # 0]

The stress pattern of (2) and (5) is the same since *man* is unstressed in both. (3) and (4) are also practically the same since *man* has primary stress in both.

**12.47 Compound within compound.** — It is possible for a compound or a phrase to be further compounded, e.g. *orange juice* → *orange juice bottle*. The new element will add its own stress pattern. The word *bottle* can be added to nouns to express “bottle for something”; the result is an initially-stressed compound, e.g. *milk bottle*. In the same way *bottle* is added without stress to *orange juice* (which is already a compound with its own unstressed second element), and the result is a new initially-stressed compound: [[orange juice] bottle] = [ [1 # 0] # 0]. The same principle applies when we add *bottle* to *hòt wáter*, but this base happens to be a finally-stressed phrase, so the result will be [[hòt wáter] bottle] [ [2 # 1] # 0].

The following examples are all initially-stressed compounds, containing as first element (shown in square brackets) a simple word or an “inside” compound or phrase, which may be initially or finally-stressed, as its own pattern requires.

[X] bottle	[X] sale	[X] story
[mílk] bottle	[cléarance] sale	[hórror] story
[órange juice] bottle	[cár boot] sale	[drúg abuse] story
[hòt wáter] bottle	[ùsed equípment] sale	[First Wòrld Wár] story

[X] teacher	[X] map
[ <b>chémistry</b> ] teacher	[ <b>róad</b> ] map
[ <b>prímáry</b> school] teacher	[ <b>bús</b> route] map
[fòreign <b>lánuage</b> ] teacher	[cèntral <b>área</b> ] map

We may add another compound-final element to these, e.g. *orange juice bottle factory* (with a single primary stress on the first element!), and so on.

It is also possible to put an element before a compound. The new initial element will get secondary stress, the base remains unchanged:

Nàtional [ <b>Héalth</b> Service]	stràwberry [ice <b>créam</b> ]
silver [ <b>wédding</b> anniversary]	Nèw [Sòuth <b>Wáles</b> ]

One may also put a compound before a one-word base. The base will of course be stressed; and since it is the last element, it will be the primary, with the stress(es) before it degraded to secondary, as usual:

[Nòrth Sèa] <b>óil</b>	[hùndred-percènt] <b>éffort</b>
[bìke shed] <b>dóor</b>	[shòrt term] <b>párking</b>

**12.48** Below we give some typical examples for three-element compounds. Remember that though they contain three words, these are not of equal rank: first we take a two-element compound or phrase [shown in brackets], then we add the third word before or after this. (Only the primary stress is shown for simplicity's sake.)

TABLE 12.48 THREE-ELEMENT COMPOUNDS

Structure	1 # 0 # 0	2 # 1 # 0	2 # 2/0 # 1
[X Y] Z	[ <b>ó</b> range juice] bottle	[fòreign <b>lánuage</b> ] teacher	[bìke shed] <b>dóor</b> [Nòrth Sèa] <b>óil</b>
X [Y Z]	—	Nàtional [ <b>Héalth</b> Service]	stràwberry [ice <b>créam</b> ]

In the third column the middle element is either unstressed (*shed*), or secondary-stressed (*Sea, ice*), in which case it easily loses its stress, “sandwiched” as it is between two other stresses. Consequently all expressions in the third column are normally pronounced with a [2 # 0 # 1] pattern: *Nòrth Sea óil*, etc. See 13.14.

<u>1 # 0 # 0</u>	<u>2 # 1 # 0</u>	<u>2 # 2/0 # 1</u>
[ <b>ó</b> range juice] bottle	[foreign <b>lánuage</b> ] teacher	[North Sea] <b>óil</b>
[ <b>prímáry</b> school] teacher	[hot <b>wáter</b> ] bottle	[U. S.] <b>ármý</b>
[ <b>cár</b> boot] sale	[Scotch <b>whísky</b> ] brand	[hundred percent] <b>éffort</b>
[ <b>ca</b> sséte recorder] factory	[used <b>equípment</b> ] sale	[White House] <b>offícial</b>
[ <b>drúg</b> abuse] story	[shaggy- <b>dóg</b> ] story	[hard-core] <b>pórn</b>
[ <b>bús</b> route] map	[English <b>phonétics</b> ] teacher	[short term] <b>párking</b>

[ <b>bá</b> ggage claim] area	[Empire <b>Stá</b> te] Building	[San Francisco] <b>Bá</b> y
[ <b>á</b> ir raid] shelter	[duty- <b>fré</b> e] shop	[duty-free] <b>wh</b> isky
[ <b>dr</b> inking water] supply	[first <b>á</b> id] station	[cottage cheese] <b>pá</b> ncake
[ <b>pé</b> trol station] attendant	[human <b>rí</b> ghts] campaign	[bike shed] <b>dó</b> or
[ <b>gé</b> nder studies] class	[drinking- <b>ú</b> p] time	[World War] <b>Tw</b> ó
[ <b>thé</b> atre ticket] agency	[liberal <b>ár</b> ts] college	strawberry [ice <b>cré</b> am]
[ <b>ché</b> wing gum] paper	National [ <b>Hé</b> alth Service]	Second [World <b>Wá</b> r]
[ <b>grá</b> pefruit] knife	silver [ <b>wé</b> dding anniversary]	stiff [upper <b>líp</b> ]
[ <b>rá</b> ilway station] building	woman [ <b>pró</b> se writer]	New [South <b>Wá</b> les]
[ <b>divó</b> rce law] expert	well- <b>[thó</b> ught-of]	well- <b>[thó</b> ught-óut]
[ <b>pó</b> st office] box		

## Summary of compounds

**12.49** Compounds are of two types: initially-stressed (“true”) and finally-stressed (“pseudo-”) compounds. Most compounds are **initially-stressed** (*sún*rise, *fire* alarm). This type includes **obscured compounds**, where the second element is weakened (*pó*stman). **Finally-stressed** compounds (*trá*de úion) are pronounced like ordinary phrases, with stress on the last element; it is only their meaning and/or grammatical behaviour which shows them to be compounds.

In many cases there is no logical reason for which stress pattern a compound has; this must be memorized (and taught) as lexical knowledge. Still, the meaning-relationship of the two elements can often serve as a guide: finally-stressed compounds usually express a “subject” relationship (“is a...” or “is made of...”: *tò*y *só*ldier, *gàs* *fire*).

Compounds or phrases can be further compounded. The stress of three-element compounds is a mechanical product of the stress of the components, with regard to their structure.

The spelling of compounds is inconsistent. Obscure compounds are always written as one word; finally-stressed compounds as two, or with a hyphen; but initially-stressed compounds (the most frequent type!) can have any spelling. Initially-stressed compounds which are spelt as two words (*fire* alarm) are called “invisible compounds”. The table below sums up the various spellings.

TABLE 12.49 COMPOUND TYPES AND THEIR SPELLINGS

	<i>Spelt as one word</i>	<i>Spelt with hyphen</i>	<i>Spelt as two words</i>
<b><i>Initially-stressed</i></b>	schóolboy súnbathe áirtight	cán-opener báby-sit háir-raising	fire alarm geógraphy teacher chócolate coloured
<b><u>OBSCURED</u></b>	póstman Yórkshire	—	—
<b><i>Finally-stressed</i></b>	— (wèekénd)	dòuble-décker ìll-tréat clèar-cút	tráde úion tòwn plánning wày óut

— o —

**QUESTIONS FOR REVISION**

1. Compare *un#believ#able* with *in+cred+ible*. Explain the boundaries and the stems.
2. Compare and explain the stressing of *intellect*, *intelligent* and *intellectual*. Which categories do the suffixes *-ent* and *-ual* belong to?
3. Look up the pronunciation of *Lilliput* and *Lilliputian* in a dictionary, then explain the place of stress and the different pronunciations of the letters *u* and *t*.
4. Explain the different behaviour of word-final *-y* in *history* ~ *historic* but *carry* ~ *carrying*.
5. Why does the stress shift in *origin* – *original*, *office* – *official*?
6. What are the differences between integrated and independent prefixes?
7. Compare the compounds *blóod poisoning* and *lèad /led/ póisoning*. Explain why they belong to different stress patterns.
8. What are the stress-fixing suffixes? Do they always cause stress-shift?
9. Compare and explain the stressing of *decorated* and *decoration*.
10. Demonstrate why we call *-ing* a neutral suffix.
11. Compare and explain the stressing of *analyse*, *he analyses*, *analysis*, *two analyses*, *analytic*, *analytical*, *analytically*.
12. What do we mean by “invisible compounds”?

## CHAPTER 13

### STRESS IN CONNECTED SPEECH

#### Features of connected speech

**13.1** In the last two chapters we examined the stressing of words. In this and the following chapter we deal with connected speech, that is, units of pronunciation larger than the word. In connected speech certain words are stressed, while others remain in the background, not receiving stress. For example:

I 'think A'manda should 'write 'Jennifer a 'letter.

/aɪ 'θɪŋk ə'mændə ʃəd 'raɪt 'dʒenɪfər ə 'letə/

The words *I*, *should*, *a* are unstressed; the other words, *think*, *Amanda*, *write*, *Jennifer*, *letter*, are stressed. When we say that “a word is stressed”, we mean that the stressed syllable of that word is stressed; the place of stress within the word is not important now. *Amánda* has it on the penult, *Jénnifer* on the antepenult, but for our present purposes both words are equally stressed.

Since our examples in this and the next chapter always consist of several words, it will be more practical to indicate stress with separate stress marks (as is done in transcription), rather than with accent marks above vowels. So instead of *Amánda*, *Jénnifer* we will write *A'manda*, *'Jennifer*, etc. Of course the two notations are equivalent.

**13.2** There are important differences between transcribing (and pronouncing) words in isolation and in connected speech. Compare the following six words transcribed in both manners:

*As isolated words:* Jim, was, interested, in, international, law  
/dʒɪm/, /wɒz/, /'ɪntrəstɪd/, /ɪn/, /,ɪntə'næʃnəl/, /lɔ:/

*As connected speech:* Jim was interested in international law.  
/'dʒɪm wəz 'ɪntrəstɪd ɪn ,ɪntə'næʃnəl 'lɔ:/

Note the following differences:

– In isolation every word is put in separate brackets; in connected speech we only put brackets at the beginning and at the end.



- In isolation one-syllable words (*Jim, was, in, law*) never get a stress-mark (11.6); in connected speech they, too, must be stress-marked if they are actually stressed in the given sentence (here *Jim* and *law* receive a stress mark because they are pronounced with stress).
- In isolation every word has stress (though this is not shown on one-syllable words); in connected speech certain words are unstressed (here *was* and *in*).
- In isolation all words have their full-vowelled “strong form”; in connected speech certain unstressed function-words have their “weak form” (here *was* /wɒz/ weakens to /wəz/).

Punctuation (dots, commas, apostrophes, etc.) and capital letters are not shown in transcription. The only thing that we take over from ordinary spelling is the space between words.

**13.3 Content-words and function-words.** — The general rule in connected speech is to stress every content-word, and leave function-words unstressed.

**Content-words** are the four major word classes: nouns, verbs, adjectives, and adverbs (including adverbial particles like *up* in *get up*). Numerals (e.g. *two*), interrogative and demonstrative pronouns (e.g. *who?*, *this*), and negative words (e.g. *not*, *couldn't*) are stressed like content-words.

**Function-words** are all others: auxiliaries, most pronouns, articles, and conjunctions. Note that prepositions (e.g. *with*, *along*) are also stressed like function-words. In the following examples the unstressed function-words are shown in italics:

- *We* 'ended 'up 'spending *the* 'whole 'week'end *with* A'manda *and* *her* 'old 'aunts *who* *were* 'staying 'there *as* *her* 'guests.

/wi 'endɪd 'ʌp 'spendɪŋ ðə 'hoʊl 'wi:k'end wɪð ə'mændər ən hər 'oʊld 'ɑ:nts hu: wə 'steɪŋ 'ðeər əz ə 'gests/

- 'Why *did* *you* 'give *me* 'this par'ticular 'book?

/'waɪ dɪd ju 'gɪv mi 'ðɪs pə'tɪkjələ 'bʊk/

- *He* *could* *have* 'told *her* *he* 'didn't re'member *her*.

/hi kəd əv 'təʊld ə hi 'dɪdnt rɪ'membə hə/

Note. Content-words are also called “lexical words”. Function-words are also called “grammatical words” or “form-words”.

**13.4 The tonic.** — We know that if a word has several stresses, the last one is the strongest (the “primary”). Similarly, in an English sentence the last stressed word has the strongest stress (it is the “sentence primary”, so to speak). This strongest stress in the sentence is called the **tonic**. The tonic is, properly speaking, a syllable (since stress is always attached to a syllable), but of course the word containing the tonic syllable will stand out as the most prominent word in the sentence.

In transcription it is not necessary to show the tonic specially, since we automatically know that it is the last stress. If needed, the tonic can be highlighted by underlining the syllable.

ble (or the word that contains it), and by placing an arrow ( $\sphericalangle$  or  $\nearrow$ , depending on whether the voice falls or rises there) in front of the tonic syllable. Let us repeat our first example, highlighting the tonic. The tonic syllable is *le-*; the tonic word is *letter*.

I 'think A'manda should 'write 'Jennifer a  $\sphericalangle$ letter.

To sum up: the tonic is the (stressed syllable of the) last stressed word in the sentence.

Note. The tonic is also called nucleus or sentence-stress or accent.

**13.5** Stress placement in the sentence is the not same as intonation. Intonation (discussed in Chapter 14) means the melody — falling or rising, etc. — starting on the tonic syllable. Stress and intonation are closely related as suprasegmental features, but they are different things. Compare:

	(1) <i>Stress (tonic) on last word</i>	(2) <i>Stress (tonic) earlier</i>
(a) <i>Falling intonation</i>	(1a) She 'spent a 'year in the $\sphericalangle$ <u>forest</u> .	(2a) She 'spent a $\sphericalangle$ <u>YEAR</u> in the forest.
(b) <i>Rising intonation</i>	(1b) 'Did she 'spend a 'year in the $\nearrow$ <u>forest</u> ?	(2b) 'Did she 'spend a $\nearrow$ <u>YEAR</u> in the forest?

Stress (the place of the tonic) is different between (1) and (2), while intonation (the melody of the tonic) is different between (a) and (b). As you see, all combinations exist. In the present chapter we shall assume all our examples to be spoken with falling intonation, like (1a, 2a), unless otherwise indicated.

**13.6** Ordinary spelling can only express some features of suprasegmental pronunciation. We have seen (12.43) that the written sentence *I met an English teacher* can be said with two stressings: *I met an English  $\sphericalangle$ teacher* (phrase, ‘a teacher who is English’), and *I met an  $\sphericalangle$ English teacher* (compound, ‘a teacher who teaches English’). To take another example, the string of words *Meet my sister Barbara* can be pronounced in three different ways, corresponding to three grammatical–communicational sentences:

- (a) 'Meet my  $\sphericalangle$ sister, Barbara. = *Hadd mutassam be a hógomat, Barbara.*  
 (b) 'Meet my  $\sphericalangle$ sister, |  $\sphericalangle$ Barbara. = *Hadd mutassam be a hógomat, Barbarát.*  
 (c) 'Meet my 'sister  $\sphericalangle$ Barbara. = *Hadd mutassam be Barbara hógomat.*

In (a) I am telling Barbara to meet my sister (whose name we don't know). In (b) I am telling someone to meet my only sister, whose name happens to be Barbara. In (c) I am telling someone to meet one of my sisters: the one called Barbara. In (c) the absence of the comma indicates, even if indirectly, the different pronunciation, but the other two are spelt the same way.

The situation is similar in other languages. Consider these Hungarian examples, written the same way but stressed differently:

Géza  $\sphericalangle$ anyjával érkezett. (G. = subject; ‘G. came with his own mother’)

$\sphericalangle$ Géza anyjával érkezett. (G. = possessor; ‘Someone came with G.’s mother’)

Admittedly, there are a few means to express suprasegmental features in writing, like the use of italics to show contrast or emphasis. Compare:

She spent a year in the forest! (tonic neutrally on  $\sphericalangle$ forest)

She spent a *year* in the forest! (emphasizing ‘year’, tonic on  $\sphericalangle$ year)

Even though italics and punctuation may express some features of stress and intonation, writing is a poor and inadequate means of representing suprasegmentals. It often happens that the same written sentence has two (or more) pronunciations, with quite different meanings or communicative values.

## THE TONE-UNIT

**13.7** Connected speech is organized into blocks called tone-units.

Phonetically a tone-unit is a stretch of speech whose last stress is a tonic, on which the voice begins to fall (or rise). There may be a slight pause after the end of a tone-unit, but this is not obligatory: the speaker may run one tone-unit into another. In this case only the falling (or rising) of the voice on the tonic will indicate that a tone-unit ends there.

The tone-unit usually corresponds to a grammatical clause. A clause is either an independent sentence, as in (1) below; or a sentence which is part of a larger sentence, as the two halves of (2) below. The tone-unit may also be less than a clause, as in (3-4-5); especially longer phrases may correspond to a tone-unit, as the first half of (6).

The boundaries of tone-units may be shown with a vertical line ( | ):

(1) | ‘Jeremy ‘played the gui $\sphericalangle$ tar. |

(2) | ‘Jeremy ‘played the gui $\sphericalangle$ tar, | but the ‘others ‘weren’t  $\sphericalangle$ listening. |

(3) | ,Unbe $\sphericalangle$ lievable! |

(4) | ‘Not on ‘top of the  $\sphericalangle$ bed, please! |

(5) |  $\sphericalangle$ No. |

(6) | In ‘front of the ‘Swan  $\sphericalangle$ Theatre | there’s an in‘credibly ‘ugly  $\sphericalangle$ petrol station. |

Tone-units rarely have more than five stresses in them. If a sentence is longer, the speaker usually breaks it up into several tone-units.

Note. The tone-unit is also called tone group or intonational phrase.

**13.8** The tone-unit has the following parts: pre-head, head, tonic, and tail. Only the tonic is obligatory, the others may be missing. A typical example is:

| We de'cided to 'come 'back in Oc ↘to ber. |  
 {pre-h.} {.....h.....e.....a.....d.....} {tonic} {tail}

- **Pre-head:** the unstressed syllables before the first stress (*We de-*).
- **Head:** the part beginning with the first stress and leading up to the tonic syllable (*-cided to come back in Oc-*).
- **Tonic:** the last stressed syllable (*-to-*).
- **Tail:** anything after the tonic (*-ber*).

In the table below each row is a tone-unit. Observe the components:

<i>Pre-head</i>	<b>Head</b>	<b>Tonic</b>	<i>Tail</i>
We de-	'cided to 'come 'back in Oc-	↘to-	ber.
	'Jeremy 'played the gui-	↘tar,	
but the	'others 'weren't	↘li-	stening.
I re-		↘mem-	ber.
In	'front of the 'Swan	↘The-	atre,
there's an in-	'credibly 'ugly	↘pe-	trol station.
	'Not on 'top of the	↘bed,	please!
	'Jim was 'interested in ,inter'national	↘law.	
She	'spent a 'year in the	↘fo-	rest.
		↘No.	
I	'think A'manda should 'write 'Jennifer a	↘le-	tter.
	'Unbe-	↘lie-	vable!
A-	'manda was up'set because 'John had 'disa-	↘ppeared.	

