

3 Long vowels, diphthongs and triphthongs

3.1 English long vowels

In Chapter 2 the short vowels were introduced. In this chapter we look at other types of English vowel sound. The first to be introduced here are the five long vowels; these are the vowels which tend to be longer than the short vowels in similar contexts. It is necessary to say “in similar contexts” because, as we shall see later, the length of all English vowel sounds varies very much according to their context (such as the type of sound that follows them) and the presence or absence of stress. To remind you that these vowels tend to be long, the symbols consist of one vowel symbol plus a length mark made of two dots *ː*. Thus we have *iː*, *ɜː*, *ɑː*, *ɔː*, *uː*. We will now look at each of these long vowels individually.

The five long vowels are different from the six short vowels described in Chapter 2, not only in length but also in quality. If we compare some similar pairs of long and short vowels, for example *ɪ* with *iː*, or *ʊ* with *uː*, or *æ* with *ɑː*, we can see distinct differences in quality (resulting from differences in tongue shape and position, and lip position) as well as in length. For this reason, all the long vowels have symbols which are different from those of short vowels; you can see that the long and short vowel symbols would still all be different from each other even if we omitted the length mark, so it is important to remember that the length mark is used not because it is essential but because it helps learners to remember the length difference. Perhaps the only case where a long and a short vowel are closely similar in quality is that of *ə* and *ɜː*, but *ə* is a special case – as we shall see later.

🎧 AU3 (CD 1), Exs 1–5

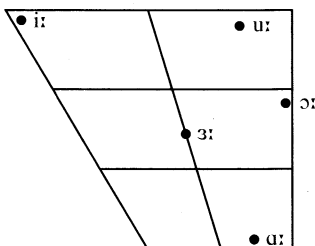


Fig. 6 English long vowels

- i: (example words: 'beat', 'mean', 'peace') This vowel is nearer to cardinal vowel no. 1 [i] (i.e. it is closer and more front) than is the short vowel of 'bid', 'pin', 'fish' described in Chapter 2. Although the tongue shape is not much different from cardinal vowel no. 1, the lips are only slightly spread and this results in a rather different vowel quality.
- ɜ: (example words: 'bird', 'fern', 'purse') This is a mid-central vowel which is used in most English accents as a hesitation sound (written 'er'), but which many learners find difficult to copy. The lip position is neutral.
- ɑ: (example words: 'card', 'half', 'pass') This is an open vowel in the region of cardinal vowel no. 5 [ɑ], but not as back as this. The lip position is neutral.
- ɔ: (example words: 'board', 'torn', 'horse') The tongue height for this vowel is between cardinal vowel no. 6 [ɔ] and no. 7 [o], and closer to the latter. This vowel is almost fully back and has quite strong lip-rounding.
- u: (example words: 'food', 'soon', 'loose') The nearest cardinal vowel to this is no. 8 [u], but BBC u: is much less back and less close, while the lips are only moderately rounded.

3.2 Diphthongs

🎧 AU3 (CD 1), Exs 6 & 7

BBC pronunciation has a large number of diphthongs – sounds which consist of a movement or glide from one vowel to another. A vowel which remains constant and does not glide is called a **pure vowel**.

In terms of length, diphthongs are similar to the long vowels described above. Perhaps the most important thing to remember about all the diphthongs is that the first part is much longer and stronger than the second part; for example, most of the diphthong aɪ (as in the words 'eye', 'I') consists of the a vowel, and only in about the last quarter of the diphthong does the glide to ɪ become noticeable. As the glide to ɪ happens, the loudness of the sound decreases. As a result, the ɪ part is shorter and quieter. Foreign learners should, therefore, always remember that the last part of English diphthongs must not be made too strongly.

The total number of diphthongs is eight (though ʊə is increasingly rare). The easiest way to remember them is in terms of three groups divided as in this diagram (Fig. 7):

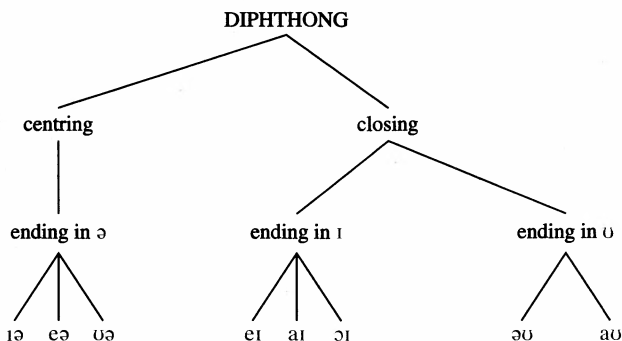


Fig. 7 Diphthongs

The centring diphthongs glide towards the ə (schwa) vowel, as the symbols indicate.

