## Section one : Introduction

1.1 Phonetics is a branch of linguistics that scientifically studies speech sounds in all human languages. There are many branches of phonetics: articulatory phonetics, acoustic phonetics (physical phonetics), auditory phonetics, etc.

| The main branches of phonetics |  |  |
| :---: | :---: | :---: |
| Articulatory Phonetics | Acoustic Phonetics | Auditory Phonetics |
|  |  |  |

1.2 Phonology is a branch of linguistics. It studies the system or pattern of speech sounds used in a particular language or in language in general. Phonology is the system of rules, representations, and principles governing the distribution of sounds. Within phonology, there are two branches of study; they are usually recognized as Segmental phonology and Supra-segmental phonology.
1.3 Phoneme is the smallest unit of phonology or the minimal unit in the sound system. The complete set of phonemes is called the phonemic system of the language.

### 1.4 Accents and Dialects

Accent is a particular way of pronouncing words that is connected with the country, area or social class that a person comes from. One accent is different from other accents only in pronunciation. For example, Welsh accent (Wales), London, accent (London), etc.

Dialect refers to a variety of a language which is different from other dialects not just in pronunciation but also in such matters as vocabulary, grammar and word order. For example, American English, Australian English, Canadian English, British English, African English, Indian English. In fact, different dialects of English do not have a great deal in common; they have far more differences than similarities.

### 1.5 R.P. and BBC pronunciation

Received Pronunciation (RP): RP was for many years the accent of British English usually chosen for the purposes of description and teaching, it is also called as "BBC pronunciation".

BBC Pronunciation: (The British Broadcasting Corporation) pronunciation, there is much to be said for using the "official" BBC accent as a standard for foreign learners wishing to acquire an English accent. Peter Roach prefers to treat the BBC accent as the best model for the description of English Language.

### 1.6 The Nature of English Spelling and English Pronunciation

Because of the confusing nature of English spelling, it is very important to study English pronunciation in terms of phonemes rather than letters of the alphabet (spelling). Examples:

1-The two English letters (ch) have different pronunciations in different words:
(school) [sku:l]
(ch) produce [k]
$($ speech $)$ [spi:t $]$
(ch) produce [t 5$]$
CAsstinst. Duaa CA. Flasan

## Section Two : Organs of speech



## g. 1 The articulators

### 2.1 Articulators

Articulatory phonetics (physiological phonetics) studies the production of speech sounds. All the sounds we make when we speak are the result of the processes of muscles contracting. The muscles in the chest that we use for breathing produce the flow of air that is needed for almost all speech sounds. The muscles in the larynx produce different modifications in the flow of air from the chest to the mouth.

In order to study how the speech sounds are produced, it is necessary to study the different parts of the vocal tract. The different parts of the vocal tract are called articulators.

After passing through the larynx, the air goes through the vocal tract. The vocal tract ends at the mouth and the nostrils. We call the part that leads to the mouth the oral cavity and the part that leads to the nostrils the nasal cavity.

| Vocal Tract |  |
| :---: | :---: |
| Oral Cavity | Nasal Cavity |
| It leads to the mouth. | It leads to the nose. <br> (nostrils) |

Vocal Tract

### 2.2 Organs of Speech

Human beings have the ability to produce speech sounds. When we speak we make use of organs situated in the respiratory tract such as the lips, the teeth, the tongue, etc. It is important for us to have an elementary knowledge of the construction of the speech organs and how they are used to produce speech sounds.

The human speech system consists of many speech organs. Most speech organs are in the chest, pharynx (throat), and head.

Organs of speech are divided into two main groups:
1-Movable Organs of Speech: the lips, the tongue, and the velum (the soft palate). They are also called active articulators.

2-Unmovable Organs of Speech: the teeth, the alveolar ridge, and the hard palate. They are also called passive articulators.

A speech sound is usually produced when a movable speech organ comes into contact with an unmovable speech organ. Examples:

1-The English sound /f/ is produced when the movable speech organ (an active articulator) the lower lip comes into contact with the unmovable speech organ (a passive articulator) the upper teeth.

### 2.2.1 The Lips

They are movable organs of speech (Active Articulators). They can take up various different shapes when speech sounds are produced. They are divided into the upper lip and the lower lip.