## Rhythm

**13.9 The rhythmic foot.** — The way stressed syllables follow each other in the “head” of the tone-unit is called rhythm. The unit of English rhythm is the **foot** (a traditional name borrowed from poetry). In linguistics a rhythmic foot is a stressed syllable plus the unstressed syllables that follow it. Each tone unit is made up of one or more feet. The first foot may be incomplete, consisting of unstressed syllables only: this is pre-head. The last foot always begins with the tonic: this is the tonic foot (consisting of tonic + tail).

The following sentence is a tone-unit consisting of five feet. (Foot boundaries are shown here with a broken line |. The missing stress in the pre-head is shown by ^.)

| ^ We de|'cided to |'come |'back in Oc|↘to ber. |

Feet are rhythmic units, so they do not always coincide with words or grammatical structures. The five feet in this sentence are: 1. *We de-*; 2. *-cided to*; 3. *come*; 4. *back in Oc-*; 5. *-tober*. The tonic syllable is *-to-*; the tonic word is *October*; the tonic foot is *-tober*.

**13.10** English rhythm is **stress-timed**. Stressed syllables tend to follow each other at regular intervals, no matter how many unstressed syllables come between them. Put another way, feet tend to be equal in length, like bars in music. (This is probably an exaggeration, but it works quite well in language teaching.)

In the above sentence the three-syllable foot |-'cided to| takes approximately as long to pronounce as the one-syllable foot |'come|. The length of time between the stresses -'ci- ... 'come ... 'back ... -'to- ... is roughly equal, even though there is a varying number of unstressed syllables between them. Unstressed syllables in English are usually weak and short, so they do not count much in forming the rhythm of speech.

Let us repeat some of our examples, printing the stressed syllables at exact distances to illustrate that English rhythm depends on the number of stresses and not on the number of syllables between them. Each vertical line shows the beginning of a foot. The pre-head is marked “Foot 0” because it is incomplete, by definition containing no stress: its syllables just “run up to” the first stress:

<b>FOOT 0</b>	<b>Foot 1</b>	<b>Foot 2</b>	<b>Foot 3</b>	<b>Foot 4</b>	<b>Foot 5</b>
We de-	'cided to	'come	'back in Oc-	'tober.	
	'Jeremy	'played the gui	'tar,		
but the	'others	'weren't	'listening.		
In	'front of the	'Swan	'Theatre,		
there's an in-	'credibly	'ugly	'petrol station.		
	'Jim was	'interested in	'inter-	'national	'law.
	'Not on	'top of the	'bed, please!		
I	'think A-	'manda should	'write	'Jennifer a	'letter.
She	'spent a	'year in the	'forest.		
A-	'manda was up	'set because	'John had	'disa-	'ppeared.

It is a useful exercise for Hungarian learners to pronounce such series of tone-units with the stresses following at strictly regular intervals (as in a music class), because it forces them to “squeeze” the unstressed syllables into the time available between two stresses, and thereby to produce the necessary amount of weakening. This does not come naturally to Hungarians, since their language knows no weak syllables and no schwa.

**13.11 Rhythmic Stress-Deletion.** — When three stresses come closely together, with no (or just one) unstressed syllable between them, the rhythm would become too jerky, too slow. To avoid this, we may delete (or “de-stress”) the middle one of the three stresses, so DUM-DUM-DUM becomes DUM-de-DUM. This is called Rhythmic Stress-Deletion. The name “rhythmic” expresses that this de-stressing does not depend on the meaning or grammatical role of the word affected, just the rhythmic pattern.

In the examples below all stresses are underlined. The place of the deleted middle stress is shown with a small circle (◦).

<i>3 stresses closely together</i>		<i>Middle stress deleted</i>
a ' <u>nice</u> ' <u>old</u> ' <u>lady</u>	→	a ' <u>nice</u> ◦old ' <u>lady</u>
' <u>very</u> ' <u>nice</u> ' <u>people</u>	→	' <u>very</u> ◦nice ' <u>people</u>
we ' <u>stood</u> ' <u>right</u> ' <u>there</u>	→	we ' <u>stood</u> ◦right ' <u>there</u>
my ' <u>son</u> ' <u>speaks</u> ' <u>Hindi</u>	→	my ' <u>son</u> ◦speaks ' <u>Hindi</u>
' <u>John</u> , <u>disa</u> ' <u>ppeared</u>	→	' <u>John</u> ◦disa' <u>ppeared</u>
' <u>strawberry</u> , <u>ice</u> ' <u>cream</u>	→	' <u>strawberry</u> ◦ice ' <u>cream</u>

The deletion also happens in the middle of very long words which have two secondary stresses before the primary:

, <u>psycho</u> , <u>ana</u> ' <u>lytical</u>	→	, <u>psycho</u> ◦ana' <u>lytical</u>
, <u>unde</u> , <u>nomi</u> ' <u>national</u>	→	, <u>unde</u> ◦nomi' <u>national</u>

Rhythmic stress-deletion is one of the mechanisms by which short content words can lose their stress, or a secondary stress may be deleted in a longer word or compound. Remember that the deletion rule needs three stresses in a row to be able to delete the middle one; in a sentence like *We de'cided to 'come 'back in Oc'tober*, stress deletion is not normal because there are only two stresses (*come* and *back*) next to each other.

**13.12** The following table gives each sentence twice: first (a) with all stresses mechanically present, and then (b) with rhythmic stress-deletion. The italics show those stresses which, being “sandwiched” between two other stresses, get deleted. Observe how in the (b) sentences the number of feet is less, and the feet are more equal in length.

	<b>FOOT 0</b>	<b>Foot 1</b>	<b>Foot 2</b>	<b>Foot 3</b>	<b>Foot 4</b>	<b>Foot 5</b>
1a		' <u>Paul's</u>	' <i>friend</i>	' <u>Tim</u> should have	' <u>bought</u> the	' <u>bread.</u>
1b		' <u>Paul's</u> ◦friend	' <u>Tim</u> should have	' <u>bought</u> the	' <u>bread.</u>	
2a	It was	' <u>terribly</u> de-	' <u>pressing</u> when	' <u>John</u>	' <i>went</i>	' <u>back.</u>
2b	It was	' <u>terribly</u> de-	' <u>pressing</u> when	' <u>John</u> ◦went	' <u>back.</u>	
3a	We en-	' <u>joyed</u> a	' <u>few</u>	' <i>fine</i>	' <u>days</u> in Ju-	' <u>ly.</u>
3b	We en-	' <u>joyed</u> a	' <u>few</u> ◦fine	' <u>days</u> in Ju-	' <u>ly.</u>	
4a		' <u>Ann's</u>	' <i>two</i>	' <u>dogs</u>	' <i>ran</i>	' <u>wild.</u>
4b		' <u>Ann's</u> ◦two	' <u>dogs</u> ◦ran	' <u>wild.</u>		

Let us give the (b) sentences in transcription too:

(1b) /'pɔ:lz frend 'tɪm ʃəd əv 'bɔ:t ðə 'bred/

(2b) /ɪt wəz 'terəbli dɪ'presɪŋ wen 'dʒɒn went 'bæk/

(3b) /wi ɪn'dʒɔɪd ə 'fju: faɪn 'deɪz ɪn dʒu'laɪ/

(4b) /'ænz tu: 'dɒgz ræn 'waɪld/

The words *friend*, *went*, *fine*, *two*, *ran* — though they are content-words and ought to be stressed — lose their stress because of rhythmic stress-deletion. By deleting their stress we get rid of a short foot, and attach the de-stressed word to the previous foot (e.g. *'Paul's* <sub>o</sub>*friend*).

## Rhythmic Stress-Shift

**13.13** If a word with two stresses (e.g. *,after'noon*) is immediately followed by a stressed word, three stresses would fall closely together: *,after'noon 'tea*. Using the rule of rhythmic stress deletion, we delete the middle stress: *'after<sub>o</sub>noon 'tea* /'ɑ:ftənu:n 'ti:/. By doing so, we have replaced the original stressing of the word *,after'noon* /,ɑ:ftə'nu:n/, [2 0 1], by a new stressing *'afternoon* /'ɑ:ftənu:n.../ [1 0 0]. The primary stress has “shifted” leftwards to the place of the secondary. This is called Rhythmic Stress-Shift. The original primary-stressed syllable (*noon*) is degraded to strong-unstressed status.

Rhythmic stress-shift is different from lexical stress-shift (*átom* ~ *atómic* 12.16; *refórm* ~ *rèformátion* 11.16; *rébel* ~ *rebél* 11.36), where the pronunciation of the vowels (and sometimes the consonants) also changes. In rhythmic stress-shift the sounds of the word do not change.

Note that rhythmic stress-shift is produced by the same mechanism as iambic reversal: in both cases a stress which is too close to the main stress is “pushed leftwards” to avoid the stress clash. Observe this on the example of *Japanese*:

- (1)            Japán + ése    →    Jàpanése                    *iambic reversal*
- (2)            Jàpanése + gárden    →    Jàpa<sub>o</sub>nese gárden                    *rhythmic stress-shift*

In (1) we see iambic reversal: the stress on *-pan* moves leftwards to *Ja-* because it would clash with the primary stress of the suffix *-ése*. In (2) we see rhythmic stress-shift: the primary stress on *-nese* shifts leftwards to *Ja-* because it would clash with the stress of *gár-*.

Rhythmic stress-shift can be defined as follows: when a word having a secondary and a primary stress is closely followed by another stressed word, the primary is deleted (by rhythmic stress-deletion), and the secondary becomes the primary of the word. E.g. *,after'nóon* → *'after<sub>o</sub>noon*. We say that the primary stress has “shifted leftwards”.

**13.14** Rhythmic stress-shift is most frequent in adjectives and nouns in attributive position, but it can affect practically any word that has two stresses. Examples:

<i>Dictionary form</i>	<i>Pronunciation (sec. + prim.)</i>	→	<i>Followed by a stress</i>	<i>Shifted pronun. (prim. + zero)</i>
after' <b>noon</b>	/,ɑ:ftə'nu:n/		'after <sub>o</sub> noon ' <b>tea</b>	/'ɑ:ftənu:n.../
Japa' <b>nese</b>	/,dʒæpə'ni:z/		'Japa <sub>o</sub> nese ' <b>gar</b> den	/'dʒæpəni:z.../
demo' <b>cratic</b>	/,demə'krætɪk/		'demo <sub>o</sub> cratic ' <b>country</b>	/'deməkrætɪk.../
sar' <b>dine</b>	/,sɑ:'di:n/		'sar <sub>o</sub> dine ' <b>sand</b> wich	/'sɑ:di:n.../
unde' <b>clared</b>	/,ʌndɪ'kleəd/		'unde <sub>o</sub> clared ' <b>goods</b>	/'ʌndɪkleəd.../
to ,de' <b>crease</b>	/,di:'kri:s/		to 'de <sub>o</sub> crease ' <b>ten</b> sion	/'di:kri:s.../

The stress-deletion may also hit the second element of a finally-stressed compound, causing the compound to sound initially-stressed. For example, ,*North 'Sea*, when followed by *oil*, loses the stress on *Sea* and appears with shifted stress: '*North Sea 'oil*. This is normal in all three-word compounds whose primary stress is on the last word (12.48):

<i>Finally-str. compound</i>	<i>Pronunciation (sec. + prim.)</i>	→	<i>Third (stressed) element added</i>	<i>Shifted pronunciation (prim. + zero)</i>
,North ' <b>Sea</b>	/,nɔ:θ'si:/		'North <sub>o</sub> Sea ' <b>oil</b>	/'nɔ:θ si:.../
,New ' <b>Year</b>	/,nju:'jɪə/		'New <sub>o</sub> Year's ' <b>Eve</b>	/'nju: jɪə.../
,duty ' <b>free</b>	/,dju:ti'fri:/		'duty <sub>o</sub> free ' <b>goods</b>	/'dju:ti fri:.../
,World ' <b>War</b>	/,wɜ:l'd wɔ:/		'World <sub>o</sub> War ' <b>Two</b>	/'wɜ:l'd wɔ:.../

Due to these rhythmic rules, the stressing of many long words or two-word expressions is variable, depending on whether they are followed by a stressed word or not. Below we present some further examples. Only the relevant words are stress-marked. The syllable shown in bold type on the left reappears unstressed in the right-hand column because there is another stress after it. We use the little circle to show this:

• Rhythmic Stress-Deletion:

<u>Independent form</u>	<u>Followed by a stressed word</u>
None of the photos ' <i>came</i> ' <b>out</b> .	— The photos ' <i>came</i> <sub>o</sub> <i>out</i> 'well.
The woman was ' <i>really</i> ' <b>nice</b> .	— She was a ' <i>really</i> <sub>o</sub> <i>nice</i> 'woman.
The hammer is ' <i>big</i> <i>e</i> ' <b>nough</b> .	— We need a ' <i>big</i> <sub>o</sub> <i>enough</i> 'hammer.
Write it in ' <i>lower</i> ' <b>case</b> .	— Use ' <i>lower</i> <sub>o</sub> <i>case</i> 'letters.
' <i>Fish</i> and ' <b>chips</b> is my favourite.	— I had a ' <i>fish</i> and <sub>o</sub> <i>chip</i> 'supper.
Her eyes are ' <i>dark</i> ' <b>blue</b> .	— She has ' <i>dark</i> <sub>o</sub> <i>blue</i> 'eyes.
He joined the ' <i>US</i> ' <b>Army</b> .	— A ' <i>US</i> <sub>o</sub> <i>Army</i> 'spokesman.



- Rhythmic Stress-Shift (the same mechanism, working within a word):

<u>Dictionary form</u>	<u>Stress-shifted form</u>
They came in the , <i>after'noon</i> .	— They came for ' <i>after<sub>o</sub>noon</i> 'tea.
The system is , <i>demo'cratic</i> .	— It's a ' <i>demo<sub>o</sub>cratic</i> 'system.
The course was , <i>three 'weeks</i> .	— We had a ' <i>three<sub>o</sub>week</i> 'course.
He was my , <i>refe'ree</i> .	— Where is the ' <i>refe<sub>o</sub>ree</i> 's re'port?
Nothing to , <i>reco'mmend</i> .	— I can ' <i>reco<sub>o</sub>mmend</i> 'Spain.
A theatre , <i>down'town</i> .	— A ' <i>down<sub>o</sub>town</i> 'theatre.
The egg is , <i>hard-'boiled</i> .	— I'll have a ' <i>hard<sub>o</sub>boiled</i> 'egg.
We counted , <i>thir'teen</i> .	— There were ' <i>thir<sub>o</sub>teen</i> 'people.
Our boss is , <i>easy'going</i> .	— We've got an ' <i>easy<sub>o</sub>going</i> 'boss.

Rhythmic stress-deletion and stress-shift have no communicative significance or special meaning: they are not applied to express anything or to emphasize any part of the message. They are mechanical means to ensure a smoother rhythm in speech.

Note. Words or expressions like those italicized above are also called “level-stressed”, because their stressing can “tilt” either way.

## Weak forms of function-words

**13.15** Some short and frequent function-words have “weak forms”: these are unstressed pronunciations without a full vowel (i.e. with schwa or no vowel at all). For example, *are* is pronounced /ə/ in *These are mine* /'ði:z ə 'maɪn/. Such weak forms are very natural in English, but the Hungarian learner tends to use them less often than necessary, preferring the unweakened (strong, full-vowelled) form. The teacher should make it clear that weak forms in English are not a mark of fast or careless speech — like *H mé' nem jössz*, or *nem t'om hol van* — but an obligatory feature of all styles, including quiet, clear speech. Though dictionaries or textbooks may give the strong form first, the weak form is the usual, normal pronunciation of these words. (There are positions in which weak forms are not used, see 13.20.)

Weak forms are phonologically peculiar because they are words without a strong syllable. All other English words, even if they become unstressed, retain the full-vowelled “strong” pronunciation in their original stressed syllable. It can never happen that each vowel in a content word should be weakened: forms like \*/dʒənɾəli/ for *generally* or \*/fəgət/ for *forget* are impossible, because without at least one full vowel a word would fall under the “threshold of wordhood”. Now, this is exactly what happens to weak-form function-words: as they have no full vowel, they become phonologically “less than a word”, pronounced rather like an affix. From a pronunciation point of view, *forgiving* /fə'gɪvɪŋ/ and *for Gilbert* /fə'gɪlbət/ begin in the same way, as do *tomato* /tə'mɑ:təʊ/ and *to Martin* /tə'mɑ:tɪn/.

Note 1. Strong and weak forms are also called full and reduced forms, respectively.

Note 2. We see now why obscured compounds (12.39) are so strange: their second element has fallen under the threshold of wordhood.

**13.16 Contracted forms.** — In a handful of function-words the weakening may be shown in spelling too. These are all cases where some sound of the word is lost. The missing sounds are replaced by an apostrophe, and the remaining letters are contracted with the preceding word. For example: *they will* → *they'll*; *did not* → *didn't*.

The fact that there are so few contracted forms in spelling might give the impression that these are the only weak forms in English. This is not so: as the table below shows, there are quite a few weak-form function-words, and contracted spellings are just a subset of these. (Contracted forms are given in brackets in the “Spelling” column of the table.)

In speech we almost always use the contracted forms, but in writing they are the markers of an informal style (see the discussion in 3.7). For example, in speech we normally contract *they* and *will* to /ðeɪl/, but in writing we only use *they'll* when we want to be informal. The stylistic value of spoken and written contracted forms is not the same: in speech they sound normal and neutral, while in writing they look informal or colloquial.

**13.17 List of weak forms.** — Below is a list of function-words that have a weak form. Only those are included that may cause difficulty to Hungarian learners. Sounds in round brackets are optional, depending on speed or phonetic environment. The pronunciation of final /-(r)/ depends on whether the next word begins with a vowel (Linking-R). The table includes only British RP usage; in other varieties, and in fast speech, other weak forms may be heard. The numbers refer to the notes after the table.