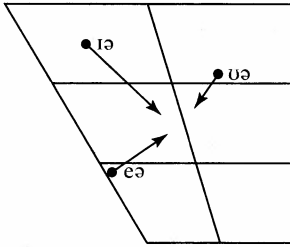


Fig. 8 Centring diphthongs

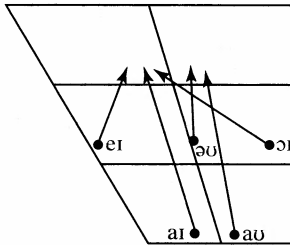
ɪə (example words: 'beard', 'weird', 'fierce') The starting point is a little closer than ɪ in 'bit', 'bin'.

eə (example words: 'aired', 'cairn', 'scarce') This diphthong begins with a vowel sound that is more open than the e of 'get', 'men'.

uə (example words: 'moored', 'tour', 'lure') For speakers who have this diphthong, this has a starting point similar to u in 'put', 'pull'. Many speakers pronounce ɔ: instead.

The closing diphthongs have the characteristic that they all end with a glide towards a closer vowel. Because the second part of the diphthong is weak, they often do not reach a position that could be called close. The important thing is that a glide from a relatively more open towards a relatively closer vowel is produced.

Three of the diphthongs glide towards ɪ, as described below:



eɪ (example words: 'paid', 'pain', 'face') The starting point is the same as the e of 'get', 'men'.

aɪ (example words: 'tide', 'time', 'nice') This diphthong begins with an open vowel which is between front and back; it is quite similar to the ʌ of the words 'cut', 'bun'.

ɔɪ (example words: 'void', 'loin', 'voice') The first part of this diphthong is slightly more open than ɔ: in 'ought', 'born'.

Fig. 9 Closing diphthongs

Two diphthongs glide towards ʊ, so that as the tongue moves closer to the roof of the mouth there is at the same time a rounding movement of the lips. This movement is not a large one, again because the second part of the diphthong is weak.

əʊ (example words: 'load', 'home', 'most') The vowel position for the beginning of this is the same as for the "schwa" vowel ə, as found in the first syllable of the word 'about'. The lips may be slightly rounded in anticipation of the glide towards ʊ, for which there is quite noticeable lip-rounding.

aʊ (example words: 'loud', 'gown', 'house') This diphthong begins with a vowel similar to aɪ. Since this is an open vowel, a glide to ʊ would necessitate a large movement, and the tongue often does not reach the ʊ position. There is only slight lip-rounding.

3.3 Triphthongs

The most complex English sounds of the vowel type are the **triphthongs**. They can be rather difficult to pronounce, and very difficult to recognise. A triphthong is a glide from

one vowel to another and then to a third, all produced rapidly and without interruption. For example, a careful pronunciation of the word ‘hour’ begins with a vowel quality similar to α :, goes on to a glide towards the back close rounded area (for which we use the symbol υ), then ends with a mid-central vowel (schwa, $\ə$). We use the symbol $\text{a}\upsilon\ə$ to represent the pronunciation of ‘hour’, but this is not always an accurate representation of the pronunciation.

The triphthongs can be looked on as being composed of the five closing diphthongs described in the last section, with $\ə$ added on the end. Thus we get:

$\text{e}\text{I} + \ə = \text{e}\text{I}\ə$	$\text{ə}\text{U} + \ə = \text{ə}\text{U}\ə$
$\text{a}\text{I} + \ə = \text{a}\text{I}\ə$	$\text{a}\text{U} + \ə = \text{a}\text{U}\ə$
$\text{ɔ}\text{I} + \ə = \text{ɔ}\text{I}\ə$	

The principal cause of difficulty for the foreign learner is that in present-day English the extent of the vowel movement is very small, except in very careful pronunciation. Because of this, the middle of the three vowel qualities of the triphthong (i.e. the I or U part) can hardly be heard and the resulting sound is difficult to distinguish from some of the diphthongs and long vowels. To add to the difficulty, there is also the problem of whether a triphthong is felt to contain one or two syllables. Words such as ‘fire’ $\text{fai}\ə$ or ‘hour’ $\text{a}\text{U}\ə$ are probably felt by most English speakers (with BBC pronunciation) to consist of only one syllable, whereas ‘player’ $\text{plei}\ə$ or ‘slower’ $\text{slə}\text{U}\ə$ are more likely to be heard as two syllables.

