

The vowels of English.

We need to know in what ways vowels differ from each other.

A- the **shape and position** of the tongue (the vertical distance between the upper surface of the tongue and the palate or the roof of the mouth and, secondly, the part of the tongue, between front and back, which is raised highest.)

B- **Lip-position.** Although the lips can have many different shapes and positions, we will consider only three possibilities:

1- Rounded, where the corners of the lips are brought towards each other and the lips pushed forwards.

2- Spread, with the corners of the lips moved away from each other, as for a smile.

3- Neutral, where the lips are not noticeably rounded or spread. The noise most English people make when they are hesitating (written 'er') has neutral lip position.

English short vowels

Description of the seven vowels

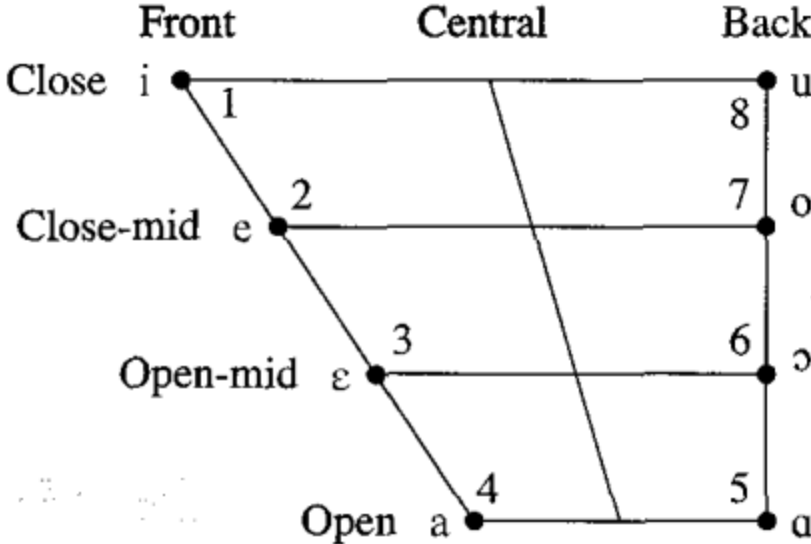


Fig. 4 Primary cardinal vowels .

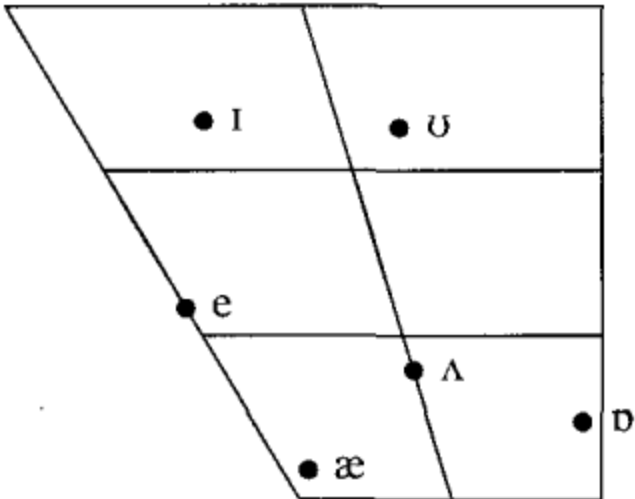


Fig. 5 English short vowels

English long vowels

The symbols consist of one vowel symbol plus a length mark made of two dots.

The five long vowels are different from the seven short vowels not only in length but also in quality ((resulting from differences in tongue shape and position, and lip position)).