TABLE 13.17 WEAK FORMS OF FUNCTION WORDS

Spelling	Strong form	Weak forms	Note	Examples	
<b>AUXILIARIES</b>					
am ('m)	/æm/	/əm, m/		What am I doing? I'm tired.	/ˈwɒt əm aɪ 'duːɪŋ/ /aɪm 'taɪəd/
is ('s)	/ɪz/	/z, s/	1	Jim's at home. Mike's alone.	/ˈdʒɪmz ət 'hoʊm/ /'maɪks ə'loʊn/
are ('re)	/ɑ:(r)/	/ə(r)/		Dogs are nice. Those're new.	/ˈdɒgz ə 'naɪs/ /'ðoʊz ə 'njuː/
was	/wɒz/	/wəz/		Jane was ill.	/ˈdʒeɪn wəz 'ɪl/
were	/wɜ:(r)/	/wə(r)/		My books were here.	/maɪ 'bʊks wə 'hɪə/
do	/duː/	/də/	2	Why do they care?	/ˈwaɪ də ðeɪ 'keə/
does	/dʌz/	/dəz, dz/		How does Ben know?	/ˈhaʊ dz 'ben 'noʊ/

have ('ve)	/hæv/	/(h)əv/ /v/	3,9	The shops have closed. They've eaten.	/ðə 'ʃɒps əv 'kloʊzɪd/ /ðeɪv 'i:tɪn/
has ('s)	/hæz/	/(h)əz/ /z, s/	1,3,9	The race has begun. Joe's arrived.	/ðə 'reɪs əz brɪ'gʌn/ /dʒoʊz ə'raɪvd/
had ('d)	/hæd/	/(h)əd/ /d/	3,9	Jack had lost it. She'd seen them.	/'dʒæk əd 'lɒst ɪt/ /ʃɪd 'si:n ðəm/
can	/kæn/	/kən, kn/		Sue can do it.	/'su: kn 'du: ɪt/
could	/kʊd/	/kəd/		Liz could help you.	/'lɪz kəd 'help ju/
must	/mʌst/	/məs(t)/	5	The boys must practise.	/ðə 'bɔɪz məs 'præktɪs/
shall	/ʃæl/	/ʃl/		What shall I do?	/'wɒt ʃl aɪ 'du:/
should	/ʃʊd/	/ʃəd/		I should think so.	/aɪ ʃəd 'θɪŋk sɒʊ/
will ('ll)	/wɪl/	/əl, l/		That'll do.	/'ðæt l 'du:/
would ('d)	/wʊd/	/wəd, əd/ /d/		Tom would read it. They'd be flattered.	/'tɒm wəd 'ri:d ɪt/ /ðeɪd bi 'flætəd/

### PERSONAL PRONOUNS

he	/hi:/	/(h)i/	3	Does he know?	/'dʌz i 'noʊ/
her	/hɜ:(r)/	/(h)ə(r)/	3	She needs her books.	/ʃi 'ni:dz ə 'bʊks/
him	/hɪm/	/(h)ɪm/	3	I've met him.	/aɪv 'met ɪm/
his	/hɪz/	/(h)ɪz/	3	He needs his books.	/hi 'ni:dz ɪz 'bʊks/
them	/ðem/	/ðəm, ðm/		We knew them well.	/wi 'nju: ðm wel/
us	/ʌs/	/əs/	6	He told us a story.	/hi 'təʊld əs ə 'stɔ:ri/
your	/jɔ:(r)/	/jə(r)/	4	Are your bags here?	/'ɑ: jə 'bægz 'hɪə/
you're	= <i>your</i>		4	Say when you're tired.	/'seɪ wen jə 'taɪəd/

### PREPOSITIONS

at	/æt/	/ət/		Look at Jim.	/'lʊk ət 'dʒɪm/
for	/fɔ:(r)/	/fə(r)/		Wait for Tom.	/'weɪt fə 'tɒm/
from	/frɒm/	/frəm/		He comes from Wales.	/hi 'kʌmz frəm 'weɪlz/
of	/ɒv/	/əv/		A pound of apples.	/ə 'paʊnd əv 'æplz/
to	/tu:/	/tə/	2	She goes to school. We like to dance.	/ʃi 'gəʊz tə 'sku:l/ /wi 'laɪk tə 'dɑ:ns/

### CONJUNCTIONS

and	/ænd/	/ən, n/		Jim and Tom	/'dʒɪm ən 'tɒm/
as	/æz/	/əz/		as good as gold	/əz 'gʊd əz 'gəʊld/
but	/bʌt/	/bət/		nice but hot	/'naɪs bət 'hɒt/
than	/ðæn/	/ðn/	8	younger than Tom	/'jʌŋgə ðən 'tɒm/

that	/ðæt/	/ðət/	9	the book that I bought I know that you can.	/ðə 'bʊk ðət aɪ 'bɔ:t/ /aɪ 'noʊ ðət ju 'kæn/
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**OTHER WORDS**

a	/eɪ/	/ə/		a cat, a unit	/ə 'kæt/ /ə 'ju:nɪt/
just	/dʒʌst/	/dʒəst/		I'm just walking.	/aɪm dʒəst 'wɔ:kɪŋ/
not (n't)	/nɒt/	/nt/	7	isn't, couldn't	/'ɪznt/ /'kʊdnt/
some	/sʌm/	/sm/	9	I'd like some tea.	/aɪd 'laɪk sm 'ti:/
the	/ði:/	/ðə/ /ði/		the book the apple	/ðə 'bʊk/ /ði 'æpl/
there	/ðeə(r)/	/ðə(r)/	9	There wasn't a seat.	/ðə 'wɒznt ə 'si:t/

**13.18** Notes to the table of weak forms.

1. On the voice-assimilation of 's (= *is*, *has*) to /z/ ~ /s/, see 4.20.
2. The schwa-ending weak forms of *do*, *to* /də tə/ are replaced by /du tu/ before a vowel, see 8.22.
3. The initial *h-* of weak forms is usually dropped inside a sentence but must be kept at the beginning, see 4.42.
4. The /j/-beginning function words (*you*, *your*, *you're*) normally cause palatalization, e.g. *did you* /dɪdʒu/, *where's your* /weəʒə/, see 4.28.
5. Final /-t/ may drop in *must*, *can't*, *don't*, etc., see 4.40.
6. *Us* is exceptionally shortened in *let's* (meaning 'we should...'), but not otherwise, e.g. *Please let us* /'let əs/ *in*.
7. *Not* is weak only when contracted to *-n't*; otherwise it is always strong and stressed. Note the exceptional BrE form *cannot* /'kænɒt/.
8. The conjunction *than* /ðæn; ðən, ðn/ must not be confused with the adverb *then* /ðen/, which has no weak form.
9. The following are used in their weak form only in certain meanings but not in others:
  - **do/does, have/has/had** are strong when used as real verbs: *It does* /'dʌz/ *no good*. – *People do* /'du:/ *stupid things*. — *She had* /'hæd/ *a headache*. – *You have to* /'hæftə/ *believe me*. — *It was all I had* /'hæd/ *left*. (= 'all I still possessed'). — *I was upset because Tim had had* /əd hæd/ *an accident*.
  - **that** has three different functions:
    - (1) conjunction (H 'hogy'): weak. *I know that* /ðæt/ *you can do it*.
    - (2) relative pronoun (H 'amely'): weak. *Here's the book that* /ðæt/ *I bought*.
    - (3) demonstrative (H 'az'): strong. *Where's that* /ðæt/ *book?* – *She knows that* /ðæt/.
 Observe the following pair of examples:
 

*I know that* /ðæt/ *cheese is very healthy*. (demonstrative, 'az a sajt')

*I know that* /ðət/ *cheese is very healthy*. (conjunction, 'hogy a sajt')

- **some** has two different functions (see 13.35):

(1) article-like determiner, almost meaningless (H ‘némi, néhány’): weak.

*I’d like some /sm/ tea. – Let’s buy some /sm/ flowers.*

– but when it stands independently (not before a noun but instead of it): strong.

*Tea? Yes, I’d like some /sΛm/. — Nice flowers! Let’s buy some /sΛm/ for Liz.*

(2) contrastive quantifier or pronoun (H ‘bizonyos, egyes(ek)’): always strong:

*Some /’sΛm/ buses go to the station, but not all.*

*This was proposed by some /’sΛm/ student.*

- **there** has two different functions:

(1) meaningless sentence-introducer: weak. *There /ðə/ was no time.*

(2) adverb (H ‘ott’): strong. *I live there /ðeə/. – Oh, there /ðeə/ you are!*

### 13.19 Further remarks on weak forms:

– The following function-words **have no weak form**, no matter how unstressed they are: *did, may, might, in /ɪn/, on /ɒn/, with /wɪð/, off /ɒf/, up /ʌp/.*

– The following are often shortened, but **never weaken their vowel to /ə/**: *is, you, me, he, she, we, they.*

– *Our /aʊə(r)/* has no weak form, but is often smoothed to [ə] or [ɑ:], see 8.27.

– *I* is normally /aɪ/, often shortened to [a] or [ʌ] in fast speech (but not weakened to /ə/).

Let us mention a few **other weak forms**, not included in the table because they are less frequent, or regarded as not quite standard or “received”.

– *Them* is often replaced colloquially by /əm/: *I like ‘em.*

– *You* is often weakened to /jə/, which may be spelt phonetically as “ya”, e.g. *Whaddaya say?* (= What do you say?); *How d’ya do?* /’hʌʊdʒə ‘du:/.

– *My* is sometimes pronounced with /i/ or /ə/, e.g. *my Mum, myself.*

– *Of* can lose its /v/ and be shortened to /ə/, which may be spelt phonetically as “-a”, e.g. *my cuppa /’kʌpə/ tea* (= cup of), *some kinda /’kaɪndə/ scandal* (= kind of).

– *Ain’t /eɪnt/* is substandardly used as the negative of *be* and *have*: *We ain’t happy. She ain’t no children.* It is considered incorrect in educated English.

– *Or* is normally /ɔ:(r)/, weakened only between numbers: *three or four /’θri: ə ‘fɔ:/.*

The following weak forms are ambiguous, because the weakening neutralizes the sound differences, turning different words into homophones. The meaning becomes clear from the spoken context only:

TABLE 13.19 AMBIGUOUS WEAK FORMS

	may be	less commonly	but never
/ə/	<i>a, are, her</i>	<i>of, or</i>	<i>I</i>
/ən/	<i>an, and</i>		<i>in, on</i>
/əv/	<i>have, of</i>		<i>I've, off</i>
/əz/	<i>as, has</i>		<i>is, us</i>
/d/	<i>had, would</i>	<i>do</i>	<i>the</i>
/ðə/	<i>the, there</i>	<i>their, they're</i>	<i>they</i>
/jə/	<i>your, you're</i>	<i>you</i>	
/s/	<i>has, is</i>	<i>does</i>	<i>as</i>
/z/	<i>has, is</i>	<i>does</i>	<i>us</i>

These frequent homophones make understanding English speech difficult, especially for beginners.

### 13.20 Positions where the weak forms are not used.

If any function-word is stressed (especially for contrast, indicated with capitals below), it must be pronounced strong:

He didn't do it ↘AFTER school, he did it ↘AT /'æt/ school.

Why do you say I'm not happy? I ↘AM /'æm/ happy!

She says she's afraid of ↘US /'ʌs/!

Such pronunciations are self-evident and do not cause much difficulty to learners.

Auxiliaries are usually stressed at the beginning of a sentence:

Can /'kæn/ I send you my ↗article?      Are /'ɑ:/ Brazilians fond of ↗tennis?

This is not a strict rule; auxiliaries in such position may be unstressed and weak occasionally:

Should /ʃəd/ I print it ↗again?      Do /d/ you ↗know about it?

**13.21** Sentence-final function-words (with one exception, see below) are never pronounced weak. Compare these sentence pairs:

I'm proud of /əv/ this ↘school. ↔ This is the school I'm ↘proud of /əv/.

Who can /kn/ speak ↘Dutch? ↔ I think ↘Tom can /kæn/.

Unstressed function words may need to be strong in the middle of the sentence too:

There's 'no 'hero to be 'proud of /əv/ ↘nowadays.

I 'wasn't 'here but 'Mary was /wɒz/ on ↘Friday.

'Have a 'biscuit. You'll 'find some /sʌm/ in the ↘fridge.

In these examples, *of*, *was*, *some* are unstressed but strong, to indicate the loss of the words that have been removed (by a grammatical transformation called ellipsis): *proud of [a hero]*, *Mary was [here]*, *find some [biscuits]*. In such position function-words behave as “final” from the pronunciation point of view.

There is one exception: the object personal pronouns (*me, her, us, them*) are weak even in final position:

I could Δrecognize them /ðm/. – He Δhates us /əs/. – They adΔmitted her /ə/.

'Tim's 'got a Δletter from him. /'letə frəm ɪm/ (cf. 13.29)

You 'mustn't Δlaugh at them. /...'lɑ:f ət ðm/

We 'all 'feel Δsorry for you. /...'sɒri fə ju/

## NEUTRAL TONIC PLACEMENT

### The “Last Content-Word” rule

**13.22** The rest of this chapter will examine the rules for tonic placement, that is, which word receives the last stress in a tone unit. The place of the tonic can be neutral (i.e. unmarked, non-contrastive), or dislocated (i.e. marked, contrastive). The neutral tonic has no special communicative value, and is prescribed by general rules. The dislocated tonic is placed by the speaker on some other word than where it would normally fall, in order to express some communicative surplus like contrasting, emphasizing or highlighting some element.

The **neutral tonic** generally falls on the last content-word of the tone-unit. This is the “last content-word” rule. For example:

'Pat's 'father is an ex'tremely 'rich Δman.                    I 'hope you can reΔmember them.

'Sue was 'wearing a 'light 'silk Δdress.                    'What 'is it that you're Δfond of?

A'manda 'made some de'licious 'fruit Δsalad.            'What was your umΔbrella like?

'Turn 'left where the 'excaΔvations are.                They 'couldn't Δwait for us.

Our 'children 'go to an 'excellent Δschool.

They 'offered to 'pay but I 'don't Δwant them to.

'Paul's friend 'Tim should have 'bought the Δbread.

It was 'terribly de'pressing when 'John went Δback.

We 'needed some 'apples, so 'Mary Δbrought some.

In some of these examples the last words are function-words, which — as expected — remain unstressed.

Note. Tonic placement is also called “tonicity”. All the above sentences have neutral tonicity.

**13.23** The neutral tonic need not be the most “important” or communicatively most informative word. In the above examples the fact that the father is a *man*, that Sue wore a *dress*, and the children go to *school* is hardly the most informative part of the message, yet the tonic falls on these. Neutral tonic placement in English is quite mechanical: it falls on the last content word, whether that word is “interesting” in any way or not.

English and Hungarian are very different in their neutral tonic placement rules:

'Tim's 'aunt is a 'nice old <u>ʌ</u> lady.	— Tim nagynénje <u>ʌ</u> helyes öreg néni.
The 'others 'weren't <u>ʌ</u> listening.	— A többiek <u>ʌ</u> nem figyeltek.
'When did 'Susie <u>a</u> ʌrrive?	— Zsuzsi <u>ʌ</u> mikor érkezett?

It would be odd to place the tonic on the last words in the Hungarian examples; and it would be equally odd to place them on an earlier word in English. (This is possible, but it counts as dislocated tonic placement, and gives the sentence some extra meaning, see 13.37.) The teacher should be aware that this is one of the major differences between the two languages. Placing the tonic correctly will ensure a communicatively efficient pronunciation even if the sound segments are foreign-sounding, and vice versa: misplacing the tonic may lead to misunderstanding or ambiguity even if the sounds are carefully articulated.

There are two types of regular exception to the rule of the last content-word: (1) when the neutral tonic is on an earlier content-word than the last, or (2) when the neutral tonic is on a function-word. We shall discuss these in the following sections. Though we will speak of the exceptions in great detail, remember that the rule of the last content-word is very powerful and accounts for the tonic of most English sentences.

## Neutral tonic on an earlier content-word

**13.24** When the neutral tonic falls on an earlier content word than the last, the “tail” will naturally contain one or more content-words.

(a) *Final elements of “invisible compounds” do not take the tonic.* When the sentence ends in an “invisible compound” (= initially-stressed compound spelt as two words, 12.38), the final element remains naturally unstressed:

- 'Everybody 'heard the ʌfire alarm.  
 'Jennifer's 'boyfriend is a ʌfolk singer.  
 She 'went to co'llect her ,unemʌployment benefit.  
 I 'put the 'vodka into an ʌorange juice bottle.

*Alarm, singer, benefit, juice, bottle* are unstressed because they do not act as independent words here, it is just the spelling which makes them seem so. The last content-word in these sentences is really the compound.

Things are quite different with finally-stressed compounds (12.40), whose last element is stressed anyway, so it will bear the tonic in sentence-final position, e.g.

- A'manda 'made some de'licious 'fruit ʌsalad.  
 They be'came in'volved with the 'trade ʌnion.  
 I 'bought this cham'pagne 'duty ʌfree.

**13.25** (b) *“Afterthoughts” do not take the tonic.* We may loosely call **afterthoughts** those words that are added by the speaker after the sentence. They are unstressed. In writing they are usually separated by a comma:



It was a 'fascinating Δfilm, *I think*.                      'This is 'not what I Δmeant, *however*.  
 I had 'good imΔpressions, *on the whole*.              He was Δhelpful, *coming to think of it*.

The same goes for **viewpoint adverbials** (or sentence adverbials), which do not express the manner or time of the action but rather the speaker's viewpoint, referring to the whole sentence:

They 'cancelled the eΔxam, *luckily*.                      We 'didn't 'have to Δstay, *happily*.  
 She Δwon, *unfortunately*.                              'Jeremy's a Δpig, *frankly*.

Another kind of unstressed afterthought-like element is **vocatives**. These are names or nouns added to call the attention of the person spoken to:

'This is where I Δlive, *Jennifer*.                      'Meet my Δsister, *Barbara!* (cf. 13.6)  
 I 'don't Δknow, *Professor Jones*.                      'Where shall we Δgo, *children?*

Afterthoughts are treated similarly in Hungarian, and do not cause much difficulty.

**13.26 (c) Common adverbs do not take the tonic.** Common adverbs, which are short or frequent, like *here, there, now, then, only, though, ago, soon, since, yet, again, yesterday, next year*, etc. are unstressed in final position when there is a stressable word before them:

'What's she Δdoing *here?*                              'Jim 'graduated 'two Δyears *ago*.  
 I 'haven't Δbeen *there yet*.                              I'm 'too 'tired to 'go Δswimming *now*.  
 They 'went to the ΔZoo *yesterday*.                      I'll be 'twenty-Δtwo *next year*.  
 The 'situation has Δchanged *since*.                      We'll 'have to 'meet ΔBaxter *soon*.

However, in very short sentences these adverbs become tonic-bearing:

'Wait Δhere.                      'What Δthen?                      I'll 'ask him Δnow.                      'Who's Δthere?

A subgroup of adverbs called adverbial particles (in phrasal verbs like *get up, put off*), behave specially (13.31).

**13.27 (d) "Obvious predicates" do not take the tonic.** Sentence-final predicates (verbs or adjectives) which are obvious or easily predictable from their subject, as they contain no real information, are unstressed. The tonic falls on the subject:

At 'that 'moment the Δbell *rang*.                              'Why's the Δdog *barking again?*  
 'Suddenly a poΔliceman *appeared*.                      The Δrain's *stopped*.  
 Let's 'park where the Δbeach *begins*.                      The Δfire's *gone out*.  
 I 'don't be'lieve what the Δpapers *write*.                      We could 'hear the Δmusic *play*.  
 You 'can't go 'in because the Δdoor's *locked*.                      Your Δcoffee's *cold*.  
ΔTerm's *starting soon*.                              The Δtrain's *coming!*

No emphasis or contrast is meant here: this is the neutral, unmarked way of saying these sentences (cf. 13.40). Hungarian works very differently, so this is a source of difficulty for learners. In Hungarian these situations would be expressed by fronting the predicate: *Megszólalt a..., Megjelent egy..., ...ahol kezdődik a..., Hideg a..., Jön a..., etc.*

## Neutral tonic on a function-word

**13.28** There are cases when the neutral tonic falls on an auxiliary, a preposition, or a pronoun. We will also mention adverbial particles, for they behave somewhat like function-words.

### Neutral tonic with auxiliaries.

- (a) An auxiliary (including the finite forms of *be*) usually has the tonic if there is no further stressable word in the sentence:

'Yes, we Δmay.                      I Δcan, sir.                      I 'think she Δshould.  
I 'wonder 'who she Δwas.                      'Jim 'always Δdoes.                      You 'never 'really Δwill.

This includes questions where the auxiliary is followed by its unstressed personal pronoun subject:

'How ex'pensive Δis it?                      'Where Δam I?                      'How Δare you?  
In 'which 'library Δcan we?                      'What Δwas it?                      'Why Δmust they, really?

Observe that in all the above examples the auxiliary is preceded either by an unstressed subject-pronoun (*we*, *I*, *she*, etc.) or by some other part of sentence: adjective (*expensive*), adverb (*always*), adverbial (*in which library*), question-word (*where*) — but not by its own stressed subject. The auxiliary is followed either by nothing, by an “afterthought” (*sir*, *really*), or by an unstressed pronoun (*it*, *we*, etc.).

- (b) Exception: when the final auxiliary is preceded by its own stressed subject, the tonic falls on the subject and the auxiliary remains unstressed (but strong!):

You 'play 'better than ΔJoe *does*.                      I 'wonder 'when the eΔxam *will be*.  
She 'went 'in when ΔTom *should have*.                      They 'said Δeverybody *must*.  
'That's the 'pub where my Δfriends *are*.                      It 'fits me 'better than Δyours *would*.

This includes cases when the subject is a pronoun, contrastively or emphatically stressed:

I a'rrived 'long be'fore ΔHE *did*.                      'Sue can 'help 'more than ΔWE *can*.

Remember that a final auxiliary is always strong, whether it is stressed or not. Let us overview the various stressings of auxiliaries, using *was* as an example:

The e'xaminer <i>was</i> <u>Δ</u> French.	/wəz/ (unstressed, weak)
'Who <u>Δ</u> was she?	/'wɒz/ (stressed, strong, tonic)
'HE was the 'boss, but 'who <i>was</i> <u>Δ</u> SHE?	/wəz/ (unstressed, weak)
'Was the e'xaminer <u>Δ</u> French?	/'wɒz/ (stressed, strong)
We 'weren't 'there but 'Mary <i>was</i> on <u>Δ</u> Friday.	/wɒz/ (unstressed, strong)
I 'wonder 'who the e <u>Δ</u> xaminer <i>was</i> .	/wɒz/ (unstressed, strong)
I 'wonder 'who she <u>Δ</u> was.	/'wɒz/ (stressed, strong, tonic)
I 'know 'HIM, but I 'wonder 'who <u>Δ</u> SHE <i>was</i> .	/wɒz/ (unstressed, strong)

### 13.29 Neutral tonic with prepositions. — Prepositions very seldom bear the tonic.

- (a) Final prepositions are usually unstressed (but always pronounced in their strong form!). Compare the following examples.

<i>Nonfinal preposition</i> <i>(unstressed, weak)</i> _____	<i>Final preposition</i> <i>(unstressed, strong)</i> _____
She's 'looking at /ət/ the ∇ <u>picture</u> .	— 'What's she ∇ <u>looking</u> at /æt/?
The 'money is for /fə/ ∇ <u>James</u> .	— 'Who is the ∇ <u>money</u> for /fɔː/?
'David 'comes from /frɪm/ ∇ <u>Wales</u> .	— I 'know where 'David ∇ <u>comes</u> from /frɒm/.
'Send it 'out to /tə/ the ∇ <u>students</u> .	— 'Who shall I 'send it ∇ <u>out</u> to /tuː/?

In the following pairs the preposition in the right-hand column behaves the same way: it is strong-unstressed. This is because it counts as “final” in these cases too (see 13.21):

We 'laughed at /ət/ ∇ <u>Tim</u> yesterday.	— 'What did you ∇ <u>laugh</u> at /æt/ yesterday?
He 'spoke of /əv/ a <u>ho</u> ∇ <u>tel</u> .	— The ho'tel he 'spoke of /ɒv/ is the ∇ <u>Ritz</u> .
'Many 'people 'want to /tə/ ∇ <u>see</u> it.	— 'People who 'want to /tuː/ may ∇ <u>see</u> it.

- (b) A sentence-final preposition bears the tonic in short Wh-Questions which contain no main verb:

'Who's it ∇ <u>for</u> ?	'Where ∇ <u>from</u> ?	'Where are you ∇ <u>from</u> ?
'Who ∇ <u>for</u> ?	'What ∇ <u>with</u> ?	'What were they ∇ <u>like</u> ?
'What <u>a</u> ∇ <u>about</u> ?	'Where ∇ <u>to</u> ?	'What's he ∇ <u>at</u> ?

- (c) If a sentence ends in object pronoun + preposition + object pronoun, the preposition is strong-unstressed, the two object pronouns are weak:

'Sue was ∇ <u>throwing</u> them at him. /... 'θrəʊɪŋ ðɪm æt ɪm/
I couldn't ∇ <u>copy</u> them for you. /... 'kɒpi ðɪm fɔː ju/
'Geoff ∇ <u>mentioned</u> it to us. /... 'menʃnd ɪt tuː əs/

It is possible (in fact quite frequent) to place the tonic on the preposition in such cases:

I couldn't 'copy them ∇ <u>for</u> you. /... 'kɒpi ðɪm 'fɔː ju/
'Geoff 'mentioned it ∇ <u>to</u> us. /... 'menʃnd ɪt 'tuː əs/

and especially with longer prepositions:

'Geoff 'told us a∇about it. /'dʒef 'təʊld əs ə'baʊt ɪt/

They di'vided the 'money be∇tween them. /... 'mʌni bi'twiːn ðɪm/

This is difficult for foreign learners, whose intuition would dictate the opposite: weakening the preposition and stressing the object pronouns, so *I couldn't copy them for you* is often mispronounced as \*/aɪ 'kʊdnt kɒpi 'ðem fə 'ju:/.

Note. The infinitive-marker *to* is pronounced exactly like the preposition *to*.

### 13.30 Auxiliaries and prepositions show interesting similarities in their stressing. There are three cases, as shown in the table below.

- (a) When followed by the content-word they belong to, they are unstressed and weak.

- When not so, they are strong; and
  - (b) when preceded by a content-word (or other stressed word), they are unstressed.
  - (c) in very short sentences they may bear the tonic.

TABLE 13.30 NEUTRAL TONIC WITH AUXILIARIES AND PREPOSITIONS

	(a) <i>Unstressed</i> <i>Weak form</i>	(b) <i>Unstressed</i> <i>Strong form</i>	(c) <i>Stressed, tonic</i> <i>Strong form</i>
<i>Auxiliaries</i>	Liz <i>can</i> ↘ <u>dance</u> . Joe <i>was</i> the ↘ <u>boss</u> . I <i>should be</i> <u>sur</u> ↘ <u>prised</u> .	...better than ↘ <u>Liz</u> <i>can</i> . ...who the ↘ <u>boss</u> <i>was</i> . I wasn't, but ↘ <u>HE</u> <i>was</i> .	When ↘ <u>can</u> we? Yes, he ↘ <u>was</u> . The boss usually ↘ <u>is</u> .
<i>Prepositions</i>	He came <i>from</i> ↘ <u>Wales</u> . ...some money <i>for</i> ↘ <u>Joe</u> . ...proud <i>of</i> ↘ <u>Leeds</u> .	Where did he ↘ <u>come</u> <i>from</i> ? Who is the ↘ <u>money</u> <i>for</i> ? ...what I was ↘ <u>proud</u> <i>of</i> .	Where ↘ <u>from</u> ? Who is it ↘ <u>for</u> ? What is she ↘ <u>like</u> ?

**13.31 Adverbial particles.** — An adverbial particle (H 'igekötő') joins a verb to form a phrasal verb: *get up, put off*. The English adverbial particles are: *away, back, down, in, off, on, out, over, through, under, up*. They are normally stressed, and have no weak form.

- (a) Inside a sentence the adverbial particle is stressed.

You should 'get 'up before ↘six.                      I 'couldn't 'ring you 'back on ↘Tuesday.  
They 'put 'off the ↘meeting.                              'Sue was 'coming 'out when she ↘heard us.  
'Could you 'sum it 'up very ↘briefly?              He 'put our 'names 'down in his ↘book.

When at the end of the sentence (followed by nothing or by non-stressable words), an adverbial particle can have two kinds of stressing:

- (b) It is stressed (tonic-bearing!) after a verb or after an unstressed pronoun:

'Get ↘up!    'Take it ↘off!  
The 'meeting was 'put ↘off.                                      I've been 'reading them ↘through.  
'When 'Sue 'heard us she 'came ↘out.                              'Please 'put that ↘down.  
'Why are they 'sending us ↘back now?                              'Shall I 'wrap one ↘up for you?

- (c) It is unstressed after a noun or stressed pronoun. This is the only case when a final adverbial particle is unstressed:

'Take your ↘coat off!    'Tim's 'got to 'call his ↘mother back.  
'Please 'put that ↘gun down.    'Liz 'promised to 'put the ↘children up.  
'How could you 'take ↘HER in?    'Why are you 'taking ↘THAT away?

We should mention that some speakers put the tonic on the final particle even in these cases, treating case (c) identically to case (b), thus 'Take your 'coat ↘off!

The verb before the particle may lose its stress due to rhythmic stress-deletion (13.11):

'Why did 'Tim **hang** 'on after ↘class?                      The 'car 'didn't **break** ↘down.  
We 'left when 'Sue **got** ↘up.                                      I 'couldn't **come** 'out i↘mmediately.

This de-stressing of the verb depends on the rhythm of the sentence and is not obligatory. A phrasal verb is consequently stressed either on both components (*'get 'up*), or just on the particle (*get 'up*).

**13.32 Preposition or adverbial particle?** — One should not confuse prepositions with adverbial particles. For example, *laugh at, deal with* are Verb + Preposition combinations (H 'elöljárós v. vonzatos ige'), while *put off, break up* are Verb + Adverbial Particle combinations, also called Phrasal Verbs (H 'igekötős ige'). The two are different in grammatical behaviour, as shown in the table below. Prepositions are unstressed (except for the very special case in 7a), while adverbial particles are stressed (except for case 4b). A preposition appears in its weak form (if it has one) in case 1a, while adverbial particles have no weak form.

TABLE 13.32 PREPOSITION OR ADVERBIAL PARTICLE?

	(a) Preposition	(b) Adverbial particle
<b>Non-final</b>	(1a) He 'laughed <i>at</i> the $\sphericalangle$ story.	(1b) He 'put 'off the e $\sphericalangle$ xam.
	(2a) He $\sphericalangle$ laughed <i>at</i> it.	—
	—	(3b) They 'broke 'up 'during $\sphericalangle$ August. They 'broke 'up $\sphericalangle$ sadly.
<b>Final</b>	—	(4b) He 'put the e $\sphericalangle$ xam <i>off</i> .
	—	(5b) He 'put it $\sphericalangle$ off.
	(6a) The 'story was $\sphericalangle$ laughed <i>at</i> . 'What did he $\sphericalangle$ laugh <i>at</i> ?	(6b) The e'xam was 'put $\sphericalangle$ off. 'What did he 'put $\sphericalangle$ off?
	(7a) 'What $\sphericalangle$ at?	—

Word orders 1 and 6 are a potential difficulty in pronunciation, since these exist both with prepositions and adverbial particles. The learner has to decide which is which, and stress accordingly. The typical Hungarian mistake is to stress prepositions as if they were adverbial particles: \**He 'laughed 'at the  $\sphericalangle$ story*; and especially in final position: \**'What did he 'laugh  $\sphericalangle$ at?* This is sometimes due to incorrect teaching, which suggests that “*laugh at*” and “*put off*” are similar verbal expressions, when in fact they are quite different. The grammatical analysis is *[[put off] [the exam]]*, but *[[laugh] [at the story]]*.

Adverbial particles, with the exception of *away* and *back*, are also used as prepositions. On the other hand, *at, for, from, of, to, with, without* are only used as prepositions, never as particles.

**13.33** Compare the following examples, illustrating the types discussed above.

<u>Preposition</u>	—	<u>Adverbial particle</u>
She 'went on <u>∇holiday</u> .		She 'went 'on <u>∇talking</u> .
'Joe 'sat on my <u>∇hat</u> .		'Joe put 'on my <u>∇hat</u> .
They 'walked up the <u>∇hillside</u> .		They 'broke 'up the <u>en∇gagement</u> .
'Eric be'lieved in <u>∇Jennifer</u> .		'Eric 'called 'in <u>∇Jennifer</u> .
She 'ran through the <u>∇park</u> .		She 'pushed 'through her <u>∇plan</u> .
'What did 'Joe <u>∇sit</u> on?		'What did 'Joe put <u>∇on</u> ?
'What did you <u>∇sleep</u> in?		'Why did you 'give <u>∇in</u> ?
Our 'vicar is 'well- <u>∇thought-of</u> .		The 'plan was 'well-thought- <u>∇out</u> .

It is possible for a phrasal verb to be followed by a preposition, e.g. *hang on to* ('insist'), *get away with* ('escape'), *go in for* ('enjoy'). The pronunciation of such combinations follows the rules outlined so far: the particle is stressed, the preposition unstressed. Examples:

'Don't hang 'on to this 'stupid i∇dea.                      'Don't hang ∇on to it.  
'What is he 'hanging ∇on to?                                      'Don't hang 'on to ∇THAT!

As an overview of neutral tonic placement with adverbial particles, observe the following sentences, where *up* is an adverbial particle, *for* is a preposition.

I'll 'wrap 'up your <u>∇book</u> .	<u>13.31.a</u>
'Which book shall I 'wrap <u>∇up</u> ?	<u>13.31.b</u>
I'll 'wrap it <u>∇up</u> . I'll 'wrap it <u>∇up</u> for you.	<u>13.31.b</u>
I'll 'wrap your <u>∇book</u> up. I'll 'wrap your <u>∇book</u> up for you.	<u>13.31.c</u>
'Who did you 'wrap the <u>∇book</u> up for?	<u>13.31.c</u>

**13.34 Neutral tonic with pronouns.**

- Personal pronouns (*I, he..., me, him..., my, his...*) are always unstressed in a neutral sentence. Remember especially that the object personal pronouns *him, her, us, them* have their weak form even at the end of a sentence.

- Independent possessive pronouns (*mine, etc.*) are always stressed:

'Yours is 'cheaper than ∇mine.                      'His 'came 'in after ∇theirs did.

- Final *-self* pronouns are tonic-bearing when they are emphatic pronouns (H 'ó maga'), but unstressed when used as reflexive pronouns (H 'magát, magának...). If they are stressed, stress is on the *-self* element. Compare:

<u>Emphatic -self, stressed</u>	<u>Reflexive -self, unstressed</u>
'Liz 'cut the 'bread <u>her∇self</u> .	'Liz <u>∇cut</u> herself.
We 'recognized it <u>our∇selves</u> .	We <u>∇recognized</u> ourselves.
The 'headmaster <u>him∇self</u> will.	'Why don't you <u>∇look</u> at yourself?
We 'asked the 'headmaster <u>him∇self</u> . He should 'know himself <u>∇better</u> .	

**13.35** The words *some*, *any*, *one(s)*, have several stress patterns.

- (a) When used as noun-substitutes (when they stand instead of a noun, not before it) they are usually unstressed. *Some* has its strong form here:

(Tea?) 'Yes, I'd ∇like *some* /sʌm/.

(Nice flowers!) Let's 'buy *some* /sʌm/ for ∇Liz.

(The flowers weren't nice, so) I 'didn't ∇buy *any*. I 'didn't 'buy *any* at the ∇market.

(I needed a new monitor, so) I ∇bought *one*. I 'bought *one* in ∇Leeds.

(I saw some nice tulips, so) I 'bought a ∇blue *one*. I 'bought a 'blue *one* for ∇Sue.

However, they are stressed mid-sentence when they have no attribute before them:

(This monitor is no good.) The '*one* I 'bought in 'Leeds is ∇better.

*BUT*: The '*small one* I 'bought in 'Leeds is ∇better. (attribute *small* before *one*)

(These flowers are not nice.) The '*ones* at the 'market are ∇nicer.

*BUT*: The 'Dutch *ones* at the 'market are ∇nicer. (attribute *Dutch* before *ones*)

(If you need money,) there's '*some* in my ∇handbag.

(If you want an orange,) there's '*one* on the ∇table.

(It's a nice church,) but it 'can't be com'pared to '*any* in ∇Italy.

Bear in mind that when *some* and *any* stand before a noun or noun-phrase as article-like determiners, they are unstressed, and *some* has its weak form (13.18):

I'd 'like *some* /sm/ ∇tea.

Let's 'buy *some* /sm/ ∇flowers.

I 'bought *some* /sm/ ∇red ones.

'Ted 'didn't 'buy *any* /eni/ ∇flowers.

*One* as a numeral is a content-word, always stressed:

(I didn't have money for two drinks, so) I 'bought ∇one.

- (b) *Some* and *any* have another use as contrastive quantifiers or pronouns ('a certain..., not just any kind of...'). In this use they are always stressed, and may even be tonic-bearing:

You can 'grow '*some* /sʌm/ 'flowers in ∇Iceland. (...but not any kind)

You 'can't 'take her ∇ANY /eni/ flowers. (...only a certain kind is suitable)

'*Some* /sʌm/ 'like it ∇hot. (= Certain people...)

I 'don't 'know them 'all but I 'know ∇some. (H 'egyesek, némelyik')

They 'showed a 'few 'types but we 'don't just 'want ∇any. (H 'akármilyen')

## Summary of neutral tonic placement

**13.36** Neutral tonic placement means pronouncing the given string of words without emphasis or contrast.

– Basic rule: neutral tonic on the last content-word.

– Exceptions:

– neutral tonic on an earlier content-word instead of the last:

– final elements of invisible compounds;

– afterthoughts (including viewpoint adverbs and vocatives);

- short and common adverbs; “obvious predicates”.
- final adverbial particles preceded by a stressed object (*Take your  $\nabla$ coat off!*).
- neutral tonic on a function-word:
  - auxiliaries not preceded by their stressed subject (*I  $\nabla$ can.*);
  - prepositions in short Wh-Questions with no main verb (*Who  $\nabla$ for?*);
  - emphatic *-self* pronouns (*He went him  $\nabla$ self.*).

