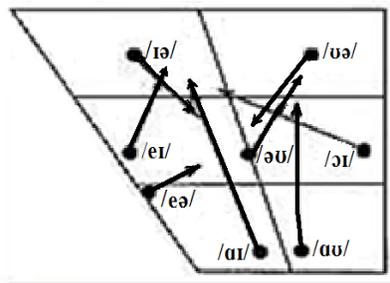


Lesson 2: Detailed Study of English Vowels: Diphthongs & Triphthongs

Introduction:

In British English, we have **12 pure vowels** divided into **5 long vowels** /i:/, /ɜ:/, /ɑ:/, /ɔ:/, /u:/ and **7 short vowels** /ɪ/, /e/, /æ/, /ʌ/, /ə/, /ʊ/, /ʊ/. In addition to the aforementioned *pure vowels*, we have **8 gliding vowels** which are a combination of *two short vowels* that make *one sound* called a **diphthong**: /eɪ/, /ɔɪ/, /aɪ/, /ɪə/, /eə/, /ʊə/, /əʊ/, /aʊ/. **Triphthongs** are the following *diphthongs* /eɪ/, /ɔɪ/, /aɪ/, /əʊ/, /aʊ/, /aʊ/ + a schwa /ə/ as follows: /eɪə/, /ɔɪə/, /aɪə/, /əʊə/, /aʊə/.

Tongue High ↕ Low	Vowels				Diphthongs		
	Front ←		→ Back		End at front →	End at back	
	/i:/	/ɪ/	/ʊ/	/u:/	/eɪ/	/ɪə/	/əʊ/
	/e/	/ə/	/ɜ:/	/ɔ:/	/ɔɪ/	/ʊə/	/aʊ/
	/æ/	/ʌ/	/ɑ:/	/ɒ/	/aɪ/	/eə/	
	Lips can be:				Closing	Centring	Closing
	Spread	Neutral	Rounded				



The representation of Diphthongs in the vowel chart. From Roach (2004: 242)

I- Diphthongs /'dɪfθɒŋz/:

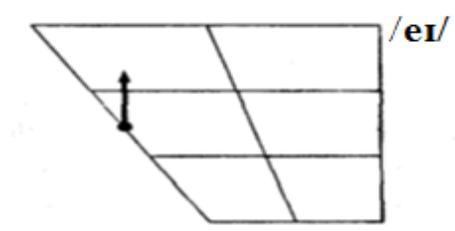
Definition: a diphthong or a gliding vowel is a term used in the phonetic classification of vowel sounds. It refers to a glide or a movement from one vowel to another one in which the first part is more prominent than the last. It involves a change in quality within the one vowel, they are classified according to their ending as follows: **closing diphthongs end in /ɪ/ and /ʊ/ ; centering diphthongs end in /ə/.**

I-1. Closing Diphthongs:

This category of diphthongs may be placed on the Cardinal Vowel Chart between a starting-point and ending in the space of close position (between mid-close and close position) .

1.1.1. The diphthong /eɪ/

Description: the starting-point is /e/ where the glide begins from slightly the mid-close front position and moves in the direction of /ɪ/ to form the diphthong /eɪ/; there is a slight closing movement of the lower jaw. The lips are spread.



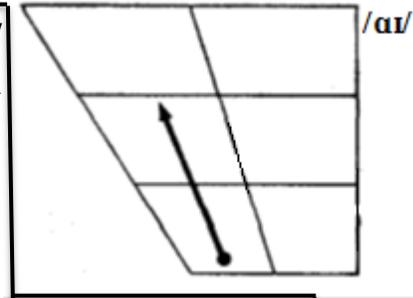
Examples: Ache /eɪk/, base /beɪs/, chase /tʃeɪs/, face /feɪs/, gaze /geɪz/, make /meɪk/, safe /seɪf/. Aim /eɪm/, Braille /breɪl/, fail /feɪl/, rail /reɪl/, straight /streɪt/, veil /veɪl/, break, great, café /'kæfeɪ/.

Example sets of minimal pairs: Edge /edʒ/ - age /eɪdʒ/; let /let/ - late /leɪt/; met/met/ - mate /meɪt/; pen/pen/ - pain /peɪn/; pepper/'pepə/ - paper /'peɪpə/; shed/ʃed/ - shade /ʃeɪd/; test /test/ - taste /teɪst/.

Exercise: Underline diphthong /eɪ/ in the following words: made, late, changed, may, say, train, waiting, eight, grey, timetable, April, station, ages, baker, eighteen, afraid, mistake, today, great.

1.1.2. The diphthong /aɪ/

Description: the most frequent glide of the RP is the diphthong /aɪ/ which begins at a point slightly behind the front open position /æ/, it is similar to the articulation of /ʌ/ and moves towards the position of /ɪ/, although the tongue is not raised to a level closer than /e/; this glide is more extensive than /eɪ/ in which there is more movement in the lower jaw. The lips change from a neutral to a loosely spread position.



Examples: Fly /flaɪ/, die /daɪ/, mine /maɪn/, hide /haɪd/, eyes /aɪz/, fight /faɪt/, aisle-isle /aɪl/.

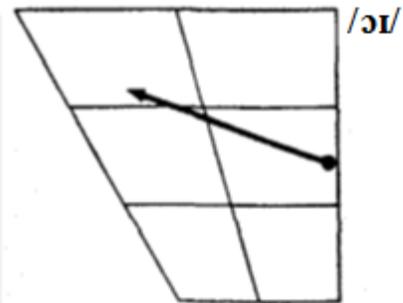
Wild /waɪld/, climb /klaɪm/, design /dɪ'zaɪn/, lie /laɪ/, type /taɪp/, micro /'maɪkrəʊ/, height /haɪt/.

Example sets of minimal pairs: fight/faɪt/-fate/feɪt/; bite,byte /baɪt/-bit /bɪt/; might /maɪt/- mate /meɪt/.

Exercise: underline & transcribe words that have the diphthong /aɪ/: why, hi, ride, smile, five, drive, miles, Carolina, bike, iced, mobile, nylon, spider, library, tonight, kite, cycle, wind (v).

1.1.3. The diphthong /ɔɪ/

Description: for the RP gliding vowel /ɔɪ/ the tongue begins at a point between the mid-open and open- back positions nearer to /ɔ:/ than to /ɒ/ then moves in the direction of /ɪ/. The tongue movement extends from back to centralised front; this glide is less extensive than /aɪ/. The lips are open rounded for the first element, changing to neutral for the second.



Examples: Boy /bɔɪ/, noise /nɔɪz/, point /pɔɪnt/, joint /dʒɔɪnt/, choice /tʃɔɪs/, soil /sɔɪl/, voice /vɔɪs/.

Example sets of minimal pairs: all /ɔ:l/-oil /ɔɪl/; corn /kɔ:n/-coin /kɔɪn/; roar/rɔ:/- Roy /rɔɪ/.

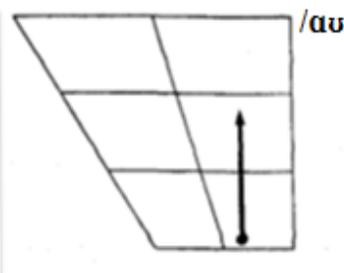
Exercise 1: underline & transcribe words that contain the diphthong /ɔɪ/: boy, toy, noise, voice, spoilt, pointing, destroyed, employed, annoying, Rolls Royce, royal, toilet, moisture, poison, oyster.

I enjoy living down town. Well, it's very noisy, of course. The traffic is loud, and the young people often shout when they come out of the clubs. But there are lots of good points too. There's a big choice of shops, and it's easy to get around.

/ɔɪ/ (4 words)	/aʊ/ (6 words)
enjoy	

1.1.4. The diphthong /aʊ/

This diphthong begins with a vowel similar to /aɪ/ but a little more front, then there is a large movement to the vowel /ʊ/ in order to get /aʊ/. This glide towards /ʊ/ begins but is not completed, in which the end of the diphthong is somewhere between mid-close and mid-open. There is a slight lip-rounding in the articulation of this diphthong.