The lips can take up the following positions:
1-Closed position:
2-Spread position:
3-Neutral position:
4-Open position:

### 2.2.2 The Teeth

They are unmovable organs of speech (passive articulators). They are divided into two main groups: the upper teeth and the lower teeth. The upper teeth and the lower teeth function as a point of articulation for certain sounds such as $/ \Theta /$, / $/ /$, /f/, /v/. in general, the upper teeth are used more than the lower teeth as a point of articulation (POA). The upper teeth are used in the production of certain speech sounds: /f/ and /v/ are produced when the lower lip comes into contact with the upper teeth.

### 2.2.3 The Tongue

It is a major speech organ. Without the tongue, no one can speak any language. Because of its essential role in speech, one of the meanings of "tongue" is "language".

The tongue is one of the most important organs of speech in the human sound system. It is a very important articulator and it can be moved into many different places and different shapes. It is theoretically divided into different parts, though there are no clear dividing lines with its structure.

The tongue has five parts:


1-The tip: It is very front part of the tongue.
2- The front part of the tongue. (blade)
3-The center of the tongue.
4-The back part of the tongue. It is also called the "dorsum".
5-The root of the tongue.
(tip, front, center, back, root)


### 2.2.4 The hard palate

The hard palate is often called the "roof of the mouth". You can feel its smooth curved surface with your tongue.

### 2.2.5 The soft palate

The soft palate or velum allows air to pass through the nose and through the mouth. The important thing about the soft palate is that it is one of the articulators that can be touched by the tongue. When we make the sounds $\mathrm{k}, \mathrm{g}$ the tongue is in contact with the lower side of the soft palate, and we call these velar consonants.

### 2.2.6 The Alveolar ridge

It is an unmovable organ of speech which forms the part between the upper front teeth and the hard palate. The English consonant sounds $/ \mathrm{t} / \mathrm{/} / \mathrm{d} / \mathrm{I} / \mathrm{s} /, / \mathrm{z} /$ are produced when the front of the tongue comes into contact with the alveolar ridge.

MedicalNewsToday
Human Mouth Anatomy


### 2.2.7 The Pharynx

It is a tube which begins just above the larynx. It is about 7 cm long in women and about 8 cm in men, and at its top end it is divided into two, one part being the back of the oral cavity and the other being the beginning of the way through the nasal cavity.

### 2.2.8 The Larynx

The larynx is a very complex and independent articulator in speech. It is an organ of speech which consists of four parts:

1-the base: (It is a circular cartilage at the bottom of the larynx.)
2-Adam's apple: (It is a cartilage and it forms the front part of the larynx.)
3-the vocal cords: (They are two cords in the middle of the larynx. They are the most essential organ in the larynx.)
4-the glottis: (It is the opening between the two vocal cords.)

The larynx is also called the "voice box".


### 2.2.9 The Vocal Cords

The vocal cords are two cords in the middle of the larynx. They are the most essential organ in the larynx. The man's vocal cords are longer and thicker than the woman's vocal cords. So the vibrations of the vocal cords in men are less than the vibrations of the vocal cords in women. The average vibrations of the vocal cords in men are $100-150$ per second while the average vibrations of the vocal cords in women are $200-300$ per second.

The vocal cords play an essential role in speech. If the vocal cords vibrate, the speech sound becomes voiced, e.g., $/ \mathrm{z} /, / \mathrm{g} /, / \mathrm{m} /, / \mathrm{n} /$, /r/. If the vocal cords do not vibrate, the speech sound becomes voiceless, e.g., /k/, /tf/, /s/, /t/, /f/. this means that the vocal cords are scientifically responsible for voice and voicelessness of speech sounds.

### 2.2.10 The Glottis

The glottis is the opening between the vocal cords. If the speech sound is voiceless, the glottis opens. If the speech sound is voiced, the glottis opens and closes repeatedly. If the speech sound is glottal, the glottiscloses completely.A. F lasan

Note: /h/ is the only glottal speech sound in English.
/h/ : voiceless, glottal, consonant sound.


### 2.2.11 The Trachea

The trachea is an air passage between the lungs and the larynx. It is also called "windpipe".

## Section Three : Vowels and Consonants

The English Language is created through the different combinations of 44 sounds (phonemes), 20 vowels and 24 consonants. In our written language we refer to the letters of the alphabet as being consonant or vowel letters depending on which type of sound they are representing.