Let us illustrate neutral tonic placement with pairs of sentences differing in the place of the tonic. All these tonics are neutral (= non-contrastive), their place being prescribed by the rules of English, and not by the speaker’s will to satisfy some communicative emphasis or “importance”.

- ‘Jim would ‘like  $\nabla$ two. (*two* = content-word, takes the tonic)  
‘Jim would  $\nabla$ like to. (*to* = function-word, cannot take the tonic, 13.23)
- ‘Sue de’cided to ‘buy  $\nabla$ one. (numeral *one*, ‘hogy egyet vesz’)  
‘Sue de’cided to  $\nabla$ buy one. (pronoun *one*, ‘hogy vesz egyet’, 13.35.a)
- ‘What did your ‘uncle  $\nabla$ like? (*like* = verb)  
‘What was your  $\nabla$ uncle like? (*like* = preposition, 13.29.a)
- ‘What did he  $\nabla$ like? (*like* = verb)  
‘What was he  $\nabla$ like? (*like* = preposition, bears the tonic due to 13.29.b)
- The ‘soldiers were ‘drinking  $\nabla$ water. (*drinking water* = verb+object phrase)  
The ‘soldiers ‘needed  $\nabla$ drinking water. (*d. w.* = invisible compound, 13.24)
- I ‘don’t ‘know Pro’fessor  $\nabla$ Jones. (*Prof. J.* = object)  
I ‘don’t  $\nabla$ know, Professor Jones. (*Prof. J.* = vocative, 13.25)
- The ‘guests ‘went a’way  $\nabla$ sadly. (*sadly* = manner adverb; they were sad)  
The ‘guests ‘went a $\nabla$ way, sadly. (*sadly* = viewpoint adverb; I think it sad, 13.25)
- ‘Who’s  $\nabla$ there? (*there* takes the tonic in a very short sentence, 13.26)  
‘Who’s  $\nabla$ standing there? (*there* = short frequent adverb, 13.26)
- ‘Why’s the ‘dog  $\nabla$ singing? (*sing* = not obvious for a dog, verb takes the tonic)  
‘Why’s the  $\nabla$ dog barking? (*bark* = “obvious predicate”, 13.27)
- I ‘don’t ‘need ‘matches, I’ve  $\nabla$ got some. (*some* = unspecified quantity, 13.35.a)  
I ‘haven’t got ‘all his ‘books, but I’ve got  $\nabla$ some (contrastive quantifier, 13.35.b)
- ‘What ‘shoes did you ‘try  $\nabla$ on? (*on* = adverbial particle, 13.31.b)  
‘What ‘factors does it de $\nabla$ pend on? (*on* = preposition, 13.29.a)
- We ‘tried the  $\nabla$ shoes on. (*on* = adverbial particle preceded by noun object, 13.31.c)  
We ‘tried them  $\nabla$ on. (*on* = adverbial particle not prec. by noun object, 13.31.b)
- A’manda  $\nabla$ knows herself. (reflexive *-self*, ‘ismeri magát’, 13.34)  
A’manda ‘knows her $\nabla$ self. (emphatic *-self*, ‘maga is tudja’, 13.34)



## DISLOCATED TONIC PLACEMENT

**13.37** When we want to emphasize some part of the message, to contrast it with something, or to highlight it as new information, we may place the tonic elsewhere than the above rules would prescribe. Compare:

- (a) 'Tim's 'aunt is a 'nice old ↘lady.  
 (b) 'Tim's ↘AUNT is a nice old lady.

Sentence (a) has neutral, (b) has dislocated tonic placement. A “dislocated” tonic is always nonneutral or “marked” or “focussed”. The speaker wants to emphasize in (b) that it is the aunt, rather than some other relative, who is a nice old lady. He achieves this by putting the tonic on *aunt* instead of the last content word (*lady*) where it would normally fall. The dislocated tonic need not be louder than the other stresses — it is just earlier or later than it would be in the neutral pronunciation. The word that bears the dislocated tonic will be printed in CAPITALS.

Though there is a logical difference between contrast and emphasis, we will consider them to be more or less the same thing in our treatment.

In everyday life people use the word “stress” exactly for this kind of emphasis, and not for the syllabic prominence that “stress” means to the linguist. People say: *The headmaster stressed that our school was a traditional one*, meaning that he laid special emphasis on tradition. (The same is done in Hungarian, where the everyday meaning of “*hangsúly(oz)*” is similarly “emphasis, emphasize”: *Az igazgató hangsúlyozta...*). The layman would say that in sentence (a) above we “didn’t stress anything”, while in (b) we “stressed” that it is the aunt and not someone else. From a linguistic point of view, the word *aunt* is stressed in both (a) and (b); but in (b) it is made emphatic by receiving a dislocated tonic.

Note. Dislocated tonic placement is usually shown in English printing by italicizing the word. Sentence (b) above would be printed as “Tim’s *aunt* is a nice old lady.”

### Dislocated tonic for contrast

**13.38 Lexical contrast.** — The most frequent case of dislocated tonic placement is when we wish to emphasize some word which would not be tonic-bearing otherwise. This is called lexical contrast. Let us take a sentence first in its neutral pronunciation, with neutral tonic:

'Jane 'bought 'three 'rabbits at the ↘market.

Now observe how the tonic may be dislocated, i.e. placed on another word:

↘JANE bought three rabbits at the market. (...not Jennifer or Sue.)

'Jane ↘BOUGHT three rabbits at the market. (...she didn’t just see them.)

'Jane 'bought ↘THREE rabbits at the market. (...not just one or two.)

'Jane 'bought 'three ↘RABBITS at the market. (...not chickens or parrots.)

Even the verb *be*, in its function of meaningful verb, can be lexically contrasted:

(She sounds Welsh to me.) — 'That's because she IS Welsh.

(It tasted like very bad onion soup.) — It WAS very bad onion soup.

Here the verb *be* is lexically contrasted with the verbs *sound* and *taste*.

**13.39** Since the word-order of English is quite rigid, it is seldom possible to rearrange the sentence according to the needs of contrast, as can be done in Hungarian (e.g. *Három nyulat JANKA vett...; Janka a PIACON vett...*). Dislocated tonic placement is therefore an important means in English to express lexical contrast without changing the word-order. If necessary, any word can receive the dislocated tonic, including function-words. For example:

He 'didn't 'do it AFTER school, | he 'did it AT school.

She 'says she's a'fraid of US! (...and not of the dog.)

We have SOME bread left. (...but not very much.)

(Everybody would like to fly,) but 'nobody CAN.

Is she 'travelling 'TO or FROM Frankfurt?

'Susan 'loves 'Gerald 'more than 'HE loves HER.

In the last two examples the words *to* and *he* are also stressed because of the parallel contrast of the two prepositions (*to, from*) and the two personal pronouns (*he, her*).

We should mention specially those cases when, for reasons of contrast, we stress the “wrong” component of a compound (12.45-46), i.e. the final element in an initially-stressed compound, or the initial element in a finally-stressed one. For example:

I su'ppose he's a piANO teacher. (*initially-stressed comp. with neutral tonic*)

He 'isn't a pi'ano TEACHER, (...he's a pianist).

'Why do you 'salt the 'fruit sALAD? (*finally-stressed compound with neutral tonic*)

It's 'not FRUIT salad, | it's CUCUMBER salad!

Another interesting possibility in dislocated tonic placement is to highlight an affix which would not normally take primary stress:

I 'think this is UNcharacteristic of romantic literature.

The 'theatre was 'opened and 'closed and REopened again.

It's a 'catLIKE animal. (...but it isn't a cat.)

All in all, dislocated tonic placement for lexical contrast is not a major difficulty for Hungarian learners since it is self-explanatory, and is also used in Hungarian (compare the *hideg konyha* example in 12.45).

**13.40** The last content-word of a sentence cannot be contrasted in this way because this word bears the tonic anyway. To really emphasize the last content word, we must use other means like extra loudness or extra-high intonation. Alternatively, if English grammar permits it, we may rearrange the word-order to focus attention on this word, e.g. *It was at the MAR-KET that Jane...*

If the last content-word would be neutrally unstressed (being one of the exceptions to the rule of the last content-word, 13.24-27), then putting the tonic on it will obviously count as dislocation and make the sentence sound contrastive. Compare:

Neutral tonic:	'Why was the $\surd$ dog barking?	<u>13.27</u>
Dislocated tonic:	'Why was the 'dog $\surd$ <u>BARKING</u> ?	<u>13.38</u>
Neutral tonic:	We 'went to the $\surd$ zoo yesterday.	<u>13.26</u>
Dislocated tonic:	We 'went to the 'zoo $\surd$ <u>YESTERDAY</u> .	<u>13.38</u>

Compare:

Neutral tonic:	'Why was the 'driver $\surd$ shouting?	last cont.-w.
Dislocated tonic:	'Why was the $\surd$ <u>DRIVER</u> shouting?	<u>13.38</u>
Neutral tonic:	We 'went to the 'zoo on $\surd$ foot.	last cont.-w.
Dislocated tonic:	We 'went to the $\surd$ <u>ZOO</u> on foot.	<u>13.38</u>

**13.41 Verbal modality and Yes/No polarity contrasts.** — The other type of contrast that we can express with a dislocated tonic concerns the mood, tense, or positive/negative value (the “polarity”) of the verb. The two neutral sentences below show these three types of difference:

- (a) Tim will enjoy the performance.  
(indicative mood, future tense, positive polarity)
- (b) Tim wouldn't enjoy the performance.  
(conditional mood, present tense, negative polarity)

As can be seen, this is not lexical contrast, since the verb (*enjoy*) is the same: the speaker is not contrasting one verb with another, but is changing the values of the same verb. In modality and polarity contrast, the dislocated tonic always falls on an auxiliary.

• **(a) Verbal modality (mood and tense) contrast.** — “Mood”, for our purposes, includes not only indicative and conditional, but also meanings expressed by the modal auxiliaries (*can, could, ought to*, etc.). The category “tense” includes all verbal categories like continuous, passive, etc.

- (Will Tim enjoy the performance?) — He  $\surd$ WOULD enjoy it (...if he went to see it.)  
(Has Sue gone to France?) — No, but she  $\surd$ MIGHT go.  
(When will the students write the application?) — They  $\surd$ ARE writing it.  
(Why don't you try the cheesecake?) — I  $\surd$ HAVE tried it, thanks.  
(Have you got a boat?) — We  $\surd$ USED to have one, (...but we sold it.)

In many such sentences the verb may be left out to avoid repetition, which leaves the auxiliary at the end of the tone-unit (similarly to 13.28.a). This makes no difference to stress: the auxiliary still bears the tonic. For example:

- (Will Tim enjoy the performance?) — He  $\surd$ WOULD (...if he went to see it.)  
(Has Sue gone to France?) — No, but she  $\surd$ MIGHT.

• **(b) Yes/No polarity (positive/negative) contrast.** — The other type of non-lexical contrast in verbs concerns polarity, namely, positive (affirmative) versus negative meaning. We may

contrast polarity (that is, we may answer “yes” to “no”, or vice versa) by placing the tonic on the auxiliary:

(Sue can learn it on her own.) — She  $\nabla$ CAN’T learn it on her own.

(You can’t come in because you’re not members.) — We  $\nabla$ ARE members.

(Tom wasn’t one of the examiners.) — ‘Yes, he  $\nabla$ WAS one of the examiners.

(Liz wouldn’t understand my problems.) — Oh, she  $\nabla$ WOULD understand.

(I’m glad you’ve bought the tickets.) — We  $\nabla$ HAVEN’T bought them.

Note. Positive/negative contrast is called polarity contrast by a metaphor taken from electricity, where there are positive and negative “poles”.

**13.42** Modality or polarity contrasts cannot be expressed in English by stressing a lexical verb. If there is no auxiliary (namely, in the indicative simple present or past), the auxiliary *do* has to come in to bear the tonic:

(I think Tim works at a hospital.) — He  $\nabla$ DID work there (...but doesn’t any more).

*AND NOT:* \*He  $\nabla$ WORKED there.

(You should start using this dictionary.) — We  $\nabla$ DO use it.

*AND NOT:* \*We  $\nabla$ USE it.

(Shouldn’t Joe study classical music?) — He  $\nabla$ DOES study classical music.

*AND NOT:* \*He  $\nabla$ STUDIES classical music.

Note that the sentences marked with an asterisk above are only incorrect for modality or polarity contrast, but would be quite correct for lexical contrast, for example:

(Was Tim ill in hospital for so long?) — No, he  $\nabla$ WORKED there.

(Why don’t you throw away this old dictionary?) — We  $\nabla$ USE it!

(Joe teaches classical music, doesn’t he?) — He  $\nabla$ STUDIES classical music.

Lexical verbs cannot bear the tonic in Yes/No polarity contrasts either, so again the auxiliary *do* must be used:

(You don’t like fish and chips, I suppose.) — I  $\nabla$ DO like fish and chips.

(It’s a shame you didn’t write to Liz.) — I  $\nabla$ DID write to her.

(I’m surprised she calls you “baby”.) — She  $\nabla$ DOESN’T call me “baby”!

**13.43** Dislocated tonic placement for modality and polarity contrasts is not difficult for Hungarians when the tonic falls on a modal auxiliary (*can, would, may, etc.*): *He  $\nabla$ WOULD enjoy it.*

However, Hungarians have great difficulty with correct stressing if the dislocated tonic is on a meaningless auxiliary (an “empty operator”): *be, have* or *do*, because it is strange for Hungarians to stress a meaningless word. It takes a lot of practice to learn tonic placements like *We  $\nabla$ ARE members; He  $\nabla$ DOES study classical music; I  $\nabla$ HAVE tried it, thanks.* The typical mistake is to put the tonic on the following meaningful word: *\*We are  $\nabla$ MEMBERS, \*He does  $\nabla$ STUDY..., etc.*

The following sentences illustrate the various cases of dislocated tonic for contrast:

They pro'duce 'plastic  $\sphericalangle$ gloves. (neutral)

- |   |       |
|---|-------|
| (a) They produce $\sphericalangle$ PLASTIC gloves. (...not leather ones.)     | 13.38 |
| (b) They PRO $\sphericalangle$ DUCE plastic gloves. (...but don't sell them.) | 13.38 |
| (c) $\sphericalangle$ THEY produce plastic gloves. (...not we.)               | 13.39 |
| (d) They $\sphericalangle$ HAVE produced plastic gloves. (I've seen them.)    | 13.41 |
| (e) They $\sphericalangle$ DO produce plastic gloves. (...not just plan to.)  | 13.42 |

Note. Dislocated tonic for contrast (lexical contrast and modality contrast, including mood, tense, and positive/negative) is also called “paradigmatic focus”.

## Dislocated tonic for highlighting new information

**13.44** The speaker may consider some part of his sentence as “old” information, known both to him and the listener. If the old information is at the end of the sentence, the speaker will de-stress the words containing it (playing them down as less important, as it were), and move the tonic leftwards to the (end of the) “new” information to highlight it. In such cases there is no contrast involved, not even emphasis; the tonic-bearing word is not opposed to anything, it is just highlighted as new.

In the examples below the *old information* is printed in italics; the dislocated tonic, highlighting the (last stress of the) NEW INFORMATION, is capitalized:

(Was the headmaster angry about it?) — I 'didn't  $\sphericalangle$ SPEAK to the headmaster.

(We only serve Indian food here.) — I  $\sphericalangle$ WANT *Indian*.

(My wife comes from Singapore.) — Oh, I 'grew  $\sphericalangle$ UP in *Singapore!*

(Was it unpleasant?) — It was  $\sphericalangle$ VERY *unpleasant*.

(Tom needs your email address.) — But I've  $\sphericalangle$ GIVEN *him my email address*.

(Does your sister play the piano?) — My 'whole  $\sphericalangle$ FAMILY *play the piano*.

In these cases the old information consisted of words actually repeated from the previous sentence. There are, however, less direct cases, where the fact that the information is “old” (or “given”) does not appear from any words spoken previously but is obvious from the situation or from the hearer's knowledge of the general background. For example:

'Here's the  $\sphericalangle$ CD I promised to bring you.

They 'moved to the 'country when the  $\sphericalangle$ CHILDREN were born.

I 'thought you 'had A $\sphericalangle$ NOTHER suitcase. (...not just this one here.)

(Leeds is a very busy town.) — My  $\sphericalangle$ PARENTS live there.

(I'm the area manager of BP.) — My  $\sphericalangle$ SON works for BP! ('a fiam is')

Note. Highlighting new information is also called “syntagmatic focus”.

In some of these cases Hungarian would use the word ...*is* ‘also’ after the highlighted new information: *a szüleim is...*, *a férjem is...* It is often possible in Hungarian to rearrange the sentence so that the new information comes at the end, and there is no need to bring the tonic

so early: *Nahát, én Szingapúrban nőttem*  $\nabla$ FÖL! *Nekem ott laknak a*  $\nabla$ SZÜLEIM. In other cases, tonic placement is quite different from English: *Én*  $\nabla$ INDIAIT *kérek.*

**13.45 Substitute words for old information.** — Often we do not repeat the exact words of the old information, but replace them with a **substitute function-word**. In the previous section, we could have said *I didn't*  $\nabla$ SPEAK *to him* (instead of repeating *the headmaster*), or *I grew*  $\nabla$ UP *there* (instead of repeating *in Singapore*). This is fairly obvious to foreign learners. However, there are some substitute function words that are difficult for Hungarians, both in grammar and in pronunciation. They are: *so* (for positive statements), *not* (for negatives), *do* (for whole verb phrases). Examples:

(Will they accept your credit card?) — I  $\nabla$ HOPE *so*.

(Can we pay later?) — I'm  $\nabla$ FRAID *not*.

(Who looks after the children when you're working?) — 'Aunt  $\nabla$ JANE *does*.

The speaker may, alternatively, choose to express the old information with **substitute content-words**, usually synonyms, or else words which we know to refer to the things mentioned. These are also unstressed:

(Why's that tall man looking at you?) — I 'went to  $\nabla$ SCHOOL with *the guy*.

(Can you tell me the story of "Pygmalion"?) — I 'haven't  $\nabla$ SEEN *the play*.

(Everyone was talking Chinese to me,) but I 'don't  $\nabla$ SPEAK *the language*.

(This wine is lovely.) — 'Have  $\nabla$ ANOTHER *glass!*

The speaker may "smuggle in" his opinion or judgment through such substitute words.

(Joe ran away) be'fore I could  $\nabla$ ASK *the idiot*.

(Shall we go to the Blue Dolphin Club?) — I  $\nabla$ HATE *that lousy place*.

(Where were you during the revolution?) — I was  $\nabla$ BROAD *in those chaotic days*.

To illustrate all this further, here are a few possible answers to a question.

*Do you know Mr Benton?*

- |                   |  |         |
|-------------------|--|---------|
| Neutral tonic:    | (a) 'Yes, I $\nabla$ <u>do</u> .                           | 13.28.a |
|                   | (b) 'Yes, I $\nabla$ <u>know</u> <i>him</i> .              | 13.34.a |
| Dislocated tonic: | (c) 'Yes, I $\nabla$ <u>KNOW</u> <i>Mr Benton</i> .        | 13.44   |
|                   | (d) 'Yes, I $\nabla$ <u>KNOW</u> <i>the man</i> .          | 13.45   |
|                   | (e) 'Yes, I $\nabla$ <u>KNOW</u> <i>the old drunkard</i> . | 13.45   |

In (c-d-e) the tonic counts as dislocated because it is not on the last content word.

**13.46** An interesting application of these rules can be seen when there is an introductory verb implying uncertainty (*think, hope, feel, say*) followed by an object clause, e.g. *I thought it would rain*. Such sentences have two pronunciations depending on whether the object clause is treated—

- (a) as new information: then the tonic is neutral, on the last content word; or  
 (b) as old information, already “given” and obvious, something expected to be known to the hearer: then the clause is de-stressed, and the tonic goes on the introductory verb.

Compare:

- (1a) I 'thought it would  $\nabla$ rain. (neutral tonic; “it would rain” = new info.)  
 Meaning: ‘it didn’t rain, but I thought it would’  
 = H ‘Azt/úgy gondoltam, hogy esni fog’.
- (1b) I  $\nabla$ THOUGHT *it would rain*. (dislocated tonic; “it would rain” = old info.)  
 Meaning: ‘it actually rained, so I was right’  
 = H ‘Gondoltam/sejtettem, hogy esni fog’.
- (2a) She 'felt she was collapsing. (neutral tonic, “was collapsing” = new info.)  
 Meaning: ‘it was her feeling, but she wasn’t collapsing’  
 = H ‘Úgy érezte, hogy elájul (mintha elájulna)’.
- (2b) She  $\nabla$ FELT *she was collapsing*. (dislocated tonic; “was collapsing” = old info.)  
 Meaning: “she collapsed indeed, and felt it in time”  
 = H ‘(Meg)érezte, hogy el fog ájulni’.

The neutral-tonic pronunciation (1a, 2a) is used when the object clause is offered as new information, answering the question, “what did you think? what did she feel?” — not “what actually happened?”. Interestingly, Hungarian expresses this by applying a forward-pointing word *azt* or *úgy*. In the dislocated-tonic examples (1b, 2b), the object clause is de-stressed to suggest that these things are known to be true and factual. Hungarian expresses this certainty of the object clause by NOT applying a forward-pointing word.

## Summary of dislocated tonic placement

**13.47** A tonic is dislocated if it is not where the rules of neutral tonic-placement would place it. The dislocation can be for **contrast**, that is, to place the tonic on an especially important word (lexical contrast); or on an auxiliary to emphasize or contrast modality or polarity; if there is no auxiliary, *do* must be brought in to bear the tonic. Dislocation can also be done to **highlight new information** by taking stress away from the old information.

The various types of dislocated tonic are listed with a short commentary below. (Each example presents an exchange between two speakers.)

0 (Tell me about your life.) —

I 'got my de'gree in 'seventy- $\nabla$ five.

Neutral tonic on the last content-word (which here is a finally-stressed compound, *sèventy-five*). Noncontrastive, unemphatic sentence; everything is new information.

1 (Did you get your degree in 1965?) —

I 'got my de'gree in  $\nabla$ SEVENTY-five.

Dislocated tonic expressing **lexical contrast**: *seventy* versus *sixty*.

2 (Did you finish school in 1975?) —

I 'got my DEGREE in seventy-five.

Dislocated tonic expressing **lexical contrast**: *getting a degree* versus *finishing school*.

3 (Did you get your degree in 1975?) —

I HAD got my degree in seventy-five; (I was already working).

Dislocated tonic expressing **tense contrast**: simple past versus past perfect.

4 (I suppose you didn't get your degree in 1975, being pregnant and all.) —

I DID get my degree in seventy-five, (but I couldn't begin working).

Dislocated tonic expressing **positive/negative contrast**: *not getting the degree* versus *getting it*.

5 (I think 1975 was a peaceful, happy period.) —

I 'got my DEGREE in seventy-five.

Dislocated tonic for **highlighting new information**: the speaker highlights the new information (*getting her degree*) by de-stressing the old information *seventy-five*. There is no contrast involved here. (Note that this type sounds the same as type 2; this is unavoidable coincidence.)

6 (I think 1975 was a peaceful, happy period.) —

I 'got my DEGREE in that year.

The same as (5), except that here the speaker uses substitute words (*that year*) to express the old information (*seventy-five*).

## SUMMARY OF STRESS IN CONNECTED SPEECH

**13.48** In connected speech not every word is stressed: **content-words** are normally stressed, **function-words** normally unstressed. In transcription those words that are stressed must be stress-marked even if they are of one syllable.

Connected speech consists of **tone-units**. Grammatically a tone-unit is usually a sentence, clause, or longer phrase. Phonetically a tone-unit ends with the **tonic**: this is the last stress, where the voice falls (or rises). Each tone-unit contains one or more feet. A **foot** is a stressed syllable plus the unstressed syllables following it. The first foot of a tone unit may contain no stress: this is the **pre-head**. The unstressed syllables following the tonic are called the **tail**: this may contain whole words, especially when the tonic is dislocated to an early word. The head of the tone unit may be several feet long. The feet (actually, the stressed syllables starting them) tend to follow at regular intervals of time: this is called **stress-timed rhythm**.

When three stresses come close to each other, the middle one may be deleted (**rhythmic stress-deletion**, *Paul's friend Tim*). When a longer word or compound having two



stresses is followed by another stress, its primary stress will shift leftwards onto the place of its secondary (**rhythmic stress-shift**, *afternoon tea*).

All function words tend to be unstressed, and some have **weak forms** which contain no full vowel (or no vowel at all). Those weak forms that may be shown in spelling are called **contracted forms** (e.g. *'ll*). Weak forms are not used in certain positions, especially sentence-finally, except for object pronouns (*him, her, us, them*).

**Neutral tonic placement** is based on the **rule of the last content-word**, with its regular exceptions where the tonic falls on an earlier content-word than the last, or else it falls on a function-word. The speaker may employ **dislocated tonic placement** for contrast or to highlight new information.

In all cases of tonic placement, whatever comes after the tonic is unstressed and belongs to the “tail” of the tone-unit.

— o —

## QUESTIONS FOR REVISION

1. Consider the syllables /ɪz/, /əz/, and /əs/. What can these be the weak forms of?
2. What is the stressing of *Chinese restaurant*? What rules are at work here?
3. List the classes of words that are normally stressed and those that are normally unstressed.
4. When are prepositions stressed, strong-unstressed, and weak-unstressed, respectively?
5. When does English grammar permit stressing a main verb for contrast, and when does it not?
6. What is the tonic?
7. What are the parts of the tone-unit, and which of these may be missing?
8. What is rhythmic stress-deletion, and what kind of word can it affect?
9. Are prepositions and adverbial particles normally stressed or unstressed? When do we find the reverse?
10. What phenomenon is exemplified by *afternoon tea, North Sea oil*?
11. Here are some answers to the question “Who sang at the graduation ceremony?”:
 

JOHN did. – JOHN sang. – JOHN sacrificed himself.

 What is similar and what is different in them?
12. What is a foot in linguistics? How are feet and rhythm related in English?

## CHAPTER 14

### INTONATION

**14.1** In Chapters 11–13 we discussed one component of suprasegmental pronunciation: stress. We now turn to the other suprasegmental component: intonation.

Intonation is the melody of speech, produced by our voice as it rises or lowers from one syllable to the next or within one syllable. While stress operates with modifying the loudness of syllables, intonation operates with modifying their height. The two are connected in the sense that all important elements of intonation are tied to stressed syllables (see [13.5](#)).

Some authors claim that intonation includes all features of connected speech, and so they treat most of our Chapter 13 (including rhythm and tonic-placement rules) under the heading “Intonation”. We prefer a narrower definition in which intonation includes two things only: the melodies or “tones” (with their meanings and functions), and the division of speech into tone-units (that is, where one intonation pattern ends and the next one begins).

Remember that speech has other features like loudness and tempo, and is accompanied by gestures and facial expressions (sometimes called “body language”), all of which are important for communication, but they do not form part of the linguistic system ([11.1](#)).

### THE FORM OF INTONATION

**14.2 Pitch.** — In linguistics voice-height is called pitch (H ‘hangmagasság’). Pitch is determined by three kinds of factors. There are natural factors like sex and age: women and children have a higher pitch than men, and every person has a characteristic pitch. There are paralinguistic factors: an excited speaker will use a higher pitch than someone who is tired or bored. Finally, there are linguistic factors: the pitch may depend on whether we pronounce a question or a command, old or new information, whether we want to be encouraging or neutral. These linguistic factors belong to the field of intonation.

The important thing in intonation is not the actual height of the pitch but the way it changes. The easiest way to demonstrate **pitch change** is by humming. Close your mouth and hum a little tune: *m-m-m-m-m...* What you have produced is a sequence of pitch changes: a melody. Or imagine that your friend says something but you don’t pay attention. You ask for repetition by saying “*Hm?*” — you have produced a rise in pitch. When we speak, the pitch

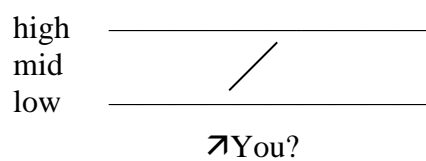
keeps changing slightly all the time, but only the greater or more abrupt pitch changes are linguistically relevant and deserve to be called rises or falls.

Pitch is traditionally described with metaphors borrowed from music: we say that pitch is “high” or “low”, “rising” or “falling”, moving “up” or “down”. Some people (including native speakers!) find these expressions difficult to relate to what they say and hear, even though they may be pronouncing the right thing. People easily confuse a high pitch with a loud stress — these often appear together, but are not the same. The teacher should be aware that intonation can best be taught through imitation and repetition, while explanations often remain obscure or useless to learners.

Note. Intonation is sometimes said to consist of “pitch contours”, since the height of the voice can be shown to describe a wavy line or curve (= a contour).

**14.3** Every speaker has his or her highest and lowest pitch: this is our individual **pitch range** (H ‘magasságtartomány’). Jack’s highest pitch may be lower than Jill’s lowest, but both of them have their highest and lowest. We are not interested in absolute but in relative pitch height: for us “high” means “near the top of that speaker’s pitch range”.

The diagram below shows the syllable “*You?*” spoken as a question. The pitch rises from low to high:



With sufficient training, one can learn to read such diagrammatic notations like printed music; but for the ordinary learner they are too difficult and therefore of little practical help.

English speakers use a wider pitch range than Hungarians: a high pitch in English can be higher and a low pitch lower than in Hungarian. When an English speaker says “*You?*” as above, the end tends to rise higher than in the corresponding H “*Te?*”. For this reason English speech may sound affected and over-emotional (slightly hysterical) to Hungarians, while Hungarian speech (including the English speech of most Hungarians!) may sound monotonous or disinterested to speakers of English.

**14.4** Intonation is a phenomenon of connected speech; it is therefore realized in the tone-unit. As we know, a tone-unit (13.7) is a stretch of speech whose last stress, the tonic (13.4), has pitch change, i.e. the voice falls or rises on that syllable. The tonic is obligatory in the tone-unit; the other components — pre-head, head, and tail (13.8) — may be missing.





The pitch-change attached to a tonic syllable is called a **tone** (H ‘tónus’ or ‘karakterdallam’). The unstressed syllables (the tail) following the tonic never start a different melody: they must continue that of the tonic. The following table sums up what we know about tone-units (see 13.7–9 for details).

TABLE 14.4 INTONATION STRUCTURE OF THE TONE UNIT

WE DE-	'cided to 'come 'back in Oc-	↘to-	ber.
Pre-head	Head	Tonic	Tail
non-obligatory	non-obligatory	obligatory	non-oblig.
no stress	stress(es)	stress	no stress
incomplete foot	one or more feet	one foot	
PRE-TONIC PART		TONIC PART	
TONE - UNIT			

The terms “tone” and “tune” are both used in speaking about intonation. They are often interchangeable, but there is a slight difference. **Tone** refers to the pitch change starting on the tonic, while **tune** (= melody) refers to the intonation of the whole tone-unit from beginning to end, including the tone. “Tune” is really the same as “intonation-pattern”.

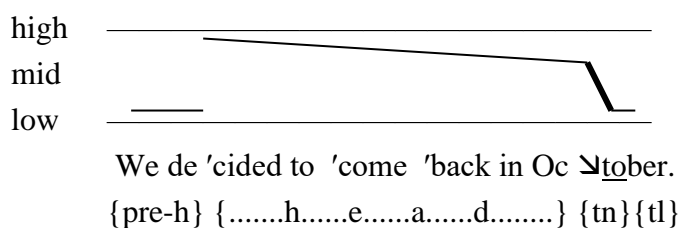
**14.5** We distinguish four tones in English, of which one is falling, three rising. They are: fall, fall-rise, low rise, high rise. They are displayed in the table below.

Type	Name of tone	Diagram	Example	Meaning
<i>Falling</i>	Fall		↘Blue	neutrality, definiteness, finality
<i>Rising</i>	Fall-rise		↘↗Blue	implication; softening; old info
	Low rise		↗Blue	encouragement; show of interest
	High rise		↗Blue	inquiry; Yes/No question

In 14.12–22 we shall illustrate each tone, together with the typical meanings or communicative situations in which it is used. It must be said, however, that speakers have considerable freedom in choosing the tone, so there is no one-to-one correspondence between a particular meaning or attitude and a particular tone.

Note. Tones are also called “nuclear tones”.

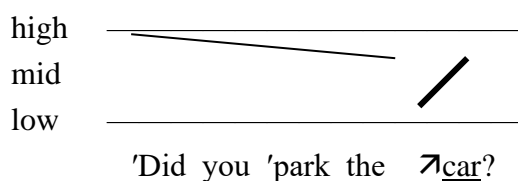
**14.6** Intonation can be represented in diagrammatic form, with lines actually depicting the rising or falling of the voice. The tone (= the pitch change on the tonic syllable) will be shown with a thick line.



The following points deserve comment:

- The pre-head (*We de-*), containing only unstressed syllables, is spoken at a low pitch.
- The head (*-cided to come back in Oc-*) begins with a high pitch, and gradually becomes lower as we proceed towards the tonic (“downdrift”, see 14.8)
- The tonic (*-to-*) has the only radical pitch change: the tone starts here. The height of the voice suddenly changes on this syllable. (Our example has a falling tone).
- The tail (*-ber*) adds nothing to the intonation, it simply continues where the tonic has pushed it (in this case at a low level).

**14.7** The next example, *Did you park the car?* has a rising tone, realized on one syllable (*car*), as there is no tail. There is no pre-head either. The head starts high, the pitch descends gradually as far as the end of the head; there the pitch suddenly breaks its descent, and rises from low to high on the tonic syllable:



The falling or rising nature of the intonation of a tone-unit is determined by the tonic. If the tonic has a falling tone, we call the whole intonation falling, no matter where it began or what happened in the pre-head or head. If the tonic is rising, we call the whole intonation rising, though the sentence may actually end on a lower pitch than where it began. The above sentence, phonologically speaking, has rising intonation. Phonetically, however, the head (*Did you park the*) descends rather than rises; and the rise on *car* ends lower than the starting-point of *Did*, so this whole sentence actually closes on a lower pitch than where it began. Still, the rising tone hallmarks the intonation (the whole tune) as “rising”.

**14.8 Downdrift.** — The gradual lowering of the pitch within the intonation’s head is called downdrift (H ‘lesodródás’). This descent does not count as falling intonation. It is a natural phenomenon found in all languages: the pitch becomes lower as we approach the end of the tone unit, probably because we have less air in the lungs than at the beginning.

Compare the examples again: the downdrifting heads are highlighted with parallel lines:



We de 'cided to 'come 'back in Oc  $\searrow$ tober.



'Did you 'park the  $\nearrow$ car?

It can be seen that both sentences have the same downdrift in their heads. This has no further significance: the first sentence has falling intonation, the second rising, because their tonics are falling and rising respectively.

Note. Downdrift is also called “declination” (H ‘lehajlás, dőlés’). Do not confuse this term with “declension” (H ‘névszóragozás, deklináció’).

**14.9 The part before the tonic.** — The pre-tonic part of the tone-unit (the pre-head plus the head) is more or less the same in all cases. The unstressed initial syllables (the pre-head) are said at low pitch. The head (beginning with the first stressed syllable) starts high, and descends gradually as far as the tonic regardless of whether the tonic is falling or rising.

It is possible to reverse the pitches in the pre-tonic part and pronounce a high pre-head and/or a low head. This may give a certain colouring to the tone-unit to express shades of attitudes or styles. We do not discuss these possibilities here as they are less important for communication.

In the rest of this chapter we will not discuss the pre-tonic part any more, and concentrate on that part of the tone-unit which bears the tone, that is, the tonic and the tail.

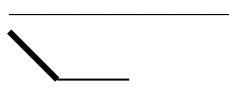
Note. Some textbooks use the lower stress mark / , / for indicating low-pitch stress in the head (and not for secondary stress as we do).

**14.10 The tail.** — If there is no tail, the tone takes place on the single tonic syllable. If there is a tail, the tone spreads out over the tail: the syllables in the tail continue the movement set by the tonic. Compare the following tone-units, the first consisting of a tonic syllable only, the others consisting of a tonic syllable plus a tail. We have chosen a falling and a high-rising tone for illustration:

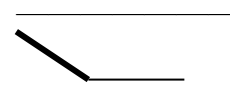
Falling tone:



$\searrow$ You.

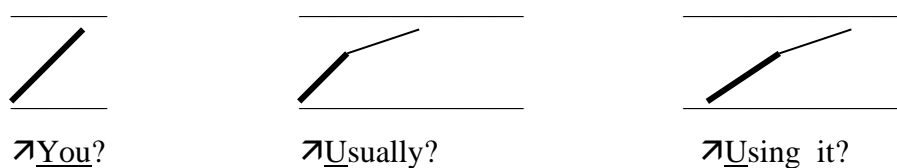


$\searrow$ Usually.



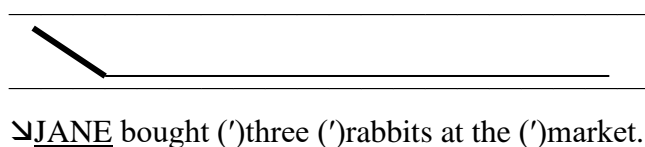
$\nearrow$ Using it.

## High-rising tone:

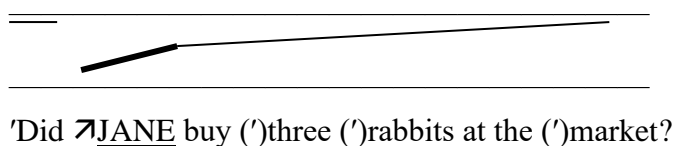


We see that when the tone is falling, the syllables in the tail continue low. When the tone is rising, the syllables in the tail continue to rise. Whatever direction the tonic sets, the tail will continue its movement. The tail is thus not an independent factor in intonation.