Examples: how /haʊ/, gown, now /naʊ/, around /ə'raʊnd/, couch /kaʊtʃ/, ouch /aʊtʃ/, plough /pləʊ/.

Minimal pairs: now /naʊ/-no /nəʊ/; wind (v) /waɪnd/-wound (pp) /waʊnd/; mice /maɪs/ -mouse /maʊs/.

Exercise: Look up the transcription of the following words in your dictionary: Audi, count, house, ground, foul, flour, south, outbound, mountain, brown, towel, shower, power.

1.1.5. The diphthong /əʊ/

The beginning of this diphthong is at the central position between mid-close and mid-open position which is the schwa /ə/, and moves in the direction of /ʊ/. There is a slight closing movement of the lower jaw. The lips are neutral for first and slightly rounded for the second element.



Examples: bow /bəʊ/, low /ləʊ/, smoke /sməʊk/, joke /dʒəʊk/, shown /ʃəʊn/, so /səʊ/, know /nəʊ/.

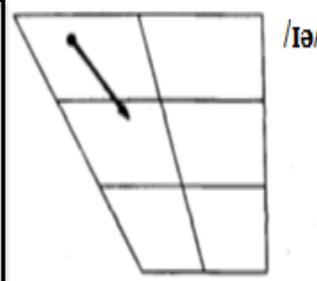
Minimal pairs: must /mʌst/ - most /məʊst/; abide /ə'baɪd/ - abode /ə'bəʊd/; whole /həʊl/- hill /hɪl/.

Exercise: Find the transcription of the words: folio, folklore, load, road, gross, soldier, role, own.

I-2. Centering Diphthongs:

2.1.1. The diphthong /ɪə/

The glide of the RP diphthong /ɪə/ begins with a position approximately to /ɪ/ in mid-close and centralised front position. The glide moves towards /ə/ and to more open in final position of the words, as in here /hɪə/ but not so extensive in mid-position of the word, as in weird /wɪəd/. The lips are neutral throughout the diphthong with a slight movement from spread to open.



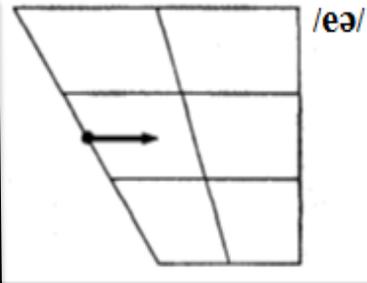
Examples: here /hɪə/; near /nɪə/; peer- pear /pɪə/; zero /'zɪərəʊ/; Algeria /æ'l'dʒɪəriə /; mania /'meniə/.

Minimal pairs: fear /fɪə/-fare /feə/; peer /pɪə/-pair /peə/; fierce /fɪəs/-face /feɪs/; pierce/pɪəs/-piece/pi:əs/.

Exercise: Find the transcription of the words: hero, sincere, deer, cheer, career, weird, idea, media, material, familiar, year, real, area, beard, period, opinion, previous, medium, million, union.

2.1.2. The diphthong /eə/

This RP gliding vowel /eə/ begins with a mid-open front position and moves to more open variety of /ə/ especially in word final position as in there /ðeə/. However, in word-medial position the second element tends to be neutral and /ə/ is in mid-position as in parent /'peərənt/. The lips are neutral throughout the diphthong.



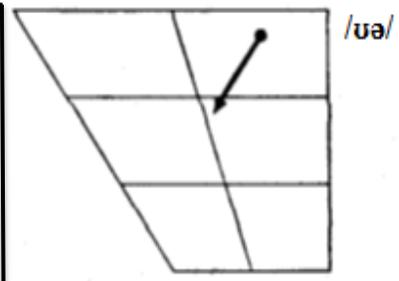
Examples: air /eə/, pair /peə/, care /keə/, fair_fare /feə/, where /weə/, there /ðeə/, scarce /skeəs/.

