Figure 10. ***Nasal, Oral and Pharyngeal Cavities*****. From Practical Phonetics and Phonology (p. 38), Collins, B. & Mees., I. M.(2003). London: Routledge.**

Oral Airflow:

When the velum (or soft palate) is raised, the passageway to the nose is blocked. This would cause the airstream to escape through mouth. The production of all vowels and most English consonants is accompanied by a flow of the airstream through a channel to the mouth called **Oral Cvity (**see Figure 10**)**. Notice when you utter the sound / **w** / in words like *wave* and *wait*. You can easily feel that the air goes out freely through your mouth.

Nasal Airflow:

In start contrast with the Oral Airflow, Nasal Airflow refers to the channel though which the air escapes through the nose (Ogden, 2009). Phonetically, the velum is lowered, closing off the channel leading up to the mouth, causing the air to go out of the vocal tract through the nose. Unlike the sounds produced with the Oral airflow, there are only three consonants that involve the escape of the airflow through nose, namely /**m**/, /**n**/ and /**ŋ**/. The channel though which the air goes out of the nose is called **Nasal Cavity**.

On Central and Lateral Airflow:

When the Oral airflow escapes through the mouth, it goes down through various passageways in the oral Cavity. The Phonetician Richard Ogden (2009) points out that it is possible to talk of two passageways in the Oral Cavity, namely the **Central Airflow** and **Lateral Airflow.** The former involves the movement of the airflow through the central part of your tongue. Ogden (2009) adds that when you utter the sound / **s** / and then quickly suck the air in, you can easily feel that the air flows on the central part of your tongue. The same is well attested with the sounds /**r**/ and /**w**/. Conversely, the airflow is said to be **Lateral (Airflow Lateral)** when the air escapes through both sides of your tongue. When you pronounce the sound /**l**/ and then suck the air in, you can easily notice the air flowing down through both sides of the tongue.

MONOPHTHONGS, DIPHTHONGS AND TRIPHTHONG

Course 11: Short Vowels and Long Vowels

INSTRUCTIONAL OBJECTIVES:

After studying this course, students will be able to:

- Understand the locus of Vowel and its basic characteristics
- Understand the meaning of monophthongs
- Identify the differences and similarities between short vowels and long vowels

What is meant by a vowel?

Ogden (2009) points out that "Vowels are syllabic sounds made with free passage of air down the mid-line of the vocal tract, usually with a convex tongue shape, and without friction. They are normally voiced; and they are normally oral" (p. 56). As noted in previous courses, vowels articulation, contrary to consonants production, involves neither an obstruction of the airflow nor contact between the articulators. Similarly, vowels are, by their very nature, voiced sounds and their articulations admit of varying types of tongue shape and height and lip roundedness. In essence, English vowels can be classified into monophthongs (or pure vowels), diphthongs and triphthongs.

Monophthongs (Short Vowels and Long Vowel):

BBC pronunciation and General American English have seven short vowels and five long vowels. The former vowels are typically short in length and highly frequent in daily speech. The vowel /**ə** /, called **Schwa**, is the shortest vowel in the English phonetic inventory system. Because it is the shortest vowel in English, it is almost difficult for non-linguists to hazard a guess about whether a specific word contains a Schwa or not-e.g., *lower*. Although there is no general pattern for the occurrence of the vowel / **ə** /, it is, however, highly pronounced in words which end with *er*, such as *baker*, *darker* and *daughter* and, also, in the first syllable of many words like *around* and *above*. Examples of the vowel / **ʌ** /, also called **Wedge**, are the words *cut* and *but*. Examples of the vowels / **æ** /, / **ɒ** / and / **ʊ** / are the words *fat*, *dot* and *good*, respectively, whereas the vowels / **ɪ** / and / **e** / are used in words like *bit* and *men.* In contrast with short vowels, long vowels, also called **Steady-state** vowels (Collins & Mees, 2013), are almost double in length than short vowels. It is worth noting that all short vowels have long versions, except for **/ æ /** and **/ e /,** as shown in Table 2 below. We usually add the length marker **:** in front of each symbol to indicate that the monophthong is long. Therefore, the long versions of the short vowels / **ɪ** / and / **ɒ** / are / **i**: / and **/ ɔ**: /, respectively.

Table 2

English Monophthongs

Short Vowels	Example	Long Vowels	Example
/ ʌ /	b**u**t	**/ ɑ**: /	car
/ ʊ /	f**oo**t	**/ u**: /	moody
/ ɪ /	k**i**t	**/ i**: /	seat
/ e /	h**e**n	/	/
/ æ /	r**a**t	/	/
/ ɒ /	kn**o**t	**/ ɔ**: /	thought
/ ə /	**a**round	**/ ɜ: /**	curtain

Lesson 12: Diphthongs

INSTRUCTIONAL OBJECTIVES:

After studying this course, students will be able to:

- Understand the locus of Diphthong and Gliding movement
- Identify the essential characteristics of Diphthongs
- Identify the main categories of Diphthongs

Diphthongs are more complex than monophthongs. While short vowels and long vowels consist of one sound, diphthongs consist of two combined sounds. In producing diphthongs, the tongue smoothly shifts from one position into another. Such **Gliding** movement represents a shift from one sound into another, such as when moving from / **e** / to / **ɪ** / in the word *rate* and from / **e** / to / **ə** / in the word *fair*. Peter Roach (2009) points out that though the duration of diphthongs is relatively similar to monophthongs, first vowel tends to be, more or less, longer and louder than the second vowel. When you utter the diphthong / **ɪə /,** you can notice that loudness decreases as you move to the second sound Schwa.