**14.11** If the tonic is dislocated to a very early place in the tone-unit (13.38), the tail becomes very long. This does not really affect the intonation pattern: the tone still starts on the tonic, and the remaining syllables (no matter how many) continue the direction set by the tonic. The only allowance we have to make — this is fairly obvious and causes no difficulty — is that some of the original stresses in the tail are “revived” to give the text some rhythm (these are shown with a stress mark in brackets):



In such cases it is questionable whether we can still speak of a “tonic foot”, i.e. whether we can consider the whole tonic-plus-tail as forming one foot. But this is more a theoretical and terminological problem; learners usually have no difficulty with de-stressing very long tails. What they do find difficult is to raise the pitch on a long tail if the tonic has a rising tone, e.g.

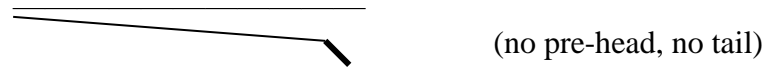


This problem will be further discussed under the high rise (14.21).

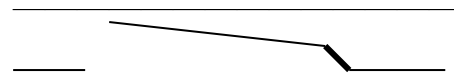
## THE TONES AND THEIR MEANINGS

### The falling tone

**14.12** The voice falls from high (or mid) to low. If there is a tail, its syllables continue low. Examples in diagrammatic notation (see also 14.5).



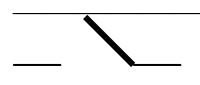
'Jeremy 'played the guintar



but the 'others 'weren't listening



there's an in'credibly 'ugly petrol station.



(no head)

I remember.

**14.13** The falling tone has the following meanings:

(a) **Definiteness.** The fall is the most neutral intonation. In statements and commands it expresses definiteness and finality. It suggests that what we say is plain new information. (In Chapter 13 there are plenty of examples for this.)

- Statements:

There 'isn't e'nough time.

Her 'book was 'published in French.

'Right be'hind the 'blue cupboard.

We're 'all ,vegetarians.

- Commands (serious, businesslike, not too polite):

'Keep your 'door 'safely locked.

'Open your 'books at 'page fifteen!

But 'don't 'put any sugar in it!

'Let's 'try the other one.

- Another use of the falling tone is in **exclamations** (to express surprise, etc.). This is an extension of the “definiteness” meaning: the speaker is (or pretends to be) sure about what he is expressing:

'What a 'marvellous picture!

'How 'utterly disgusting!

'What ex'citing smells!

'Oh, lovely!



**(b) Wh-questions.** The fall is regularly used for one category of questions, namely Wh-questions (i.e. those beginning with a question-word such as *who*, *what*, *where*, *how*, etc.):

'What's her 'new a\address?

'Who'll be the 'chief \editor?

'How did A'manda 'find 'out the \truth?

'Why was 'everybody up\set about it?

\When?

'What \size are they?

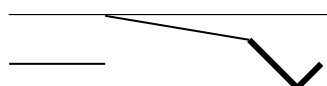
To sum up: the fall is used for statements, commands, exclamations and Wh-questions. It is used similarly in Hungarian, so it causes no difficulty to learners. The problem is, rather, that English uses the fall less often, replacing it with a rise, especially the fall-rise or the low rise.

## The fall-rise tone

**14.14** The voice falls from high (or mid) to low, then immediately rises to mid-high again. Thus the second half of this tune is a low rise. If there is a tail, its syllables continue to rise to mid-height. Examples in diagrammatic notation:



\Fine



You can 'ask the \porter.



The \first part is interesting.

The fall-rise tone may seem to be exotic or difficult, but in fact it is quite easily learnt by Hungarians. However, they tend to use it much less than the English, because it sounds “affected” or “mannered” to the average Hungarian ear.

**14.15** The fall-rise has the following meanings:

**(a) Implications.** The fall-rise often expresses that what we say is not the whole truth. It suggests that the speaker has reservations, does not agree completely, or is hesitant to plainly say his opinion: “yes, but...” We call it implicational because it implies something that remains unsaid (this is added with three dots in the examples below).

(Shall we go by car?) — \Fine. (...but I won't drive)

(Who designed the building?)

— You can 'ask the \porter. (...but I don't think he'll know)

I 'don't keep 'track of 'Tim's \hobbies. (...I'm not his girlfriend, after all)

We 'like to \travel. (...but not to silly places like that)

Such sentences often have a dislocated tonic:

The \FIRST part is interesting. (...but the rest isn't)

\JOYCE was Irish. (...if you are looking for an Irish writer)

I 'wouldn't 'mind \FISH for dinner. (but I can eat whatever I get)

In Hungarian such implications are often expressed by fronting the emphasized element and adding *az(t)*: *A portást, azt megkérdezheted. Az első rész, az érdekes. Utazni, azt szeretünk.*

The implication conveyed by the fall-rise is often that **something should be done**:

\ʔDinner's ready! (...so come and sit down)

I 'can't \ʔlift this. (...so please help me)

**14.16** The implicational use of the fall-rise can be exploited with negative sentences, where it is able to express **partial negation** (b), implying that the thing is true on the whole, but some part of it is negated. While ordinary full negation (a), expressed by the fall, simply means “no”, the partial negation expressed by the fall-rise means “yes, but...”. Compare:

- (a) I 'won't 'eat \ʔan~~ny~~thing. (full negation; H 'nem eszem semmit')
- (b) I 'won't 'eat \ʔan~~ny~~thing. (partial negation; H 'akármit nem eszem meg')
- (a) We 'haven't 'heard them \ʔon~~ce~~. (full negation; H 'egyszer se hallottuk')
- (b) We 'haven't 'heard them \ʔon~~ce~~. (partial negation; H 'nem egyszer hallottuk')
- (a) It 'wasn't 'published because a \ʔwoman wrote it.  
(full negation; it wasn't published; H 'azért nem jelent meg, mert nő írta')
- (b) It 'wasn't 'published because a \ʔwoman wrote it.  
(partial negation; it was published; H 'nem azért jelent meg, mert nő írta')

**14.17** An interesting intonational distinction is made in English between general prohibitions and on-the-spot negative commands. A **general prohibition** (a) prevents people from doing something, and is spoken with falling intonation. An **on-the-spot negative command** (b) is used when we catch people doing something and want them to stop; this is spoken with a fall-rise intonation (with the tonic often dislocated to the word expressing the offence). This is another implicational use of the fall-rise, the implication being: “...I see you are doing it!”.

- (a) 'Take your 'boots off when you 'come \ʔin. (general rule of the house)
- (b) 'Take your \ʔBOOTS off when you come in! (...or go out with your dirty boots *now*!)
- (a) 'Don't 'speak Hun'garian during \ʔpairwork. (instructions before pairwork)
- (b) 'Don't 'speak HUN\ʔGARIAN during pairwork! (Stop doing that, children!)
- (a) 'Don't 'take the 'medicine too \ʔoften. (said by doctor when prescribing medicine)
- (b) 'Don't 'take the 'medicine too \ʔoften! (said by wife who sees husband taking it again)
- (a) You can 'only 'smoke out \ʔside. (general instruction, describing smoking rules)
- (b) You can 'only 'smoke out \ʔside! (reproach to someone who is smoking inside)

This (b) use for on-the-spot negative commands is really an extension of the “something should be done” meaning, see [14.15](#).

**14.18 (b) Softening.** Another use of the fall-rise is to soften the directness of commands or questions, which might sound rude or too official with the falling tone.

- Polite commands (said rather like requests):

\ʔWait a minute!

'Tell me 'how it \ʔhappened.

'Keep your \ʔpassports ready!

'Have a \ʔanother one!

- Polite Wh-questions:

'What's your \u025cname?

'How \u025cold is she?

\u025cWhen?

'What \u025csize are they?

'Why are you 'interested in \u025cuniforms?

'Where's \u025cJennifer?

(c) **Old information.** The fall-rise can also express that some information is “old” (or “given” or “known”), serving as background to the “new” information, which takes a falling tone. The old-information part may be before or after the new-information part.

In our 'back \u025cgarden | there are 'tulips and \u025croses. (old + new)

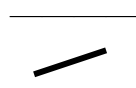
He's got 'no 'time for the \u025cchildren | with his 'new \u025cjob and all. (new + old)

To sum up: the fall-rise is used for implications (including partial negation and on-the-spot negative commands); to soften a command or a Wh-question; and to express old information.

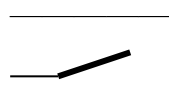
## The low rising tone

**14.19** The voice rises from low to mid. If there is a tail, its syllables continue at mid-height.

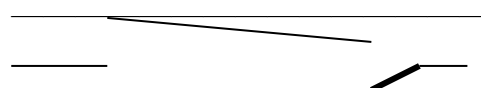
Examples in diagrammatic notation:



\u025cBlue.



She \u025cknows.



We could 'ask them 'over for \u025ccoffee.

The use of the low rising tone is the most difficult for Hungarians, because it operates so differently in the two languages. In Hungarian it is only used for questions, whereas in English it is hardly ever used in that function (see 1.7), so learners easily misinterpret English low-rising sentences as questions, which they are not.

**14.20** The low rise is mostly used in response to what someone else has said. It expresses the following meanings or attitudes:

(a) **Indifference.** Statements said with the low rise may suggest, “What I’m saying is true but I don’t think it’s important or interesting or relevant.” It sounds as if the speaker was shrugging while saying these sentences.

(What’s your favourite colour?) — \u025cBlue. (What a childish question.)

(I suppose you don’t dare to tell your wife.) — She \u025cknows. (It makes no difference.)

(We’ll have to invite the new neighbours.) — We could 'ask them 'over for \u025ccoffee.

(Did you enjoy the performance?) — It was all \u025cright. (Nothing special.)

(Just imagine, I walked three miles!) — \u025cReally? (That’s not very much.)

(b) **Encouragement.** Another use of the low rise is to encourage or comfort the hearer and to sound reassuring. It sounds as if the speaker meant, “no problem, nothing serious, relax”.

- Encouragement to do something, not to worry, etc. Often used to children.

'Don't \u025cworry.

I 'don't \u025cmind.

We 'shouldn't be a\u025cfraid.

'Try again!                      'Speak louder!                      'Here's your ,questionnaire.  
 There's 'still time.                      It 'won't hurt.                      You can 'always borrow one.

- Encouragement to continue speaking ("I'm listening, go on!"):

Yes.                      Is 'that so?                      'That's interesting.  
No. (but tell me)                      Funny.                      True.

(c) **Greetings, thanks, apologies.** These, if they were said with the fall, would sound too serious, almost threatening, so they are normally pronounced with the low rise, in the "encouraging" fashion:

'Good morning.                      'How are you?                      'Bye-bye.  
 I'm sorry.                      Excuse me.                      'See you soon.  
Thank you.                      You're welcome.                      I apologize.  
 I 'beg your pardon? (= What did you say?)


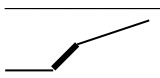
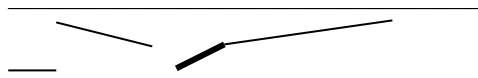
**14.21 (d) Subordinate information.** The low rise can express that something is subordinate, i.e. of secondary importance compared to the main message in the sentence. The main message takes the falling tone, the subordinate information is added in a separate tone-unit with a low-rising tone (see 14.38 for more detail):

I can 'tell you the details, | if 'anyone's interested.  
 'Sue's 'promised to write it, | on 'Wednesday or Thursday.

To sum up: the low rise is mostly a response, something added to other sentences. It can express indifference and lack of importance. Due to its "lightness" it can also be used to express encouragement, greetings and similar social formulae. It is not normally used for questions.

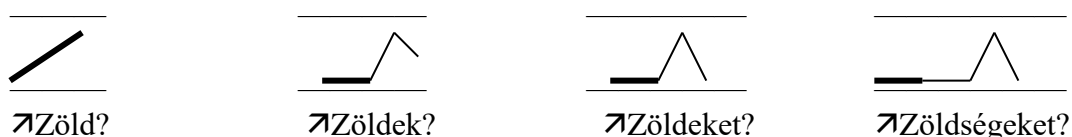
## The high rising tone

**14.22** The voice rises from low to high. If there is no tail, the whole high rise is accomplished on the tonic syllable. If there is a tail, the tonic begins the rise and the syllables of the tail continue it, so the whole high rise is accomplished on the tonic plus the tail together. Examples in diagrammatic notation:

 You?                       To Jennifer?                       And 'is she permanently there?

The high rise is the only tone which is difficult for Hungarians to produce. If there is no tail (so the rise takes place on a single syllable), it is its height which is difficult. One-syllable rises do occur in Hungarian, e.g. *Te?*, *Zöld?*, but they do not rise so high as their English counterparts. Consequently, the "high" rise produced by Hungarians will sound as a low rise to English speakers, which may communicate indifference and boredom, or not asking a question at all.

**14.23** The difficulty is even greater if there is a tail: as the English rise is distributed over the tonic plus the tail, sometimes four or five or six syllables keep rising steadily. Hungarian, however, does not allow rising syllable sequences, so if there is a tail syllable, it begins to fall (see *Zöldek?* below), and if there are two tail syllables, the last one has to be low (*Zöldeket?*). Thus the Hungarian “rising” tune only ends in a real rise if the last syllable is the tonic (e.g. *Ez vajon zöld?*); otherwise the last syllable has to fall. If there are two or more syllables after the tonic (*Zöldeket? Zöldségeket?*), only the penult will rise and the ult will fall back. This is the characteristic Hungarian “rise-fall”. For example:



If there is a tail in the English high rise, Hungarian learners will tend to use their rise-fall. This is dangerous for communication as the English ear will only hear the fall at the end, and interpret the intonation as falling, i.e. not a question. Learners need to practise the steadily rising tails of English high-rising intonation, including very long ones such as the *Did Jane...* example in [14.10](#), or the “please-repeat” questions in [14.29](#).

**14.24** The high rise is mostly used in **Yes/No questions** (i.e. those questions that do not begin with a question-word and expect a yes/no answer):

'Did you 'park the ↗ <u>car</u> ?	'Could I 'bring it 'back on ↗ <u>Saturday</u> ?
'Has 'someone 'set 'off the ↗ <u>fire</u> alarm?	'Is Mr 'Booth 'one of the ↗ <u>e</u> ditors?
↗ <u>A</u> re you?	'Are ↗ <u>Y</u> OU?
↗ <u>B</u> irmingham?	'New ↗ <u>Y</u> ork?

The high rise indicates a true question, as opposed to the low rise, which does not. Compare these two pronunciations of *Really?*, one with low rise and one with high rise:

↗Really? (just a polite way of saying “I see” or “I heard what you said”)

↗Really? (a true question asking for confirmation of something surprising)

The various uses of the high rise with different types of questions will be discussed in [14.27](#) and further sections.

## SENTENCE TYPES AND THEIR INTONATION

**14.25** It is often believed that certain sentence types and certain tones are in a one-to-one correspondence, e.g. that statements always have a falling intonation, and so on. This is an oversimplification, just like thinking that if something happened the day before yesterday, we must use the past perfect tense to express it. Sentence types and intonations are in a similarly complex relationship as actual times and grammatical tenses. Our treatment here is simpli-

fied, following the purpose of the book, but even so we must warn the reader that practically all combinations are possible.

In the examples to follow, only the tonic syllable is marked, the other stresses are not.

## Non-questions

**14.26** First we sum up the intonation of non-questions: statements, commands, and exclamations.

- **Statements** (also called declaratives) can have any of the tones except the high rise.
  - Fall: the normal, neutral tone for making a statement (14.13.a).
  - Fall-rise: statements with implications, including hints that something should be done (*Dinner's ready!*) and partial negations (*I won't eat anything*) (14.15-16). The “old” information part of a sentence can have the fall-rise (14.18.c, 14.39).
  - Low rise: to express indifference or lack of interest (14.20.a). This tone also signals an attitude of comforting and encouragement (14.20.b). Information regarded as subordinate (of secondary importance) also has the low rise (14.21.d).

- **Commands** (also called imperatives) can have any of the tones except the high rise.
  - Fall: serious, businesslike, could sound even harsh and impolite (14.13.a).
  - Fall-rise: softens the directness of a command (14.18.b), often sounding like a suggestion (14.15.a). With negatives, it expresses an on-the-spot negative command to stop doing something “wrong” (14.17).
  - Low rise: even milder, to express encouragement or reassurance (14.20.b).

- **Exclamations** (also called exclamative sentences, including wishes) have the falling tone (14.13.a), even if they are constructed syntactically like questions:

What exciting ↘ <u>smells</u> !	Aren't you ↘ <u>lucky</u> ?!
If only I could ↘ <u>phone</u> her!	I wish you were more ↘ <u>reasonable</u> !
Oh, ↘ <u>excellent</u> !	Doesn't it remind you of ↘ <u>Spain</u> ?!
'Isn't it bi↘ <u>zarre</u> ?!	'Would you be↘ <u>lieve</u> it?!

A subtype of exclamations is “**rebuke**” **questions**, where we repeat a question to show that we find the question unnecessary or insulting.

(Do you know Amanda?) — Do I ↘know her!?! (She's my wife, you idiot!)  
 (Was Liszt Hungarian?) — Was he Hun↘garian!?! (Of course, everybody knows!)  
 (Has Linda protested?) — Has she pro↘tested!?! (She made an awful scandal!)

Hungarian rebuke questions have the form *Még hogy...!?* or *Mi az, hogy...!?*:

(*Te ismered Amandát?*) — *Mi az, hogy ismerem!?*

## Questions

**14.27** Questions (also called interrogatives) can have any of the tones except the low rise. The tone depends on their grammatical structure (whether syntactically they have the form of a question) and the communicative situation (whether we are really asking for information). Note that the orthographic question mark is not a safe guide to intonation. The two sentences below are both written with a question mark because they are grammatically questions, even though the first has high-rising intonation (being a Yes-No question), the second has falling intonation (being a Wh-question):

Are you free on ↗Saturday?                      What are you doing on ↘Saturday?

The question mark does not represent the suprasegmental features but the grammatical category of “question”.

The most typical kind of questions, **Yes/No questions**, have the high-rising tone (14.24):

'Did you 'park the ↗car?                                      'Could I 'bring it 'back on ↗Saturday?

This is also true for questions that are syntactically statements (“declarative questions”), or just single words:

You were ↗ <u>there</u> ?	↗ <u>Birmingham</u> ?	He 'speaks Chi↗ <u>nese</u> ?
You can 'sleep ↗ <u>standing</u> ?	'New ↗ <u>York</u> ?	A'manda is ↗ <u>married</u> ?
A ↗ <u>petrol</u> station attendant?	↗ <u>Well</u> ?	'Fifteen ↗ <u>times</u> ?

**14.28 Wh-questions** normally have the falling tone (14.13.b):

'What's her 'new a↘ddress?                                      'Who'll be the 'chief ↘editor?