Minimal pairs: spare /speə/ - spear /spiə/; bear /beə/ - beer /biə/; rear/rɪə / - rare /reə/, air - ear.

Exercise: Find the transcription of the following words: bare, bear, hair, heir, their, swear, share, aware, square, various, librarian, stare, affair, despair, wear, mayor.

2.1.3. The diphthong /ʊə/

The RP diphthong /ʊə/ glides from a tongue position similar to /ʊ/ then moves towards more open type of /ə/ but it moves to centre when the diphthongs occurs in word-medial position especially in word final position as in poor /pʊə/. The lips are weakly rounded at the beginning then becoming neutrally spread as the glide progresses.



Examples: poor /pʊə/, plural /'plʊərəl/, pure /pjʊə/, cure /kjʊə/, endure /ɪn'dʒʊə/, during /'dʒʊəriŋ/.

Minimal pairs: sure /ʃʊə/- show /ʃəʊ/; moor /mʊə/ - more /mɔ:/; poor/pʊə/ - pour /pɔ:/.

Exercise: Transcribe the following words: curious, furious, security, insurance, cruel, fluent, actual, mutual, usual, gradual, influence, jaguar, valuable.

I-3. Triphthongs /'trɪfθɒŋz/:

Definition: a triphthong is a glide from one vowel to another and then to a third, all produced rapidly and without interruption. For example, a slow pronunciation of the word “hour” begins with a vowel quality similar to /a:/ and goes on towards /ʊ/ then ends with schwa /ə/ to get /aʊə/. A triphthong is made up of two vowel sounds, a closing diphthong plus a schwa (diphthong+ schwa= triphthong).

The triphthongs are composed of the five closing diphthongs described before, with schwa /ə/ added to the end. Thus we get:

/eɪ/ + /ə/ = /eɪə/	i.e: Player /'pleɪə/, payer /'peɪə/
/aɪ/ + /ə/ = /aɪə/	i.e: Fire /'faɪə/, higher /'haɪə/
/ɔɪ/ + /ə/ = /ɔɪə/	i.e: Loyal /'lɔɪə/, royal /'rɔɪə/
/əʊ/ + /ə/ = /əʊə/	i.e: Lower /'ləʊə/, slower /'sləʊə/
/aʊ/ + /ə/ = /aʊə/	i.e: Our-hour /'aʊə/, power /'paʊə/

Performance Exercises

Task 1.1 Listen, and practise the difference.

low	law	toe	tore
Joe	jaw	tone	torn
yoke, yolk	York	snow	snore
boat	bought	hole	hall
cold	called	sew, sow	saw
bowl	ball	show	shore

Task 1.2: From the phonemic transcription find the spelling form for 13 jobs in the wordsearch.

1-	k	d	ɒ	k	t	ə	n	8-
2-	ʊ	d	r	aɪ	v	ə	z:	9-
3-	k	p	eɪ	n	t	ə	s	10-
4-	m	ə	k	æ	n	ɪ	k	11-
5-	f	e	n	dʒ	ə	n	ɪə	12-
6-	ɑ:	v	r	aɪ	t	ə	g	13-
7-	m	e	s	ɪ	ŋ	ə	ɑ:	
	ə	t	w	eɪ	t	ə	d	

Task 1.3: Using your dictionary transcribe the following sentences.

- (1) I've called you several times, but never found you there.
.....
- (2) Someone, somewhere, wants and awaits a letter from her.
.....
- (3) We were away more than a year ago.
.....
- (4) We all heard a yellow lion roaring.
.....
- (5) Never kill a snake with your bare hands.
.....
- (6) We're looking for a builder, an engineer or an architect, I propose Mr. Adler and Anderson.
.....

References for further study:

- 1- Roach, P. *English Phonetics and Phonology*. pp 18-25. Cambridge University Press.
- 2- Gimson, A, C. *Pronunciation of Pronunciation*. pp 32-37. Cambridge University Press.
- 3- Hancock, M. *English Pronunciation in Use*. pp 44-50. Cambridge University Press.