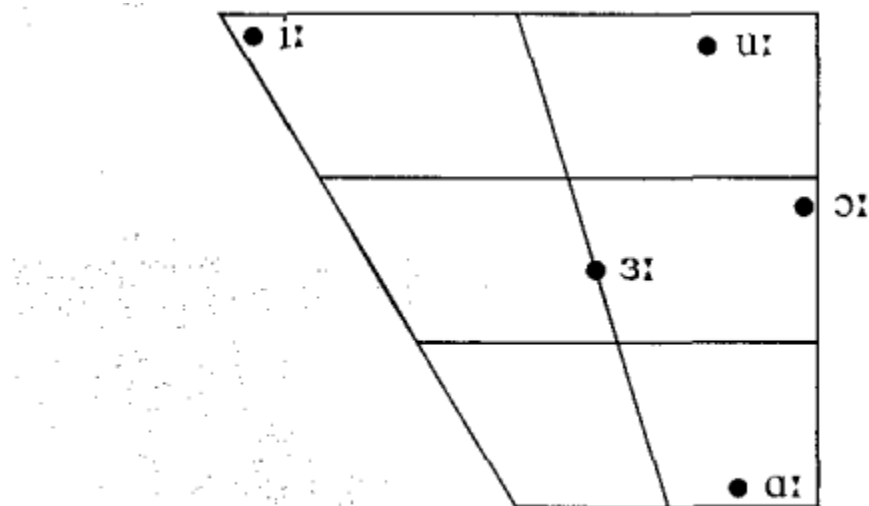


Fig. 6 English long vowels

Description of the seven vowels

Diphthongs

Sounds which consist of a movement or glide from one vowel to another. In terms of length, diphthongs are similar to long vowels. The

most important thing to remember about diphthongs is that the first part is much longer and stronger than the second part.

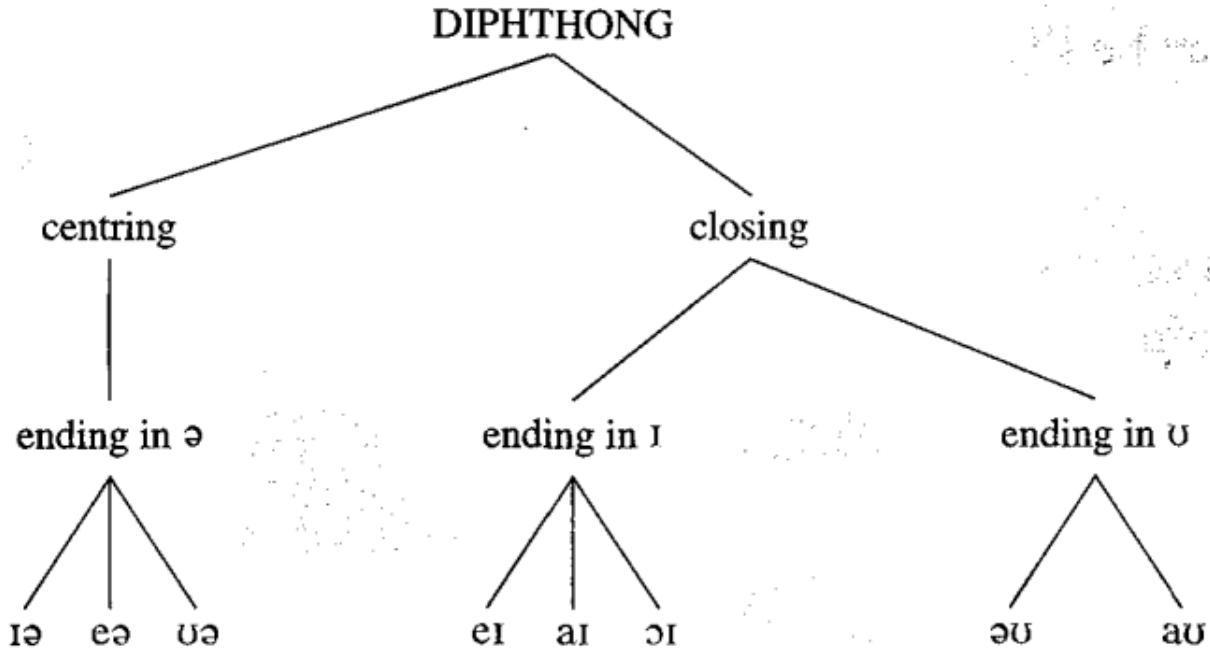


Fig. 7 Diphthongs

A: The centring diphthongs glide towards the..... vowel (schwa).

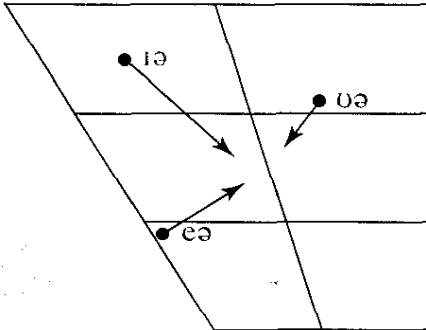


Fig. 8 Centring diphthongs

1- The starting point is a little closer than I in 'bit' and 'bin'.

e.g. here beard weird fierce fear linear ear near hear

2- This diphthong begins with a vowel sound that is more open than the e of 'get', 'men'.

e.g. bear fair hair stair air square dare

3- This has a starting point similar to....in 'put', 'pull'. Many speakers pronounceinstead.

e.g. tour moor lure pure cure

B: The closing diphthongs have the characteristic that they all end with a glide towards a closer vowel. The important thing is that a glide from a relatively more open towards a relatively closer vowel is produced.

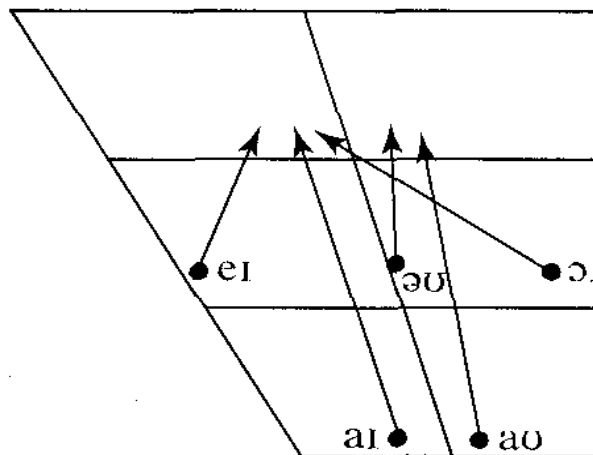


Fig. 9 Closing diphthongs

- Three of the diphthongs glide towards /ɪ/

4- The starting point is the same as the e of 'get', 'men'.

e.g. stay - may - break ...

5- This diphthong begins with an open vowel which is between front and back; it is quite similar to theof the words 'cut', 'bun'.

e.g. smile - my - nice

6- The first part of this diphthong is slightly more open thanin 'ought' and 'born'.

e.g. boil - soil - coin

- Two diphthongs glide towards

7- The lips are slightly rounded in anticipation of the glide towards, for which there is quite noticeable lip-rounding.

e.g. boat - coat - home.....

8- house - loud - mouse....

Triphthongs

They are the most complex English sounds of the vowel type. A triphthong is a glide from one vowel to another and then to a third, all produced rapidly and without interruption. They can be looked on as being composed of the five closing diphthongs, with.....added on the end. Thus we get:

1- Player - layer -

2- Liar - fire - tired - flyer

3- Royal - loyal - employer

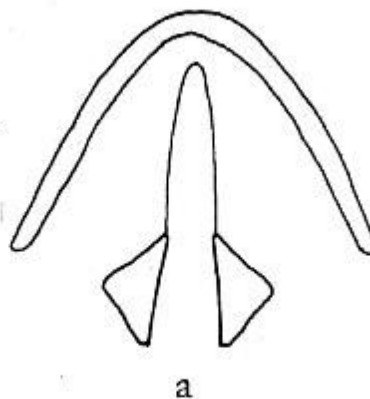
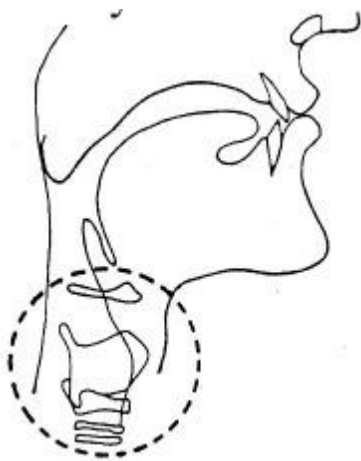
4- Lower - mower - widower - slower

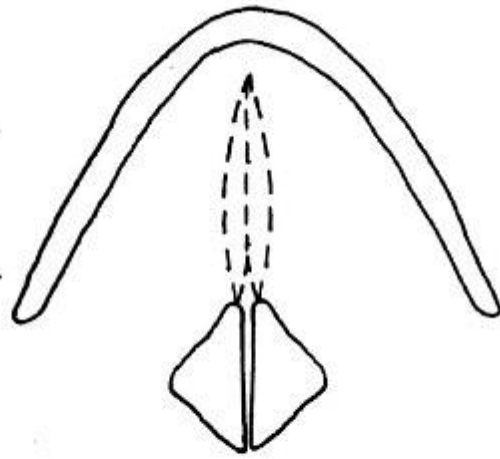
5- Power - hour - tower - our - tower - tyre - shower

Voicing

The larynx is like a box, inside which are the vocal folds, two thick flaps of muscle. In a normal position, the vocal folds are apart and we say that the glottis is open (figure a). When the edges of the vocal folds touch each other, the air passing through the glottis will usually cause vibration (figure b). This opening and closing is repeated regularly and gives what is called voicing.

The only distinction between the first sounds of sue and zoo for example is that [s] is voiceless, [z] is voiced. The same goes for few and view, [f] is voiceless, [v] is voiced. If you now say [sssszzzzzsssss] or [ffffvvvvvffff] you can either hear the vibrations of the [zzzzz] or [vvvvv] by sticking your fingers into your ears, or you can feel them by touching the front of your larynx (the Adam's Apple).





Manner of Articulation

The manner of articulation has to do with the kind of obstruction the air meets on its way out, after it has passed the vocal folds.

1- Plosives are sounds in which there is a complete closure in the mouth, so that the air is blocked for a fraction of a second and then released with a small burst of sound, called a plosion (it sounds like a very small explosion). Plosives may be bilabial [p,b], alveolar [t,d], or velar [k,g]. There is a fourth kind of plosive, the glottal stop “ʔ”. the glottal stop is of less importance, since it is usually just an alternative pronunciation of p, t, k in certain contexts.

What is a glottal stop?

a *glottal stop* is a stop sound made by rapidly closing the vocal cords. It is a form of plosive in which the closure is made by bringing the vocal folds together, as when holding one's . The glottal stop appears in limited phonetic contexts. For example, in many dialects of English it can be heard as a variant of the p, t, k sound certain contexts.

Examples:

(When a t is at the end of a syllable and is followed by a consonant sound.)

What-day, that-man, don't-know,
clip-board, background, stop me,

It should be noted though, for all the examples above, that when a speaker is producing very clear, slow speech, the glottal stop might not be used.

In English a voiceless plosive that occurs at the beginning of a word and is followed by a vowel, is rather special in the sense that at the release of a plosion one can hear a slight puff of air (called **aspiration**) before the vowel is articulated. Hence in “pen” we hear [p^hen]. These aspirated voiceless plosives are not considered to be different sounds from unaspirated voiceless plosives from the point of view of how they function in the sound system. This difference is said to be **phonetic**.

2- Fricatives have a closure which is not quite complete. This means that the air is not blocked at any point, and therefore there is no plosion. On the other hand the obstruction is big enough for the air to make a noise when it passes through it, because of the friction. This effect is similar to the wind whistling around the corner of a house. Fricatives may be labiodental [f,v], dental [..., ...], alveolar [s,z], palato-alveolar [..., ...], or glottal [h]. [h] is a glottal fricative.

3- Affricates are a combination of a plosive and a fricative (sometimes they are called "affricated plosives"). They begin like a plosive, with a complete closure, but instead of a plosion, they have a

very slow release, moving backwards to a place where a friction can be heard (palato alveolar). The two English affricates are both palato alveolar, [tʃ.....] which is voiceless, and [dʒ.....] which is voiced.

4- Nasals resemble plosives (there is a complete closure in the mouth), but as the velum is lowered the air can escape through the nasal cavity. Though most sounds are produced with the velum raised, the normal position for the velum is lowered, as this is the position for breathing. The three English nasals are all voiced: [m] is bilabial, [n] is alveolar, and [ŋ.....] is velar.

5- Laterals are sounds where the air escapes around the sides of the tongue. There is only one lateral in English, the [l], a voiced alveolar lateral. It occurs in two positions:

- before vowels "clear l" e.g. light, long
- in other cases "dark l" e.g. milk, ball.

"Clear l" is pronounced with the front of the tongue raised, whereas for "dark l" it is the back of the tongue which is raised. "Dark l" is written with the symbol [ɫ.....]. Here again, as with aspirated and unaspirated voiceless plosives, even though "clear l" and "dark l" are **phonetically different**, they cannot be said to be different sounds from the point of view of how they function in the sound system. If you produce a "dark l" where usually you have a "clear l", for example at the beginning of the word "long", your pronunciation will sound odd but nobody will understand a different word.

6- Approximants are sounds where the tongue only approaches the roof of the mouth, so that there is not enough obstruction to create any friction. English has three approximants which are all voiced. [r] is a post-alveolar approximant, [j] is a palatal approximant, and [w] is a velar approximant.

The Phoneme

In any language we can identify a small number of regularly used sounds (vowels and consonants) that we call **phonemes**; for example, the vowels in the words 'pin' and 'pen' are different phonemes, and so are the consonants at the beginning of the words 'pet' and 'bet'.

The phoneme: the smallest unit of sound in a language which can distinguish two words (thus change meaning).

e.g.

The cat is on the mat.

The hat is on the mat.

Distinctive features

A phoneme is opposed to all other phonemes of its subsystem in several ways. /p / has to be defined as an unvoiced bilabial plosive to account for all the oppositions found with the other consonants in English. These three features (voiceless, bilabial, plosive) are said to be **the distinctive features of /p/**.

Allophones

Each phoneme can be described as a maximal set of distinctive features. We have seen that /p/ must be described as ‘voiceless bilabial plosive’ to account for all the oppositions it can be found in. Every sound which is a realisation of a given phoneme must show the same set of distinctive features. **The realisations of phonemes are called allophones.** All allophones of a phoneme share the same set of distinctive features but each one can also show **additional features.** For example the phoneme /p/ is realised as [p^h] as in "pit", and as [p] in "cup".

[p] and [p^h] are said to be allophones because:

- 1- They can both be described as voiceless bilabial plosives.
- 2- If we substitute one for the other we do not get any change in meaning but rather an odd pronunciation.

*Note that these non-phonological variations are not always perceived.

* More systematic instances of allophones may be due to regional accents.

The Syllable

The syllable is a unit of speech consisting of a phoneme or a sequence of phonemes.

The syllable is defined by the way in which vowels and consonants combine to form various sequences. Vowels can form a syllable on their own or they can be the “centre” of a syllable, preceded or followed by one or more consonants.

The syllable is a unit of speech consisting minimally of one vowel and maximally of a vowel preceded by a consonant or consonant cluster and followed by a consonant or consonant cluster.

Monosyllabic words words which consist of one syllable only. There are not many examples of **monosyllabic words** consisting of only a vowel in English (are, or, I, eye, owe...).

Syllable Structure

The construction of a syllable is always organised around a vowel which is the **nucleus** (the indispensable element of the syllable). What comes before the nucleus is called **onset** and what follows is called **termination**. Neither onset nor termination are necessary. They occur separately, or together with the nucleus, as illustrated in the table.

A syllable can be divided into three parts:

a The beginning, called the **onset**

b The central part, called the **nucleus** or **peak**

c The end, called the **coda**, **final** or **termination**

Clusters

Both onset and termination can consist of one or more consonant phonemes. Two or more consonants in the onset or in the termination form **consonant clusters**.

Onset cluster

The largest **onset consonant cluster** can consist of three elements. In this case the first one is necessarily /s/.

/s C C nucleus/ (C stands for “consonant”)

Two consonant onset clusters are more frequent. Possible combinations are exemplified in the following table.

Termination clusters are:

Case 1- Two-consonant clusters in termination

Case 2- Three-consonant clusters in termination

Case 3- Four-consonant clusters in termination