In this case tone choice is based on the same principle as in Hungarian, where Wh-questions also have the intonation of statements. Compare:

- |                                  |  |
|----------------------------------|--|
| (1) <i>Kétszer vizsgáztál.</i>   | statement; statement intonation (fall)           |
| (2) <i>Kétszer vizsgáztál?</i>   | Yes/No question; question intonation (rise-fall) |
| (3) <i>Miért nem vizsgáztál?</i> | Wh-question; statement intonation (fall)         |

That is, the Wh-question (3) has the same intonation as the statement (1), as opposed to the Yes/No question (2). This is exactly as in English. Yet learners often make the mistake of using a high-rise tone (or the Hungarian rise-fall, which they feel to correspond to it, cf. 14.23) even for Wh-questions, probably in an effort to sound more “question-like”.

**Polite Wh-questions** can be softened with the fall-rise tone (14.18.b):

'What's your ↘↗name?                      'How ↘↗old is she?                      'Where's ↘↗Jennifer?

Hungarian has a similar possibility of softening Wh-questions with a rising intonation: *Kinek lesz a görög salá↗ta?* Example (3) above may also be pronounced this way, to sound “nice” or even a bit threatening: *Miért nem vizsgáz↗tál?*

**14.29 “Please-repeat” questions.** These are Wh-questions asking for the repetition of something just heard. We use this form when we haven't understood something, or else if we find it suprising or shocking (“we can't believe our ears” — indicated in writing with the

double question mark). Such “please-repeat” questions have the high-rising tone, with a dislocated tonic on the question word. This can produce extremely long rising tails.

(Jennifer is in Kuala Lumpur.) — ↗WHERE's Jennifer??

(Watson will be the new chief editor.) — ↗WHO'll be the new chief editor??

(My girlfriend is thirteen.) — ↗HOW old is she??

(They are going to finish at Michaelmas.) — ↗WHEN are they going to finish??

The question-word bearing the tonic can also remain in the syntactic place where the questioned element stands in the statement. In this case the word order is not question-like:

(She bought herself a platypus.) — She bought herself a ↗what?

(You could marry my cousin Letitia.) — I could marry ↗who?

(Is there a train to Aberystwyth, please?) — You want a train ↗where?

(We've got tickets for the 2am performance.)

— You've got tickets for ↗WHICH performance?

**14.30 Echo questions.** An echo question repeats (or “echoes”) the other speaker’s question instead of giving an answer. We use this form when we need time to think, or want to avoid answering. (We can indicate this in writing with three dots after the question mark.) Echo questions may be of either type (Yes/No or Wh-); they always have a high-rising tone.

(Why don't you go to college?) — Why don't I go to ↗college?...

(Does Cleo love you?) — Does Cleo ↗love me?...

(What's their most popular record?) — What's their most popular ↗record?...

Hungarian echo questions often begin with *Hogy*:

(*Miért nem tanulsz tovább?*) — *Hogy miért nem tanulok tovább?*...

Let us compare the various question intonations, using the single-word question *Where?*

(1) Ordinary Wh-question: falling tone.

(I know a much better pub.) — ↘Where? (neutral question)

(2) Polite Wh-question: fall-rise tone.

(I know a much better pub.) — ↘↗Where? (“Oh, really? Tell me!”)

(3) “Please-repeat” question: high-rising tone.

(There's a better pub in Hoggenboggle Street.) — ↗Where?? (“Sorry, couldn't hear.”)

(4) Echo question: high-rising tone.

(We could go to a pub, but where?) — ↗Where?... (“Mmm, let me think.”)

**14.31 Tag questions** (also called question-tags). These are short questions attached to the end of a statement, e.g. *...isn't it? ...could they?* The base sentence is always spoken with a falling tone. Tag questions always form a separate tone unit, and are marked off in writing with a comma. They have different intonations depending on their structure and meaning. The usual type of tag question is positive after a negative sentence, and vice versa: negative after a positive sentence. We call this type “opposite-polarity tag”. But there are tags which



agree in polarity with the base sentence (positive after positive, negative after negative); these are called “same-polarity tags”.

• **Opposite-polarity tag questions** always suppose that the hearer agrees.

(a) They have the **falling** tone if the speaker is certain of what he is saying, and does not expect an actual answer. The Hungarian equivalents are: *hát; igen; ugye; bizony; lám*.

(What a fine view!) —  $\downarrow$ Lovely, |  $\downarrow$ isn't it?

(Liz speaks English perfectly.) — She doesn't sound  $\downarrow$ foreign, |  $\downarrow$ does she?

(What trains are there?) — We could check on the  $\downarrow$ internet, |  $\downarrow$ couldn't we?

(I've thrown out those grapes.) —  $\downarrow$ Yes, | they were too  $\downarrow$ sour, |  $\downarrow$ weren't they?

(b) They have the **high-rising** tone if the speaker is not quite certain of what he is saying, and expects a confirming answer. The Hungarian equivalents are: *nem(de)? igaz? ugye? jól mondom?*

There's a  $\downarrow$ nother entrance, |  $\uparrow$ isn't there?

Your son plays the  $\downarrow$ chello, |  $\uparrow$ doesn't he?

Dr Brown hasn't come  $\downarrow$ in yet, |  $\uparrow$ has she?

They don't ask for your  $\downarrow$ PASSPORT at the bank, |  $\uparrow$ do they?

All this is quite easy for Hungarian learners to understand. What they find hard to master is that the base sentence is a tone unit in its own right despite the fact that it ends in a comma. Tell them it has to sound as if it ended in a full stop.

**14.32** • **Same-polarity tag questions** expect no response. They are added to a base sentence which itself is a kind of summary or comment on what someone has said. They always have the **low-rising** tone. The Hungarian equivalents are: *aha; szóval igen/nem; na persze*.

(I rang the shop and they said we could go.) — So they're  $\downarrow$ open, |  $\uparrow$ are they?

(I'd give it another chance.) — You  $\downarrow$ would, |  $\uparrow$ would you?

(It's almost six o'clock.) — So they won't catch the  $\downarrow$ plane, |  $\uparrow$ won't they?

(Mary insists on inviting Jason.) — She finds him at  $\downarrow$ tractive, |  $\uparrow$ does she?

The same low-rising intonation is used with the polite tag *...will/won't you?*, attached to imperatives. The imperative base sentence has a falling tone:

Help your  $\downarrow$ self, |  $\uparrow$ won't you?

Come and lend a  $\downarrow$ hand, |  $\uparrow$ will you?

**14.33** **Alternative questions.** These offer the hearer a choice between things. The meaning is: you can only have one of them, you must choose. The items are said in separate tone-groups: the first (ones) with a high-rising tone; the last one with a falling tone.

Would you like  $\uparrow$ coffee | or  $\uparrow$ wine | or  $\downarrow$ tea? (you can only have one)

Shall we go to Greece in  $\uparrow$ June | or to Spain in July? (either-or)

Does Margaret work for  $\uparrow$ Tesco | or for Marks and  $\downarrow$ Spencer's?

Alternative questions are really Wh-questions from a communicative point of view, since they do not expect a yes/no answer; this explains the falling tone of their last item.

This is different from **list questions**, where we list things from which the hearer may accept all. In this case we don't offer an alternative; each item is a tone-unit with a high-rising tone:

Shall I lend you an umbrella | or a hat? (you can have both)

Have you been to Paris | or Madrid | or Lisbon? (or perhaps to all these places?)  
Alternative questions, as well as list questions, behave similarly in Hungarian, and do not cause much difficulty.

**14.34 Summary.** The table sums up the sentence types and the tones typically associated with them.

TABLE 14.34 SENTENCE TYPES AND THEIR TONES

Sentence type	Falling tone	Fall-rise tone	Low rising tone	High rising tone
<b>Statement</b>	<ul style="list-style-type: none"> <li>normal 14.33.a</li> </ul>	<ul style="list-style-type: none"> <li>implication 14.15.a</li> <li>partial negation 14.16</li> <li>old information 14.18.c, 14.39</li> </ul>	<ul style="list-style-type: none"> <li>indifference 14.20.a</li> <li>encouragement 14.20.b</li> <li>subordinate information 14.21.d, 14.38</li> </ul>	
<b>Command</b>	<ul style="list-style-type: none"> <li>serious 14.13.a</li> </ul>	<ul style="list-style-type: none"> <li>softened 14.18.b</li> <li>"sthg should be done" 14.15</li> <li>on-the-spot negative command 14.17</li> </ul>	<ul style="list-style-type: none"> <li>mild 14.20.b</li> </ul>	
<b>Exclamation</b>	<ul style="list-style-type: none"> <li>normal 14.26</li> <li>"rebuke" question 14.26</li> </ul>			
<b>Question</b>	<ul style="list-style-type: none"> <li>Wh- normal 14.28</li> <li>Tag (opposite polarity), certain 14.31.a</li> <li>Alternative (last item) 14.33</li> </ul>	<ul style="list-style-type: none"> <li>Wh- polite 14.18.b</li> </ul>	<ul style="list-style-type: none"> <li>Tag (same-polarity) 14.32</li> </ul>	<ul style="list-style-type: none"> <li>Yes/No 14.27</li> <li>Please-repeat 14.29</li> <li>Echo 14.30</li> <li>Tag (opposite polarity), not certain 14.31.b</li> </ul>

## tone-unit division

**14.35** In order to produce a correct intonation, we have to make three choices correctly:

- (1) Choosing the place of the tonic: which word gets the primary stress in the tone-unit (discussed in 13.22-47).
- (2) Choosing the tone: what "melody" to use on the tonic (discussed in 14.12-33).

## (3) Choosing the tone-unit division: how to divide our speech into tone-units?

To answer this third question, let us show that tone-group boundaries may affect the meaning of what we say. (For completeness' sake we shall print the boundaries at the beginning and end of sentences too.)

(a) | She washed and brushed her  $\searrow$ hair. | *1 tone-unit*

This means that she washed her hair and then brushed it.

(b) | She  $\nearrow$ washed | and brushed her  $\searrow$ hair. | *2 tone-units*

This means that she washed herself, and then brushed her hair.

The different tone-unit boundaries are of course connected to the syntactic analysis of the two sentences: in (a) we have one clause, and the two co-ordinated verbs both refer to the same object (*hair*); in (b) we have two co-ordinated clauses, one without an object (*wash*), the other with an object (*brush + hair*). In many cases such differences are shown in writing too. The above sentences could be written like this, using the comma to disambiguate them:

(a) *She washed and brushed her hair.*

(b) *She washed, and brushed her hair.*

**14.36** Remember that we may dislocate the tonic, and/or change the tone, without changing the tone-unit division (see examples in 13.5). For instance, sentence (c) is the same tone-unit as (a), except that the tonic has been dislocated:

(c) | She washed and  $\searrow$ BRUSHED her hair. | *1 tone-unit*

Lexical contrast: Did she wash and comb her hair? No, she...

Similarly, we may change the tone without changing the tone-unit boundaries. Sentence (d) is still the same tone-unit as (a), except that the tone is now low-rising, expressing indifference or boredom:

(d) | She washed and brushed her  $\nearrow$ hair. | *1 tone-unit*

Meaning: I don't mind what she did, probably the usual thing.

**14.37** Generally speaking, a sentence (if not too long) or clause (H 'tagmondát'), or a longer phrase (H 'szintagma, szó szerkezet, csoport') corresponds to a tone-unit. Often these are indicated in writing too: whenever there is a punctuation mark, there is a tone-unit boundary. The punctuation marks (H 'központozás, írásjelek') are:

full stop (.)	colon (:)	question mark (?)	dash (—)
comma (,)	semicolon (;)	exclamation mark (!)	

In the following examples we show the punctuation, the tone-unit boundaries, the tonic syllable and the tone:

|  $\nearrow$ London, | the financial capital of |  $\nearrow$ Europe, | is a bustling  $\searrow$ city. |

| He didn't say a  $\searrow$ word, |  $\nearrow$ modest as he was. |

| Built by William  $\nearrow$ Morris, | the house is a fine piece of  $\searrow$ architecture. |

However, sometimes a tone-unit boundary is not shown by punctuation. Especially the comma is more sparingly used in English than in Hungarian; this may give the impression that

there are fewer tone-unit boundaries. This is not necessarily so. Below we list the most important such cases.

**14.38 Subordinate information** may take the form of a clause or a phrase. These are not always marked off with a comma, yet they often form a separate tone-unit, especially if they are longer or if they contain a verb. Subordinate information is spoken with the low-rising tone:

| We'll have to talk to  $\nabla$ Grandma | when she a $\nearrow$ rrives. |

(2 tone-units, no comma)

| If you can't  $\nearrow$ swim, | don't go into the  $\nabla$ water. |

(2 tone-units, comma)

This sentence can also be expressed by the two clauses changing place — the intonation of each part remains the same:

| Don't go into the  $\nabla$ water, | if you can't  $\nearrow$ swim. |

| He's got no time for the  $\nabla$ children, | with his new  $\nearrow$ job and all. |

| You shouldn't be very  $\nabla$ squeamish, | once you're in  $\nearrow$ politics. |

In these last three sentences the comma is not obligatory; this has no effect on the intonation.

Bear in mind that if the information is not subordinate but new, it must be included into a single tone-group with the main clause:

| We'll have to talk to Grandma when she a $\nabla$ rrives. |

(1 tone-unit, no comma) – H: Majd akkor kell vele beszélni, amikor megjön.

**Afterthoughts** (described in 13.25 as simply unstressed), can be made into a separate tone-unit with low-rising intonation, sounding the same as subordinate information:

I had good im $\nabla$ pressions, | on the  $\nearrow$ whole.                      She  $\nabla$ won, | un $\nearrow$ fortunately.

The same can be done with **vocatives**:

This is where I  $\nabla$ live, | Miss  $\nearrow$ Jenkins.                      Where shall we  $\nabla$ go, |  $\nearrow$ children?

Meet my  $\nabla$ sister, |  $\nearrow$ Barbara. (cf. 13.6)                      Nice to  $\nabla$ see you, |  $\nearrow$ colonel!

**14.39** Old information, that is, the part of the sentence which is known to both speaker or hearer (also called the “topic” of the sentence) is normally said with the rise-fall; then comes the main clause with “new” information, spoken with the falling tone:

| Since everybody's  $\nearrow$ tired, | we'd better stay at  $\nabla$ home. |

| When Grandma a $\nabla$ rrives, | we'll have to  $\nabla$ talk to her. |

| In our back  $\nearrow$ garden | there are tulips and  $\nabla$ roses. |

| The  $\nearrow$ government | just aren't doing  $\nabla$ anything. |

If the two clauses change places, the “old” information is no longer the topic but an appended explanation. In such cases both parts have the falling tone, or we include them in a single tone-unit:

| We'd better stay at  $\nabla$ home | since everybody's  $\nabla$ tired. |

- or: | We'd better stay at home since everybody's  $\downarrow$ tired. |  
 | We'll have to talk to Grandma when she a $\downarrow$ rrives. |  
 | There are tulips and roses in our back  $\downarrow$ garden. |

**14.40 Restrictive and nonrestrictive postmodifiers.** — A postmodifier is a phrase or a relative clause standing after a noun. It can be restrictive (a) and nonrestrictive (b). Restrictive postmodifiers tell you which one we mean from several; nonrestrictive postmodifiers just add further information. Restrictives are written without a comma and — unless they are very long — are not spoken with a separate tone-unit:

- (a) | Jim has a sister who can play the gui $\downarrow$ tar. | — *1 tone-unit*  
 (restrictive; he has several sisters, and one of them plays)
- (b) | Jim has a  $\downarrow$ sister, | who can play the gui $\downarrow$ tar. | — *2 tone-units*  
 (non-restrictive; he has this one sister only)
- (a) | The books available in paperback cost very  $\downarrow$ little. | — *1 tone-unit*  
 (restrictive; only those books cost little which were in paperback)
- (b) | The  $\downarrow$ books, | available in  $\downarrow$ paperback, | cost very  $\downarrow$ little. | — *3 tone-units*  
 (nonrestrictive; all the books were available in paperback, and they cost little)
- (a) | He told his boss a joke which was very  $\downarrow$ silly. | — *1 tone-unit*  
 (restrictive; the joke was very silly)
- (b) | He told his boss a  $\downarrow$ joke, | which was very  $\downarrow$ silly. | — *2 tone-units*  
 (nonrestrictive; the fact that he told it was silly; the joke may have been good)

A potential source of mistakes is the fact that in Hungarian both types of relative clause (restrictive and nonrestrictive) have a separate tone-unit, and a comma in writing:

(a = b) Jimnek van egy nővére, aki tud gitározni.

To illustrate the difference, we may use “forward-pointing” pronouns in Hungarian (*az, olyan*): these can only be used with the restrictive, so they disambiguate the meaning:

- (a) Jimnek *az* a nővére, aki tud gitározni...  
 (a) *Azok* a könyvek, amelyek papírkötésben is kaphatók...  
 (a) A főnökének elmesélt egy *olyan* viccet, ami...

## Summary of Intonation

**14.41** Each tone-unit has a tone, starting on the tonic syllable (the last stressed syllable). The tail (if there is one) continues the movement of the tone. The pre-tonic part of the tone-unit is always the same: the pre-head (if there is one) is low, the head (if there is one) starts high and descends gradually.

The four tones are: falling, rising-falling, low-rising, high-rising. They have their typical uses, but one and the same tone may be used with several types of sentence. The con-

verse is also true: each sentence type (statement, command, exclamation, question) has a typical tone, but again there are often other possibilities. Questions have several subtypes with their typical intonation: Yes/No Questions (high rise), Wh-questions (fall), “Please-repeat” questions (high rise), Echo questions (high rise), Tag questions (fall, high rise or low rise, depending on subtype), Alternative questions (the first one(s) high-rising, the last one falling).

Choosing the tone was discussed in the first part of Chapter 14, while in the latter part we looked at some aspects of choosing the tone-unit boundaries. As English uses the comma less often than Hungarian, we may need to insert a tone-unit boundary even where the spelling does not show one. Restrictive modification, however, has no comma and no separate tone-unit.

— o —

## QUESTIONS FOR REVISION

1. If a sentence has rising intonation, will the end be higher than the beginning?
2. Which type of question has the same intonation as statements? Is this arrangement found in Hungarian too?
3. Here are two sentences: *He won't complain, will he?* – *He won't complain, won't he?* Explain the possible intonations of the tags.
4. Here is a string of words without punctuation: *This is my roommate Steve* – How many sentences is this? Provide punctuation, stress, and intonation.
5. The sentence *Wouldn't it be awful?* can be said with two different tones. Explain.
6. List the four tones, with a typical meaning for each.
7. What do we mean by “implication” and which tone expresses it?
8. What distinguishes restrictive and nonrestrictive postmodifiers in speech and in writing?
9. What is the usual Hungarian mistake in producing the high-rising tone?
10. What happens if there are unstressed syllables after the tonic?
11. What is “partial negation” and how does intonation express it?
12. How can we “soften” a command with tone choice?

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