We will not go through a detailed description of each triphthong. This is partly because there is so much variation in the amount of vowel movement according to how slow and careful the pronunciation is, and also because the “careful” pronunciation can be found by looking at the description of the corresponding diphthong and adding $\ə$ to the end. However, to help identify these triphthongs, some example words are given here:

$\text{e}\text{I}\ə$ ‘layer’, ‘player’	$\text{ə}\text{U}\ə$ ‘lower’, ‘mower’
$\text{a}\text{I}\ə$ ‘liar’, ‘fire’	$\text{a}\text{U}\ə$ ‘power’, ‘hour’
$\text{ɔ}\text{I}\ə$ ‘loyal’, ‘royal’	

Notes on problems and further reading

For more information about vowels, see Ashby (2005, Chapter 4), Ladefoged (2004, Chapter 3). Long vowels and diphthongs can be seen as a group of vowel sounds that are consistently longer *in a given context* than the short vowels described in the previous chapter. Some writers give the label *tense* to long vowels and diphthongs and *lax* to the short vowels. Giegerich (1992) explains how this concept applies to three different accents of English: SSE (Standard Scottish English), RP (BBC pronunciation) and GA (General American). The accents are described in 3.1 and 3.2; the idea of pairs of vowels differing in tenseness and laxness follows in 3.3. Jakobson and Halle (1964) explain the historical background to the distinction, which plays an important role in the treatment of the English vowel system by Chomsky and Halle (1968).

As mentioned in the notes on Chapter 1, the choice of symbols has in the past tended to vary from book to book, and this is particularly noticeable in the case of length marks

for long vowels (this issue comes up again in Section 5.2 of Chapter 5); you could read Cruttenden (2008: Section 8.5). As an example of a contemporary difference in symbol choice, see Kreidler (2004, 4.3).

The phonemes *i:*, *u:* are usually classed as long vowels; it is worth noting that most English speakers pronounce them with something of a diphthongal glide, so that a possible alternative transcription could be *ii*, *uu*, respectively. This is not normally proposed, however.

It seems that triphthongs in BBC pronunciation are in a rather unstable state, resulting in the loss of some distinctions: in the case of some speakers, for example, it is not easy to hear a difference between ‘tyre’ *taiə*, ‘tower’ *tauə*, ‘tar’ *tɑ:*. BBC newsreaders often pronounce ‘Ireland’ as *ɑ:lənd*. Gimson (1964) suggested that this shows a change in progress in the phonemic system of RP.

Notes for teachers

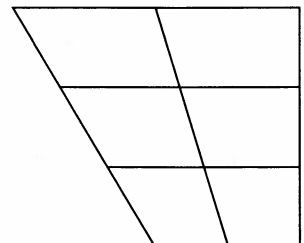
I mention above that *i:*, *u:* are often pronounced as slightly diphthongal: although this glide is often noticeable, I have never found it helpful to try to teach foreign learners to pronounce *i:*, *u:* in this way. Foreign learners who wish to get close to the BBC model should be careful not to pronounce the “r” that is often found in the spelling corresponding to *ɑ:*, *ɔ:*, *ɜ:* (‘ar’, ‘or’, ‘er’).

Most of the essential pronunciation features of the diphthongs are described in Chapter 3. One of the most common pronunciation characteristics that result in a learner of English being judged to have a foreign accent is the production of pure vowels where a diphthong should be pronounced (e.g. [e] for *eɪ*, [o] for *əʊ*).

Two additional points are worth making. The diphthong *ʊə* is included, but this is not used as much as the others – many English speakers use *ɔ:* in words like ‘moor’, ‘mourn’, ‘tour’. However, I feel that it is important for foreign learners to be aware of this diphthong because of the distinctiveness of words in pairs like ‘moor’ and ‘more’, ‘poor’ and ‘paw’ for many speakers. The other diphthong that requires comment is *əʊ*. English speakers seem to be specially sensitive to the quality of this diphthong, particularly to the first part. It often happens that foreign learners, having understood that the first part of the diphthong is not a back vowel, exaggerate this by using a vowel that is too front, producing a diphthong like *eʊ*. Unfortunately, this gives the impression of someone trying to copy a “posh” or upper-class accent: *eʊ* for *əʊ* is noticeable in the speech of the Royal Family.

Written exercises

- On the vowel diagram provided, indicate the glides for the diphthongs in the following words:
 - fright
 - home
 - clear
 - cow



2 Write the symbols for the long vowels in the following words:

- | | | |
|----------|----------|---------|
| a) broad | d) learn | g) err |
| b) ward | e) cool | h) seal |
| c) calf | f) team | i) curl |

3 Write the symbols for the diphthongs in the following words:

- | | | |
|----------|---------|---------|
| a) tone | d) way | g) hair |
| b) style | e) beer | h) why |
| c) out | f) coil | i) prey |