### 3.1 English vowels

Vowels are open sounds because they involve no obstruction to the flow of air from the lungs as it passes up through the windpipe (trachea), through the voice box (larynx) and out of the mouth. Other than positioning the tongue, jaws and lips there is nothing to obstruct the airflow. All vowels are produced with the vocal folds vibrating and are said to be voiced sounds.

Vowels are commonly described according to the following characteristics:

1. The part of the tongue that is involved in the articulation: front, central or back.
2. The tongue's height relative to the palate: close , close-mid, open-mid, open.
3. The shape of the lips: rounded, spread, neutral.
i) Make a vowel like the i: in the English word 'see' and look in a mirror; if you tilt your head back slightly you will be able to see that the tongue is held up close to the roof of the mouth. Now make an $\mathfrak{æ}$ vowel (as in the word 'cat'). The difference between i : and ae is a difference of tongue height, and we would describe i: as a relatively close vowel and ae as a relatively open vowel.
ii) In making the two vowels described above, it is the front part of the tongue that is raised. We could therefore describe i: and $\mathfrak{x}$ as comparatively front vowels. A vowel in which the back of the tongue is the highest point is called a back vowel. If you make the vowel in the word 'calm', which we write phonetically as /a:/ you can see that the back of the tongue is raised. The vowel in 'too' ( $\mathbf{u}$ :) is also a comparatively back vowel.
iii) The lips can have many different shapes and positions: These are: 1) Rounded, where the corners of the lips are brought towards each other and the lips pushed forwards as in [u]. 2) Spread, with the corners of the lips moved away from each other, as for a smile as in [i]. 3) Neutral, where the lips are not noticeably rounded or spread as in $/ \partial /$.

### 3.1.1 The Cardinal Vowel System

It is a universal system for the description of the vowels of different languages and dialects. It was devised by Daniel Jones. It has become traditional to locate cardinal vowels on a four-sided figure (a quadrilateral of the shape seen in Fig. 4 - the design used here is the one recommended by the International Phonetic Association).


Fig. 4 Primary cardinal vowels

### 3.1.2 Short English vowels

. The symbols for these short vowels are: i, e, æ , $\Lambda, \mathfrak{p}, \mathrm{u}, ~ ə$ Short vowels are only relatively short; as we shall see later, vowels can have quite different lengths in different contexts.


## g. 5 English short vowels

To describe a vowel, there is a need for three main features: height of the tongue, part of the tongue, shape of lips.
/ I/ it is close-mid, front, spread
/e/ open-mid, front, spread
/æ/ open , front, spread
/2/ between close mid -open mid, centralaneutraßuaa CA.F lasan
/u/ close, back, rounded
$/ \mathrm{p} /$ open-mid, back, rounded.
$/ \Lambda /$ open-mid, central, neutral.

## Check the following transcribed words :

| 1 mad mæd | 4 bet bet |
| :--- | :--- |
| 2 mud m $\wedge$ d | 5 cut k $\Delta t$ |
| 3 bit bit | 6 cot knt |


| 7 put put | 10 man mæn |
| :--- | :--- |
| 8 pot pot | 11 fun f $\AA n$ |
| 9 men men | 12 fan fæn |

Check the following contrasted short vowels:

| I and | e | e and | æ | æ | and |
| :--- | :--- | :--- | :--- | :--- | :--- |
| bit | bet | hem | ham | lack | luck |
| tin | ten | set | sat | bad | bud |
| fill | fell | peck | pack | fan | fun |
| built | belt | send | sand | stamp | stump |
| lift | left | wreck | rack | flash | flush |
|  |  |  |  |  |  |
| $\Lambda$ and | D | p and | U |  |  |
| dug | dog | lock | look |  |  |
| cup | cop | cod | could |  |  |
| rub | rob | pot | put |  |  |
| stuck | stock | shock | shook |  |  |
| luck | lock | crock | crook |  |  |

## Written exercise

3 Draw a vowel quadrilateral and indicate on it the correct places for the following English vowels:
a) æ
b) $\Lambda$
c) I
d) e

4 Write the symbols for the vowels in the following words:
a) bread
b) rough
c) foot
d) hymn
e) pull
f) cough
g) mat
h) friend
5.Transcribe the following words:

Bit, but, ask

### 3.1.3 English long vowels

The English long vowel sounds tend to be longer than the English short vowel sounds in similar contexts because the length of all English vowel sounds varies very much according to their contexts: "their contexts" refers here to:

1-the type of sound that follows them.
2-the presence and absence of stress.

The English long vowel sounds are: /i:/, /a:/, /u:/, /Э:/, /Ә:/ (5 long vowel sounds in English).


Fig. 6 English long vowels


## Description of long vowels:

/i:/ close, front, spread
/u:/ close, back , rounded
/3:/ open-mid, central, neutral.
I:/ open-mid, back, rounded
/a:/ open, back, neutral.

Check the following transcribed words:

| 1 heard h3:d | 6 heart ha:t |
| :--- | ---: |
| 2 bean bi:n | 7 cord ko:d |
| 3 root ru:t | 8 beef bi:f |
| 4 hearth ha: $\theta$ | 9 rude ru:d |
| 5 caught ko:t | 10 earn 3:n |

Check and compare short and long vowels:

| i: and | I | a: and | $\Lambda$ | a: and | æ |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| feel | fill | calm | come | part | pat |  |  |  |
| bead | bid | cart | cut | lard | lad |  |  |  |
| steel | still | half | huff | calm | Cam |  |  |  |
| reed | rid | lark | luck | heart | hat |  |  |  |
| bean | bin | mast | must | harms | hams |  |  |  |
| S: and | D | u: and | 0 |  | 3: and | $\Lambda$ | a: and | D |
| caught | cot | pool | pull | hurt | hut | dark | dock |  |
| stork | stock | suit | soot | turn | ton | part | pot |  |
| short | shot | Luke | look | curt | cut | lark | lock |  |
| cord | cod | wooed | wood | girl | gull | balm | bomb |  |
| port | pot | fool | full | bird | bud | large | lodge |  |

3.1. 4 English Diphthongs Ctestinst. Duaa CA. Flasan

## English Diphthongs

Diphthongs are 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.


Fig. 7 Diphthongs

The centering diphthongs glide towards the $ə$ (schwa) vowel, as the symbols indicate.
/ьə/ is (example words: ‘beard', weird', 'fierce') dear (/dıə/) or fear (/fıə/)
/eә/ (example words: ‘aired’, ‘cairn', ‘scarce’) fair (/feə/) or care (/keə/)
/uə/ example words: ‘moored’, 'tour', 'lure') sure (/ऽvə/) or cure (/kjuə/)

The closing diphthongs glide toward / I/:
/eI/ (example words: 'paid’, 'pain', ‘face') late (/leit/) or gate (/get// /ai/ (example words: 'tide', 'time', 'nice') time (/taim/) or rhyme (/raim/) /כI/ (example words: ‘void', ‘loin', ‘voice’) (/djom/) or coin (/koin/)

Two diphthongs glide towards $/ \mathbf{u} /$, 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. /əu/ (example words: 'load', 'home', Asst, most') globe (/'glaub/) or show (/Jəo/)
／au／（example words：‘loud＇，＇gown＇，＇house＇）cow（／kav／）or how（／hav／）

## 3．1．5 English 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．

The triphthongs can be looked on as being composed of the five closing diphthongs described in the last section，with 0 added on the end．Thus we get：

$$
\begin{aligned}
& \mathrm{e}_{\mathrm{I}}+\partial=\text { еІә } \quad \partial u+\partial=\partial \circlearrowright \partial \\
& \text { aı }+ \text { ə = aıə } \quad \text { au }+\rho=\text { аひə } \\
& \text { эı }+ \text { ə = っı }
\end{aligned}
$$

Some example words are given here：

$$
\begin{array}{ll}
\text { егә 'layer', 'player' } & \text { әЈə 'lower',' 'mower' } \\
\text { аə 'liar', 'fire' } & \text { aЈə 'power', 'hour' } \\
\text { эә 'loyal', 'royal' } &
\end{array}
$$

Written exercises：

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

### 3.2 English Consonants

Consonants are pronounced by stopping the air from flowing easily through the mouth, especially by closing the lips or touching the teeth with the tongue.

Consonants are described and classified in the following main features that distinguish each one from the others:
a. Voicing
b. Place of articulation
c. Manner of articulation
a. Voicing: it refers to the activity of the vocal folds. English Consonants are divided into two types:

1-English Voiced Consonants : The consonants which are produced with the vibration of the vocal cords are referred to as voiced consonants.

English Voiced Consonants

| 1 | $/ \mathrm{b} /$ | 6 | $/ \mathrm{z} /$ | 11 | $/ \mathrm{n} /$ |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 2 | $/ \mathrm{d} /$ | 7 | $/ \mathrm{3} /$ | 12 | $/ \mathrm{n} /$ |
| 3 | $/ \mathrm{g} /$ | 8 | $/ \mathrm{d} /$ | 13 | $/ \mathrm{r} /$ |
| 4 | $/ \mathrm{v} /$ | 9 | $/ \mathrm{l} /$ | 14 | $/ \mathrm{w} /$ |
| 5 | $/ \partial /$ | 10 | $/ \mathrm{m} /$ | 15 | $/ \mathrm{j} /$ |

2-English Voiceless Consonants: The consonants which are produced without the vibration of the vocal cords are referred to as voiceless consonants

| English Voiceless Consonants |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 |  | /p/ | 4 |  | /f/ |  |  | / $/ 1$ |
| 2 | /t/ |  | 5 | / ${ }^{\text {/ }}$ |  | 8 | /ts/ |  |
| 3 | /k/ |  | 6 | /s/ |  | 9 | /h/ |  |

## b. Place of articulation

Place of Articulation (Point of Articulation): It refers to the place or point of the oral cavity involved in the production of the sound. English consonant sounds can be categorized according to this variable or feature as follows:

1-Bilabial Consonants: In the production of bilabial consonants, the upper and lower lips act as articulators and form a closure followed by a release. The English bilabial consonants are: /p/, /b/,/m/,/w/.

2-Labio-dental Consonants: In the production of labio-dental consonants, the lower lip comes into contact with the upper front teeth. The English labio-dental consonants are: /f/ and /v/.

3-Dental Consonants: In the production of dental consonants, the tip of the tongue comes into contact with the upper front teeth. The English dental consonants are: / $\Theta$ / and $/ \mathrm{\delta} /$.

4-Alveolar Consonants: In the production of alveolar consonants, the tip and blade of the tongue comes into contact with the alveolar ridge. The English alveolar consonants are: /t/, /d/, /s/, /z/, /l/, /n/.

5-Post-alveolar Consonants: In the production of post-alveolar consonants, the tongue comes into contact with the back of the alveolar ridge. The English postalveolar consonants are: / $/ \mathrm{J} / \mathrm{/J} / \mathrm{/t} \mathrm{f} /$, /d $3 /$, $\mathrm{r} /$.

6-Palatal Consonants: In the production of palatal consonants, the tongue comes into contact with the hard palate. The English palatal consonant is $/ \mathrm{j} /$.

7-Velar Consonants: In the production of velar consonants, the back of the tongue comes into contact with the soft palate. The English velar consonants are: /k/, /g/, /n/.

8-Glottal Consonants: A glottal sound is produced in the glottis. The glottis is the space between the vocal cords. The English glottal consonant is $/ \mathrm{h} /$.

## c.Manner of Articulation:

Manner of articulation refers to the type of closure made by the different organs of speech, i.e., the way in which the air passes through the vocal tract, while the sound is produced. Concerning manner of articulation, the English consonants are grouped as follows:

1-Stop (plosive) Consonants: /p/, /b/, /t/, /d/, /k/, /g/
2- Fricative Consonants: /f/, /v/, / $\Theta /$, /ठ/, /s/, /z/, ///, /3/, /h/
3-Affricate Consonants: /t $\mathrm{f} / \mathrm{/} / \mathrm{d} 3 /$
4-Nasal Consonants: /m/, /n/, /n/
5-Lateral Consonants: /l/
6-Approximants: /w/, /j/, /r/
ctsstinst. Duaa CA. Flasan

## 1.Plosive Consonants

English has six plosive consonants: $\mathrm{p}, \mathrm{t}, \mathrm{k}, \mathrm{b}, \mathrm{d}, \mathrm{g}$. The plosives have different places of articulation. The plosives $\mathrm{p}, \mathrm{b}$ are bilabial , $\mathrm{t}, \mathrm{d}$ are alveolar . $\mathrm{k}, \mathrm{g}$ are velar.
$\mathrm{P}, \mathrm{t}, \mathrm{k}$ are voiceless , where as $\mathrm{b}, \mathrm{d}, \mathrm{g}$ are voiced.
As for the position of plosives in words, they occur in all position.
-Initial position : In the initial position, the release of $\mathrm{p}, \mathrm{t}, \mathrm{k}$ is followed by audible plosion - that is, a burst of noise, making a sound like h as in part, car, this is called aspiration. The release of $\mathrm{b}, \mathrm{d}, \mathrm{g}$ is followed by weak plosion.
-initial position, $\mathrm{b}, \mathrm{d}$, g cannot be preceded by any consonant, but $\mathrm{p}, \mathrm{t}, \mathrm{k}$ may be preceded by s . When one of $\mathrm{p}, \mathrm{t}, \mathrm{k}$ is preceded by s it is unaspirated. Like spy, score, stop .

## Exercises: Initial p, t, k

paw po:
tea ti:
car ka:
Initial b, d, g
bee bi:
door do:
go gəu
-
care keə
two tu:
key ki:
gear giə
boy boi
dear dia

## Final plosives

| mate made | ment merd |
| :--- | :--- |
| rope robe | raup raub |
| ... .. |  |

## Fortis and lenis Consonants

In linguistics, fortis and lenis, also called tense and lax, refer to consonants pronounced with greater and lesser energy. English has fortis consonants, such as the p in pat, with a corresponding lenis consonant, such as the b in bat. Fortis and lenis consonants may be distinguished by tenseness or other characteristics, such as voicing, aspiration, glottalization, velarization, length, and length of nearby vowels. Fortis and lenis were coined for languages where the contrast between sounds such as p and b does not involve voicing.

## 2. Fricatives and Affricates

Fricatives are consonants with the characteristic that air escapes through a narrow passage and makes a hissing sound. Most languages have fricatives, the most commonly found being something like s. Fricatives are continuant consonants, which means that you can continue making them without interruption as long as you have enough air in your lungs. The table below contain the place of articulation of the fricatives:

|  | PLACE OF ARTICULATION |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
|  | Labiodental | Dental | Alveolar | Post-alveolar | Glottal |
| Fortis ("voiceless") | f | $\theta$ | s | $\int$ |  |
| Lenis ("voiced") |  |  |  |  | h |

Asst.inst. Duaa CA.flasan

As for the position of fricatives, there is nothing different about them. They come initially, mid, and final position. However, /h/ is somehow different.

The place of articulation of $/ \mathrm{h} /$ is glottal, Phonologically, h is a consonant.
So what is the evidence that proves /h/ to be a consonants ?
a)It is usually found before vowels. b) As well as being found in initial position it is found medially in words such as 'ahead' shed, 'greenhouse' 'boathook . c) It is noticeable that when h occurs between voiced sounds (as in the words 'ahead', 'greenhouse'), it is pronounced with voicing - not the normal voicing of vowels but a weak, slightly fricative sound called breathy voice.

## Check the following transcribed fricatives:

| $f$ fin $f$ in <br> v vat væt <br> $\theta$ thing $\theta_{\text {II }}$ <br> $\partial$ these ði:z <br> s sad sæd <br> z zoo zu: <br> $\int$ show fau | offer of $\partial$ <br> over วuva method me $\theta$ od <br> other ^дə <br> lesser lesa <br> lazy leızi <br> washing wdim | laugh la:f leave li:v breath bre $\theta$ breathe bri:ð moss mos lose lu:z rush raf |
| :---: | :---: | :---: |
| 3 <br> h hot hot | measure meza beehive bithav | rouge ru:3 |

Affricates are rather complex consonants. They begin as plosives and end as fricatives. A familiar example is the affricate heard at the beginning and end of the word 'church'. tf, d3 are the only two affricate phonemes in English.

As for their position, /tf/ comes initial, middle and final. While /d3/ comes middle position.

# Check the following comparison between fricatives and affricates: 

fop tfop (shop, chop)
fiit tfiit (sheet, cheat)
lezə ledzə (leisure, ledger)
plezə pled3ə (pleasure, pledger)
li:zən li:dzən (lesion, legion)

## Check the following short sentences and remember to memorize the

 transcription:1 See the size of the fish<br>2 Jeff chose four sausages

si: ðә saız әv ðә fif d3ef t fouz fo: sosid3Iz

## 3.Nasals

The basic characteristic of a nasal consonant is that the air escapes through the nose. It cannot pass through the mouth because of certain closure. Nasals are

- m, n, $\eta$.

The place of articulation of $/ \mathrm{m} /$ is bilabial, as for $/ \mathrm{n} / \mathrm{it}$ is alveolar, and $/ \eta /$ is velar. The consonants $\mathrm{m}, \mathrm{n}$ are simple and straightforward with distributions. However, $/ \mathrm{\eta} /$ is special. This consonants never occur initially.

Medially, $/ \mathrm{\eta} /$ occurs quite frequently,. When we find the letters ' $\underline{n k}$ ' in the middle of a word in its spelling, a /k/ will always be pronounced; however, some words with spelling ' ng ' in the middle will have a pronunciation containing $/ \mathrm{ng} /$ and others will have $/ \mathrm{\eta} /$ without g . For example, in

| A | B |
| :--- | :--- |
| 'finger' fıngə | 'singer' sıŋə |
| 'anger' æygə | 'hanger' hæŋァ |

The important difference is in the way the words are constructed - their morphology. The words of column B can be divided into two grammatical pieces: 'sing' + '-er', 'hang' + '-er' and we say that column B words are different from column A words, since these cannot be divided into two morphemes. 'Finger' and 'anger' consist of just one word.

## Check the following transcribed words:

| fıgga | finger |
| :---: | :---: |
| æŋgə | anger |
| bæŋgə | Bangor |

## 4.Lateral

This is a consonant in which the passage of air through the mouth does not go in the usual way along the centre of the tongue; instead, there is complete closure between the centre of the tongue and the part of the roof of the mouth where contact is to be made (the alveolar ridge in the case of 1 )

## Light (clear ) and Dark /l/

We find /1/ initially, medially and finally, and its distribution is therefore not particularly limited.

- /l/ is dark when(1) it comes in final position after a vowel ex eel, ball . Also, (2) it occurs when it comes before a consonants (eels) or in the end of a syllable ex. Pillow.
$-/ l /$ is light or clear when (1) it comes at the beginning of a word ex like , lean. (2) when it comes before vowels.


## Exercise

Clear /l/

$$
\begin{array}{ll}
\text { lav lie } & \text { lau low } \\
\text { lu:s loose } & \text { laud loud }
\end{array}
$$

## Dark /I/

| fil fill | perl pale |
| :--- | :--- |
| bel bell |  |
| marl mile |  |

## 5.Approximants

a. Approximant/r/

The important thing about the articulation of $/ \mathrm{r} /$ is that the tip of the tongue approaches the alveolar area in approximately the way it would for a $/ \mathrm{t} / \mathrm{or} / \mathrm{d} /$, but never actually makes contact with any part of the roof of the mouth.

The tongue is in fact usually slightly curled backwards with the tip raised; consonants with this tongue shape are usually called retroflex.

The distributional peculiarity of /r/ in the BBC accent is very easy to state: this phoneme only occurs before vowels. Ex :
i) 'red' red 'arrive' əraıv 'hearing' hıərı刀

In these words /r/ is followed by a vowel. But in the following words there is no /r/ in the pronunciation:
ii) 'car' ka: 'ever' evə 'here' hı

Many accents of English do pronounce /r / in words like those of (ii) and (iii) (e.g. most American, Scots and West of England accents). Those accents which have r in final position (before a pause) and before a consonant are called rhotic accents, while accents in which r only occurs before vowels (such as BBC) are called non-rhotic.

## b. Approximants /j/ and /w/

These are the consonants found at the beginning of words such as 'yet' and 'wet'. They are known as approximants

The most important thing to remember about these phonemes is that they are phonetically like vowels but phonologically like consonants.

Since they are similar to vowels, how to prove that they are consonants?
a. they only occur before vowel phonemes.
b. If a word beginning with $/ \mathrm{w} /$ or $/ \mathrm{j} /$ is preceded by the indefinite article, it is the 'a' form that is found (as in 'a way', 'a year')
c. the rule is that 'the' is pronounced as / $\not \partial /$ before consonants (as in 'the dog’ ðə dog, ') and as $\begin{aligned} \\ \text { before vowels. And with words like way, it }\end{aligned}$ is pronounced as ( ðə wei)

## Check the following words:

```
ju: you weI way
jo:n yawn wo: war
jıə year win win
juə your weə wear
```

Cfostinst
Duaa CA.Alasan

## Exercise:

2 Transcribe the following words phonemically:
a) sofa
c) steering
b) verse
d) breadcrumb

