### 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 | $/ \mathrm{Z} /$ | 12 | $/ \mathrm{n} /$ |
| 3 | $/ \mathrm{g} /$ | 8 | $/ \mathrm{d} /$ | 13 | $/ \mathrm{r} /$ |
| 4 | $/ \mathrm{v} /$ | 9 | $/ \mathrm{l} /$ | 14 | $/ \mathrm{w} /$ |
| 5 | $/ \mathrm{d} /$ | 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 | / / |  | 8 | /t 5 |  |
| 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 $/ \mathrm{\partial} /$.

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: $/ \mathrm{J} / \mathrm{/} / \mathrm{J} / \mathrm{I} / \mathrm{t} \mathrm{f} /, / \mathrm{d} \mathrm{J} / \mathrm{/} / \mathrm{r} /$.

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/, /Ө/, /ठ/, /s/, /z/, /ऽ/, /3/, /h/
3-Affricate Consonants: /tf/, /d3/
4-Nasal Consonants: /m/, /n/, /n/
5-Lateral Consonants: /l/
6-Approximants: /w/, /j/, /r/

## 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:
```

care keə
two tu:
key ki:
Initial b, d, g

| bee bi: | gear gıa |
| :--- | :--- |
| door do: | boy boı |
| go gəu | dear dıa |

Final plosives

| mate made | meit meid |
| :--- | :--- |
| rope robe | rəup rəub |
| ..... |  |

## 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 |  |
| Fortis ("voiceless") | f | $\theta$ | s | Glottal |  |
|  |  |  |  | h |  |
| Lenis ("voiced") | v | $\partial$ | z | 3 |  |

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 $\theta_{\mathrm{II}}$ <br> ð these ði:z <br> s sad sæd <br> z zoo zu: <br> $\int$ show $\int$ วu | offer of $\partial$ over auva method me $\theta$ ad other ^дə lesser lesa lazy leızi washing wofin | laugh la:f leave li:v breath bre $\theta$ breathe bri:ð moss mos lose lu:z rush raf |
| :---: | :---: | :---: |
| 3 h hot hot | measure meza <br> beehive bi:hav | 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 t fop (shop, chop)
fiit t fiit (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<br>si: ðә saız əv ðә fı $\int$<br>d3ef tfouz fo: sbsid3Iz

## 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 $/ \mathrm{n} /$ it is alveolar, and $/ \eta /$ is velar.
The consonants $\mathrm{m}, \mathrm{n}$ are simple and straightforward with distributions. However, $/ \mathrm{n} /$ 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 $/ \mathrm{n} /$ 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:

| fıggə | finger |
| :--- | :--- |
| æygə | anger |
| bæygə | 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 /I/

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

## Dark ///

| 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 /t/ or /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 $/ \mathrm{r} /$ 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 $/ \mathrm{r} /$ is followed by a vowel. But in the following words there is no /r/ in the pronunciation:
ii) 'car' ka: 'ever' eva 'here' hıə

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 $/ \partial \partial /$ 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 | wel way |
| :--- | :--- |
| jo:n yawn | wo: war |
| jıə year | win win |
| jua your | wea wear |