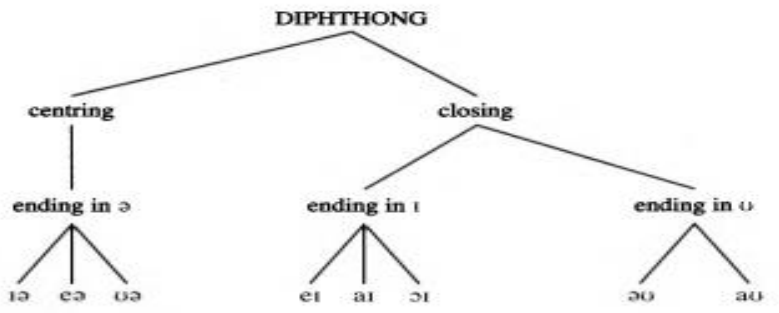

Figure 11. Closing Diphthongs and Centering Diphthongs. From *English Phonetics and Phonology* (p. 17), Roach, P. (2009). Cambridge: Cambridge University Press.

There is a general consensus among phoneticians that sees that diphthongs can be divided into two main categories, namely: centering diphthongs and closing diphthongs. The former category is called centering simply because it consist of diphthongs that end with the central vowel Schwa, whereas the second category are called closing because they end with close vowels. There are three centering diphthongs in English, namely: / **ɪə /,** / **eə /** and / **ʊə /.** Figure 10 shows three diphthongs that end with the vowel / **ɪ /** and two diphthongs that end with the vowel / **ʊ /.** It is, however, worth noting that the pronunciation of some diphthongs is not the same in the RP and GA (Yule, 2020). By way of example, while British people pronounce the word *poor* with the standard form / **ʊə /,** Americans in several USA regions pronounce it with the short vowel / **ʊ** /. Likewise, while British speakers realize the words *square* and *there* with the diphthong / **eə /,** many native speakers in the USA realize the same words with the short vowel / **e /.**

Lesson 13: Triphthongs

INSTRUCTIONAL OBJECTIVES:

After studying this course, students will be able to:

- Understand the meaning of Triphthong and its types
- Identify all the possible and impossible combinations of triphthongs

Vowels, which consist of a combination of three juxtaposed sounds, are commonly termed **Triphthongs**. Contrary to diphthongs production, the articulation of triphthongs involves two gliding movements, that is, a smooth shift from the sound A to B and finally to C. By way of example, when we produce the triphthong / **eɪə /,** the vocal organs shift from the vocalic position / **e** / to / **ɪ** / and then smoothly shifts to / **ə** / (Roach, 2009). It worth noting that it is almost difficult for native and non-native speakers to recognize the last vocalic position, Schwa, in words that have a triphthong. Because, it must be noted, / **ə** / is the shortest vowel in the whole English inventory system, many non-linguists cannot hear it in speech, and thus fail to hazard a guess about the exact number of sounds in the words which typically have triphthongs, such as *royal* and *lower*. In essence, there are five triphthongs in the English language:

/ eɪ / + /ə/ = / eɪə /

/ ɔɪ / + /ə/ = / ɔɪə /

/ ɑɪ / + /ə/ = / ɑɪə /

/ əʊ / + /ə/ = / əʊə /

/ ɑʊ / + /ə/ = / ɑʊə /

Remarkably, all the five triphthongs listed above end with the short vowel **/ə/**. Although it is possible to find triphthongs which are composed of one closing diphthong followed by **/ə/**, it is impossible to find a triphthong that is formed by combining a centering diphthong and a Schwa in any English speaking community. This is quite conceivable, provided that in English phonetic system the vowel is not followed by another *identical* vowel, in this case **/ə/ + /ə/ = /ʊəə/***. In brief, the combination of one centering diphthong + Schwa, though theoretically possible, does NOT occur in any English-based variety, be it standard or vernacular.

CHARACTERISATION AND CLASSIFICATION OF VOWELS

Lesson 14: Classifications of Vowels

INSTRUCTIONAL OBJECTIVES

After studying this course, students will be able to:

- Understand the locus of the Cardinal Vowel System (CVs)
- Learn how to describe the vowels in terms of distinct reference points, such as height and frontness

Introduction:

This course overviews the Cardinal Vowel System **(CVs)** used to describe monophthongs, diphthongs and triphthongs in terms of a set of criteria. Some of the **CVs** descriptions discussed in this course, it must be noted, are similar to other descriptions used with other languages.

Cardinal Vowel System: