

PHONETICS

SPEECH SOUNDS IN ENGLISH

DESCRIPTION AND CLASSIFICATION OF SPEECH SOUNDS

While describing consonants, the following points should be taken into consideration the following points:

i) **The nature of air-stream:**

Whether the air- stream mechanism is pulmonic egressive or pulmonic ingressive

ii) **Voiceless or voiced Sounds:**

Whether the speech sound is voiceless or voiced (i.e. whether the vocal cords vibrate or not).

iii) **The position of the Soft palate:**

Whether the soft palate is raised or lowered. For instance, for oral sounds, the soft palate is raised and for nasal sounds, it is lowered.

iv) **Place of Articulation:** Bilabial, Alveolar, Velar etc

v) **Manner of Articulation:** Plosive / Stop, nasal, fricatives etc

Let's describe bilabial plosives with the help of the five points mentioned above.

For instance, for the production of /p,b/:

- 1 For /p,b/, the two lips are pressed together.
- 2 The soft palate is raised.
- 3 When the two lips are separated from each other suddenly the lungs air escapes through the mouth with explosion.
- 4 The vocal cords vibrate for /b/ but not for /p/.
- 5 There is complete oral closure and sudden release of the lung- air.
- 6 The airstream mechanism is pulmonic egressive.

Three term labels:

/p/ is a voiceless bilabial plosive.

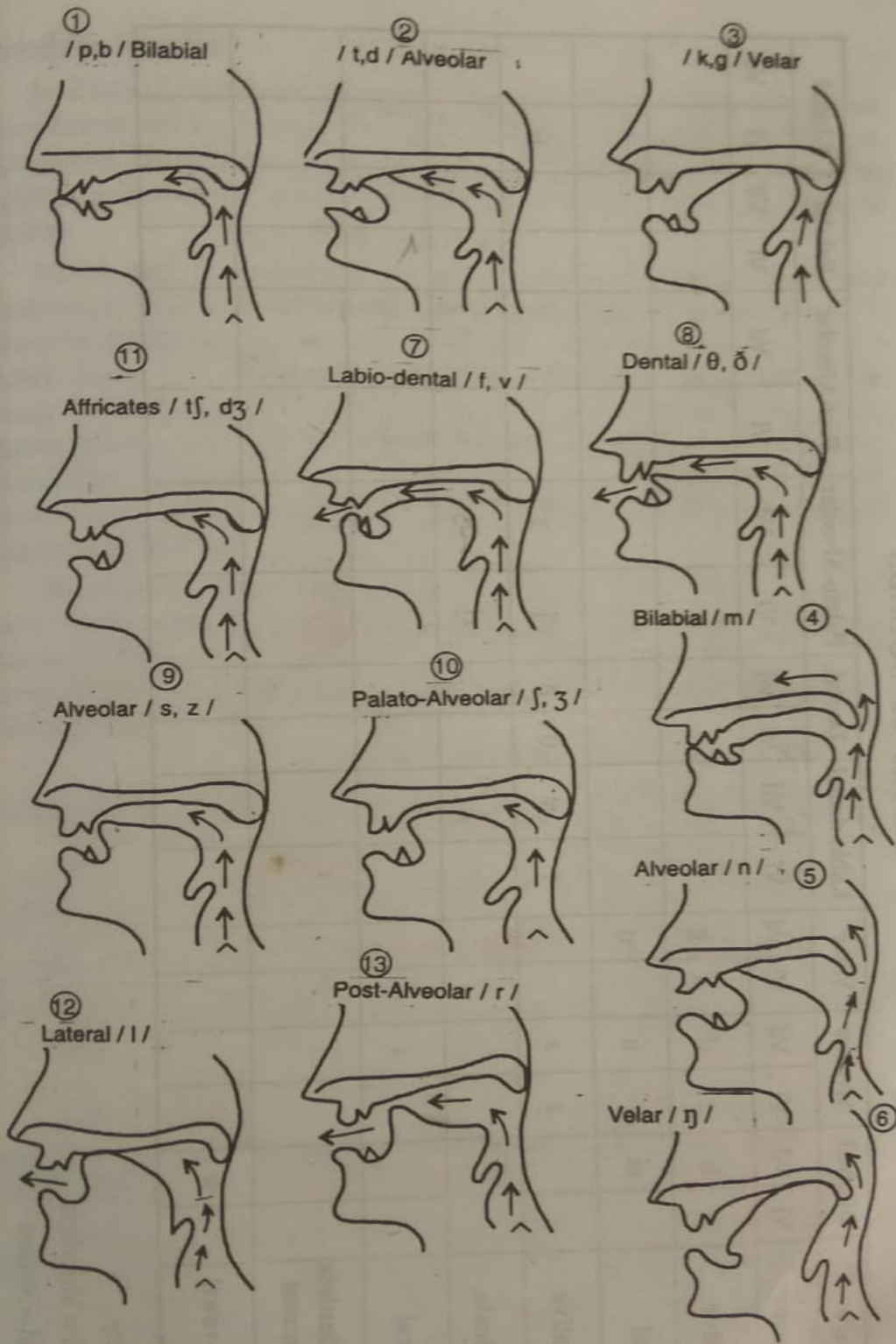
/b/ is a voiced bilabial plosive.

1. PLACE OF ARTICULATION

Place of articulation means the study of which organs of speech are involved in the production of speech sounds and what role they play in their pronunciation. Consonants can be classified according to the Place of Articulation, Manner of Articulation and Voicing.

- I) **Bilabial:** Bilabial sounds are produced by pressing two lips together. For example / p, b, m, w/ are bilabial sounds.
- II) **Alveolar:** Alveolar sounds are produced by raising the tip & blade of the tongue towards the alveolar ridge. For example, / t, d, n, l, s, z/ are alveolar sounds.
- III) **Velar:** Velar sounds made by touching the back of the tongue to the soft palate called the velum. For example, /k, g, ŋ / are Velar sounds.
- IV) **Labio- Dental:** These sounds are produced when the lower lip is raised towards the upper front teeth. For example, / f, v / are Labio- dental sounds.
- V) **Dental:** Dental sounds are produced by touching the tip of the tongue to upper front teeth. For example, / θ, ð / are dental sounds.
- VI) **Palato – alveolar:** These sounds are produced when the tip and blade of the tongue is raised towards the alveolar ridge simultaneously the front of the tongue is raised towards the hard palate. e.g. / ʃ, ʒ, tʃ, dʒ /
- V) **Post alveolar:** tip of the tongue is raised very close towards the back of alveolar ridge, for e.g /r/
- VI) **Palatal:** The front of the tongue is raised towards hard palate. for e.g /j/
- IX) **Glottal:** The sound is produced at the glottis and the vocal cords are the articulators. for e.g /h/

Following figures show the place of articulation of consonants.



2.The Stricture involved in the articulation of speech sounds

The stricture is the technical term used for the position taken up by the active articulator in relation to the passive articulator. It reveals the nature of the air stream passage at a particular point in the vocal tract. Following are different types of strictures involved in the articulation of speech sounds.

- **Complete Closure and sudden release of the lung air:**

The stricture may be one of complete closures. By complete closure we mean that there is a firm contact of active articulator with passive articulator and thus prevent the lungs air from escaping through the mouth. There is the blockage of the lung air behind the closure. Sounds produced with the stricture of complete closure are called **plosive sounds**.

e.g. / p, b, t, d, k, g, /

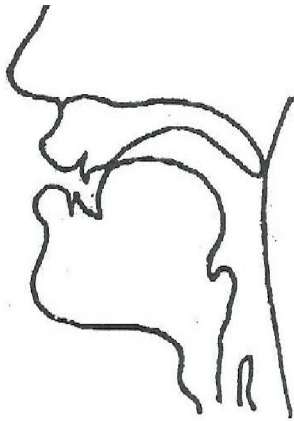


Fig. 9 Articulation of the plosive sounds /t,d/. The tip and blade of the tongue in firm contact with the teeth ridge and soft palate in its raised position.

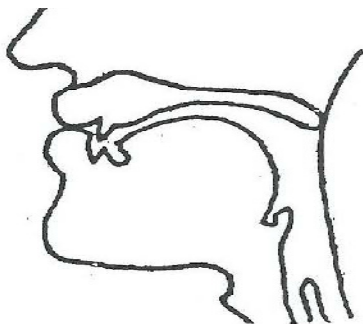


Fig. 10 Articulation of the plosive sounds /p,b/. The two lips are in firm contact and the soft palate is raised.



Fig. 11 Articulation of the plosive sounds /k,g/. The back of the tongue and the soft palate are in firm contact with each other. The soft palate is raised.

- **Complete Closure and slow release of the lung air:**

When the active articulator is removed slowly from the passive articulator slight friction is heard. Sounds produced with this kind of stricture are called affricates. For example, / tʃ, dʒ / .

- **Complete oral closure:**

Sometimes the stricture may be of **complete oral closure**. By this stricture we mean that the active and passive articulators are in firm contact with each other. For instance, for Nasal sounds, there is a complete oral closure and the soft palate is lowered allowing the air to escape through the nose. e.g. nasal sounds / m/, /n/, /ŋ/.

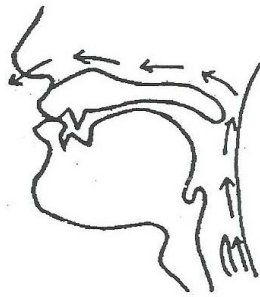


Fig. 12 Articulation of the nasal consonant /m/. The closure of the lips (oral closure). The soft palate is lowered and the nasal passage is open.

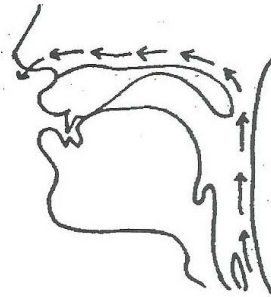


Fig. 13 Articulation of the nasal consonant /n/. The blade of the tongue and the teeth-ridge in firm contact, effecting the oral closure. The soft palate is lowered and the nasal passage is open.

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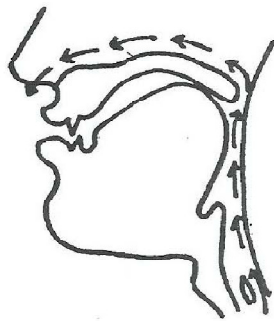


Fig. 14 Articulation of the nasal sound /ŋ/. The oral closure is effected by the back of the tongue and the soft palate, which are in firm contact. The soft palate is lowered and the nasal passage is open.

- **Partial Closure:** The stricture may be one of the partial closures. It is seen when the lungs air escapes along the sides of the tongue without friction as they are lowered. For example lateral /l/.

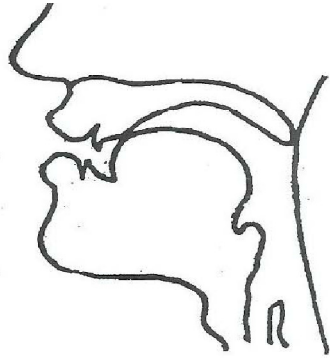


Fig. 17 Articulation of the lateral sound /l/. The tip and blade of the tongue are in firm contact with the teeth-ridge. Soft palate in its raised position.

- **Close Approximation:** For fricative sounds, there is no closure anywhere but narrowing only e.g. /f/, /v/, /s/, /z/, /θ/, /ð/, /ʃ/, /ʒ/, /h/. In the production these sounds the two articulators are brought very close to each other so that the lungs air escapes a narrow gap with audible friction.

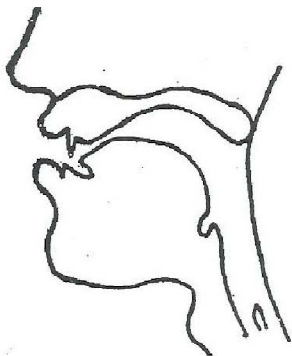


Fig. 15 Articulation of the fricative sounds that begin the words /s/ and /z/. The velic closure effected by the raised soft palate. The narrow gap between the blade of the tongue and the teeth-ridge.

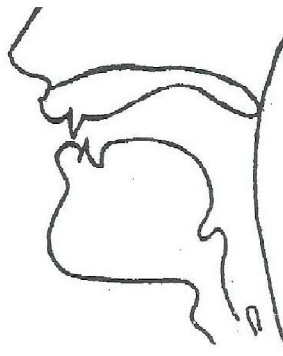


Fig. 16 Articulation of the fricative consonants /f/ and /w/. The soft palate is raised. The narrow gap between the lower lip and the upper front teeth (the passive articulators).

- **Open Approximation:** Open approximation means that the oral tract is somewhat more open than in close approximation, so that there is no friction. For /r/ this kind of stricture is used.

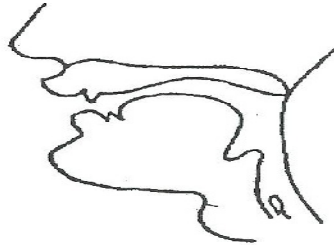


Fig. 18 Articulation of the approximant represented by the Devnagari letter /w/ as in wet. The gap between the lower lip and the upper front teeth.

We can summaries the classification of consonants as follows:

Classification	Manner/ Stricture of Articulation	Examples
Plosive / Stop	Complete closure in the mouth and sudden release of lung air through the mouth.	/p/, /b/, /t/, /d/, /k/, /g/
Nasal	Complete oral closure in the mouth, the air escapes through the nose	/m/, /n/, /ŋ/
Fricative	Narrowing with audible friction, close approximation.	/f/, /v/, /s/, /z/, /θ/, /ð/, /ʃ/, /ʒ/, /h/
Affricate	Complete oral closure and slow release of the lung air.	/tʃ/, /dʒ/
Frictionless-continuant	No closure but slight narrowing open approximation.	/r/
Lateral	Partial Closure	/l/
Semi vowel	Slight narrowing but no friction, open approximation.	/j, w/

2. Voicing

On the basis of voicing, sounds can be classified into voiced and voiceless sounds.

Voiceless consonants are usually articulated with open glottis. For example, voiceless sounds. e.g. /p, t, k, f, θ, S, ʃ, tʃ, h, / and when the vocal cords are held loosely together, the lung air can escape through them and the vocal cords are set into vibration. Such vibration creates a voice.

The sounds produced in this manner are called voiced sounds. For instance all vowels and consonant sounds like / b, d, g, m, n, ŋ, v, ð, z, ʒ, dʒ, l, r, j, w / are voiced sounds.

Three term labels of consonants:

/p/	is	a	voiceless bilabial plosive
/b/	is	a	voiced bilabial plosive
/t/	is	a	voiceless alveolar plosive
/d/	is	a	voiced alveolar plosive
/k/	is	a	voiceless velar plosive
/g/	is	a	voiced velar plosive
/m/	is	a	voiced bilabial nasal
/n/	is	a	voiced alveolar nasal
/ŋ/	is	a	voiced velar nasal
/f/	is	a	voiceless labio-dental fricative
/v/	is	a	voiced labio-dental fricative
/θ/	is	a	voiceless dental fricative
/ð/	is	a	voiced dental fricative
/s/	is	a	voiceless alveolar fricative
/z/	is	a	voiced alveolar fricative
/ʃ/	is	a	voiceless palato-alveolar fricative
/ʒ/	is	a	voiced palato-alveolar fricative
/h/	is	a	voiceless glottal fricative
/tʃ/	is	a	voiceless palato-alveolar affricate
/dʒ/	is	a	voiced palato-alveolar affricate
/l/	is	a	voiced alveolar lateral
/r/	is	a	voiced post-alveolar frictionless continuant
/j/	is	a	voiced Palatal semi-vowel
/w/	is	a	voiced bilabial semi-vowel

VOWELS IN ENGLISH

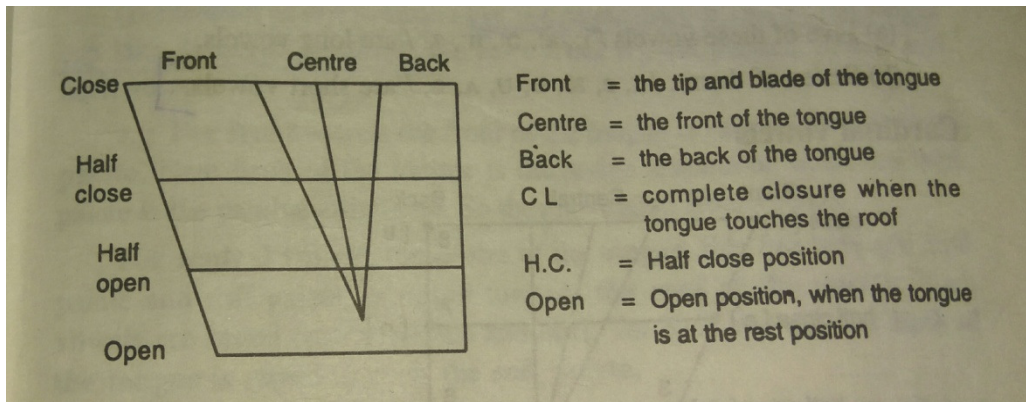
In English there are 20 vowel sounds. They are classified into pure vowels and diphthongs. There are 12 pure vowels and 08 diphthongs. Pure vowels are single vowel sounds. They are also called Monophthongs, Diphthongs, on the other hand are called vowel glides or gliding vowels. (Gliding means moving from one place to another)

Vowel may be defined as the sound which is normally voiced and produced without any obstruction, partial or complete, in the air-stream. It means in the production of vowel sounds, the air comes out freely through the mouth. There is no closure, no narrowing of the air-passage that would cause audible friction. In short vowels are produced with open approximation. The

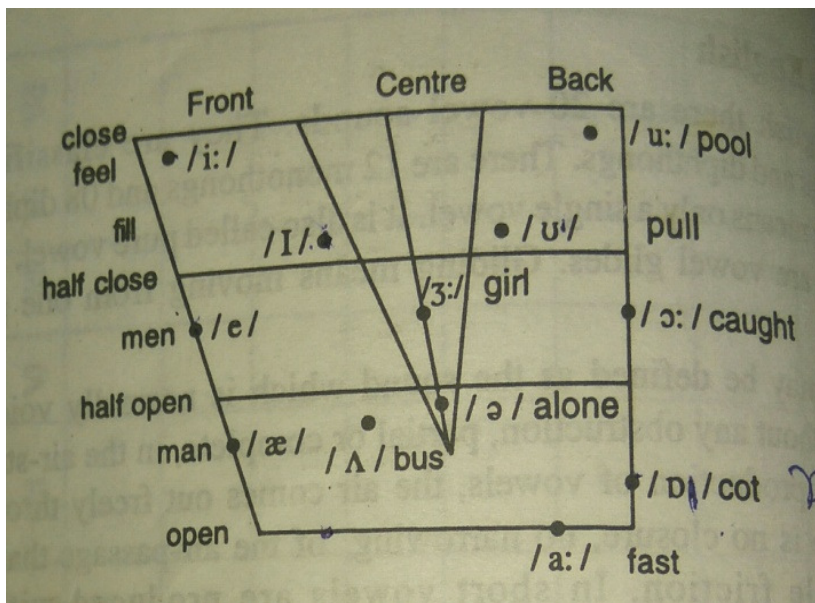
vocal cords vibrate for all vowels. All English vowels are oral. The soft palate is raised for oral sounds. There is no friction.

To describe vowels, we usually draw three points in the horizontal axes: Front, centre and back. These points refer to the part of the tongue which is the highest. We can draw four points referring to the height on the vertical axes: close, half close, half open and open. They are represented in the following figure.

FIGURE OF VOWEL SOUNDS



If you look at the inside of the face from one side, (here left side) it looks like this shape and that is why this is used as to represent vowel diagram. Vowels are indicated by thick dots • in the diagram



Description and Classification of vowels:

Vowels are normally described with the help of following points:

1. The position of the tongue (i.e part of the tongue which is raised) :

For the production of vowels, the tongue can take different positions. We have front vowels, central vowels and back vowels. For instance, For front vowels, the front of the tongue is raised towards the hard palate for central vowels, the centre of the tongue is raised towards the roof of the mouth and for back vowels, the back of the tongue is raised towards the soft palate.

2. Height of the tongue: This point deals with the four different tongue positions: close, half close, half open and open.

3. Position of the lips: In the articulation of vowel sounds, the lips take various positions. e.g spread (unrounded), neutral or rounded e.g. **front vowels**, the lips are **spread or unrounded** including back vowel/ a:/, For **central vowels**, the lips are **neural**. (i.e. nor spread nor rounded) and for **back vowels**, the lips are in rounded shape.

4. Length of vowels: (long / short): The length is marked by two dots (:) after vowel. If there are dots, the sounds are long, if not the sounds are short.
e. g. / i: / is a long vowel and / I / is a short vowel.

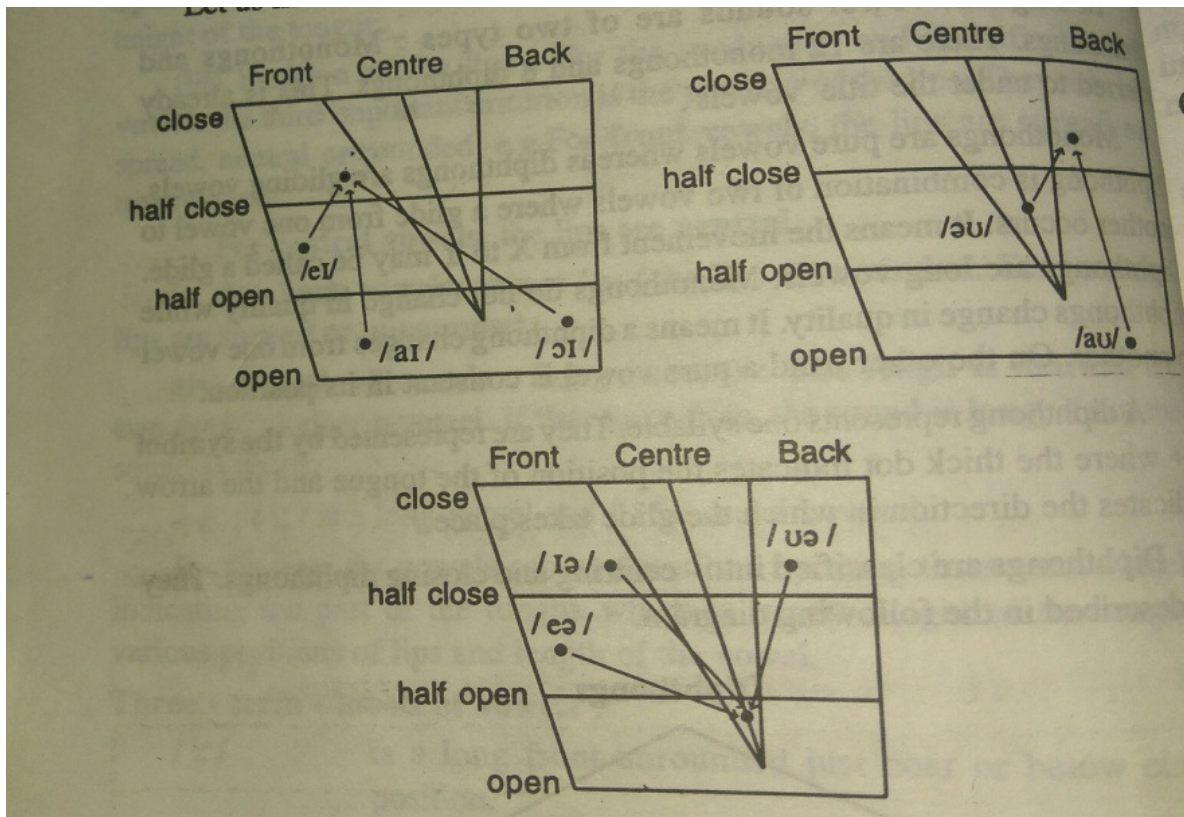
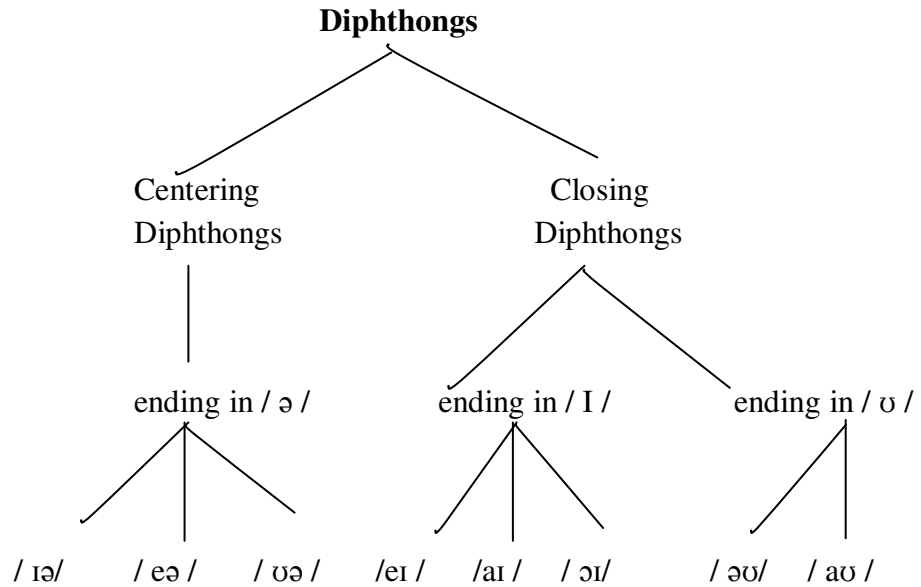
The vowels can be described by using three-term-labels indicating the points mentioned above.

Three-term-labels of vowels:

- / i: / - front spread/ unrounded just below close.
- / I / - centralized front spread/ unrounded just above half close .
- / e / - front spread/ unrounded between half close and half open.
- / æ / - front spread /unrounded just below half open.
- / a: / - back spread /unrounded on the open.
- / ɒ / - back rounded just above open.
- / ɔ: / - back rounded between half close and half open.
- / ʊ / - centralized back rounded just above half close.
- / u: / - back rounded just below close.
- / ʌ / - central neutral between half open and open.
- / ə / - central neutral just below half open position.
- / ə: / - central neutral between half close and half open position.

DIPHTHONGS IN ENGLISH

Diphthongs are classified into: Centering and Closing diphthongs. They are described in the following diagram.



Given below is the description of diphthongs in terms of three- term – labels:

- a) / eɪ / : In this closing diphthongs, the tongue glides from /e/ (front spread/ unrounded between half close and half open) to /I/ (centralized front spread/unrounded just above half close).
- b) / aɪ /: In this closing diphthongs, the tongue glides from /a:/ /(front spread open) to / I / (centralized front spread just above half close)
- c) / ɔɪ /: In this closing diphthongs, the tongue glides from / ɔ / (back rounded just above open) to / I / (centralized front spread just above half close)
- d) / ɪə / : In this centering diphthongs, the tongue glides from / I / (centralized front spread just above half close) to the final /ə/ (central neutral just below half open).
- e) / eə /: In this centering diphthongs, the tongue glides from / e/ (front spread between half close and half open) to the final /ə/(central neutral just below half open).
- f) / ʊə /: In this centering diphthongs, the tongue glides from / ʊ/ (centralized back rounded just above half close) to the final /ə/ (central neutral just below half open)
- g) / əʊ /: In this closing diphthongs, the tongue glides from / ə / (central neutral between half close and half open) to / ʊ/ (centralized back rounded just above half close).
- h) / aʊ/: In this closing diphthongs, the tongue glides from / a: / (back spread open position) to / ʊ / (centralized back rounded just above half close).

IPA SYMBOLS
INTERNATIONAL PHONETIC ALPHABET

IPA SYMBOLS

Given below are the **IPA** symbols which are used to transcribe sounds of English language. These symbols are taken from A.S. Hornby's The Advanced Learner's Dictionary of current English (ALD) 4th edition.

CONSONANTS

In English there are 24 consonants.

/p/ - pen / pen /

/b/ - bell / bel /

/t/ - tell / tel /

/d/ - dance /da:ns/

/k/ - key / k i:/

/g/ - gas /gæs/

/m/ - man /mæn/

/n/ - new /nju:/

/ŋ/ - sing / sɪŋ /

- /f/ - flood / flʌd/
- /v/ - van /væn/
- /θ/ - third / θɜ:d /
- /ð/ -they / ðeɪ /
- /s/ - stool / stu:l /
- /z/ - zoo /zu:/
- /ʃ/- shine / ʃaɪn /
- /ʒ/ - garage / gæra:ʒ/
- /h/ - hill / hɪl /
- /tʃ/ - charge / tʃ a:ɔʒ /
- /dʒ/ - judge / dʒʌdʒ /
- /l/ - light / laɪt/
- /r/ - right / raɪt /
- /j/ -yes / jəs /
- /w/ - week / wi:k /

PURE VOWELS (MONOPHTHONGS)

• PURE VOWELS (MONOPHTHONGS):

In English there are 12 pure vowels.

- /i:/ - green / gri:n /
- /ɪ / - mill / mɪl /
- /e/ - men- / men /
- /æ/ - fat /fæt /
- /ɜ:/ - bird / bɜ:d /
- /ə/ - alone / ələʊn /
- /ʌ/ - shut / ʃʌt /
- /u:/ - pool /pu:l /
- /ʊ/ - pull / pʊl /
- /ɔ:/ - force / fɔ:s /
- /ɒ/ - follow / fɒləʊ /
- /ɑ:/ - cast / ka:st /

DIPHTHONGS

- **DIPHTHONGS:**
- In English there are 08 diphthongs.
- /ɪə/ - fear / fiə /
- /eə/ - fair / feə /
- /ʊə/ - sure / ʃʊə /
- /eɪ/ - table / teɪbl /
- /aɪ/ - five / faɪv /
- /ɔɪ/ - coil / kɔɪl /
- /əʊ/ - go / gəʊ /
- /aʊ/ - how / haʊ /

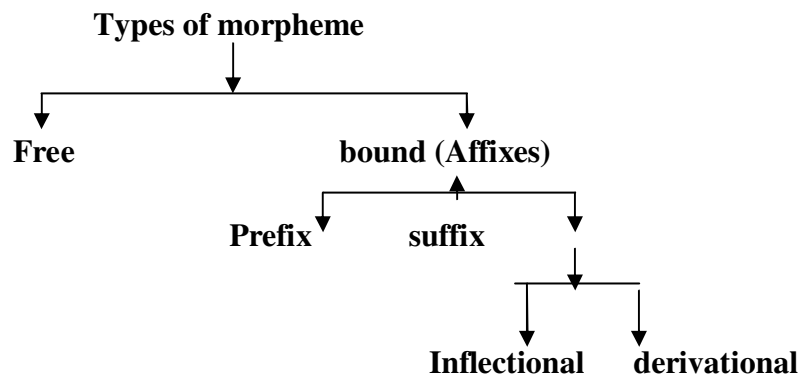
LINGUISTICS

MODULE MORPHOLOGY

- **Morphology** is the study of **words** or **word structure**
- It is defined as the **smallest or minimal meaningful unit in the grammatical analysis of a language.**

For example ‘happy’ is one morpheme. In the word ‘unhappy’ there are **two** morphemes. They are : ‘un’ + happy , in” **unhappily**” there are **three** morphemes . They are un+happy+ly.

- In this way the word is made up of morphemes.
- In these three morphemes “**un- and -ly**” are called **bound morphemes** or Affixes and “**happy**” is called a **free** morpheme. ‘**Happy**’ is called a **base** word.
- The word which **don’t take affixes** are called **base words or free morphemes** . So here happy is called a base word or a free morpheme.
- Bound morphemes are called affixes.
- Affixes are of two types: 1) Prefix
2) Suffix
- **Prefix:** **Prefix** is a kind of an affix that is **attached** at the **beginning of a word**. Prefixes always occur /come before the words.
- **Suffix:** **Suffix** is a kind of an affix that is **attached at the end of a word**. **Suffixes** always occur /come at the end of the words.
- For example, in the word ” **unhappily**”
‘un-’ is a prefix and ‘-ly’ is a suffix and ‘happy’ is a free morpheme.



ALLOMORPHS:

- As we allophones of phonemes in Phonology so also we have allomorphs of morphemes in Morphology.
- **Allomorphs** are the **variants** of morphemes.

Organs of Speech and Speech Mechanism

Speech Mechanism (Air- Stream):

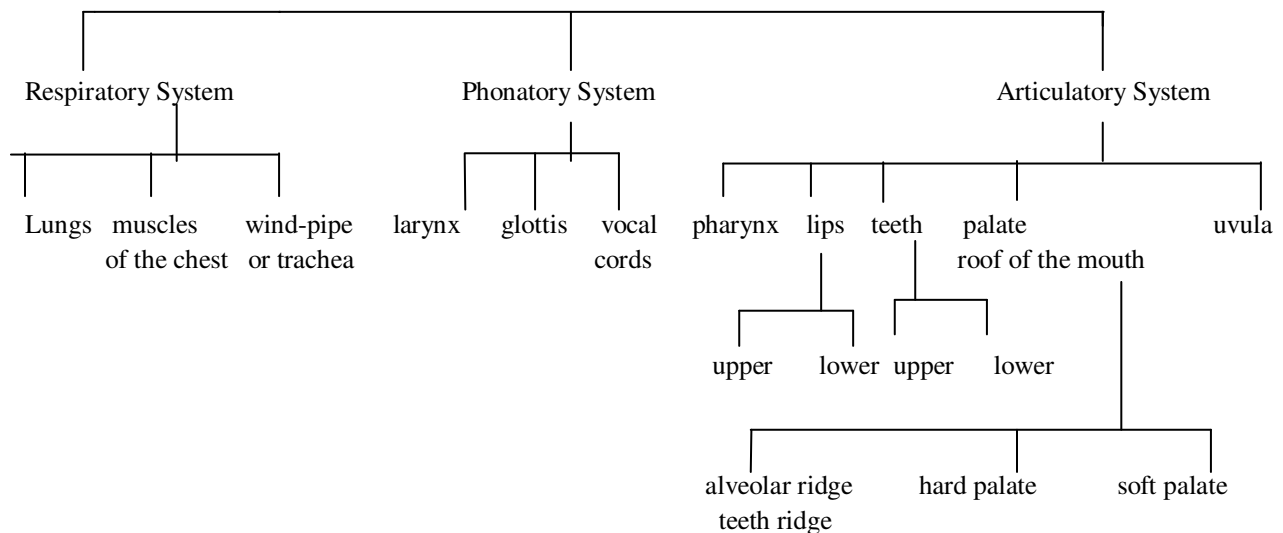
Human beings use specific body mechanisms to produce the speech sound. The air- stream is the basis of speech sounds. In speech mechanism, we use our breath to produce various speech sounds. The air that we breathe out is used to modify into speech sounds. It is called ‘egressive’ and when the air stream which is taken in as breath is used to produce speech sounds is called ‘ingressive’.

There are two types of air –stream mechanism. One is Pulmonic egressive and the other is Pulmonic ingressive. Majority of the languages make use of pulmonic egressive air- stream mechanism while a few languages use pulmonic ingressive air – stream mechanism. For instance, for the articulation of English speech sounds, we use pulmonic egressive air – stream mechanism. The actions of our speech organs play a very important role to produce different sounds.

Production of Speech Sounds:

Phonetics is the study of speech sounds. When we produce speech sounds we use the Speech Mechanism which includes certain organs of the body such as the muscles of the chest, vocal cords, lips, teeth, tongue, palates etc as seen in the following tree diagram. The movement of these organs causes some disturbance which passes or goes to the ear of the listener in the form of sound waves. The listener then interprets them/sound waves as sounds.

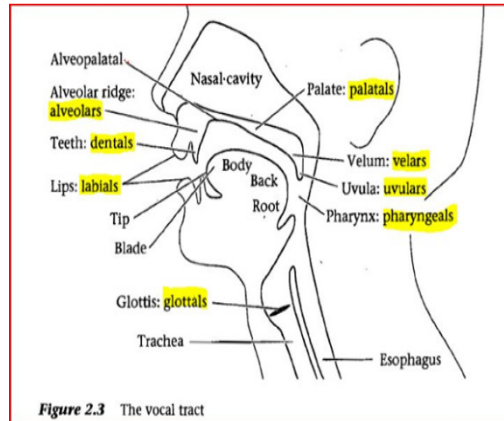
Organs of Speech



The parts/organs of the human body which are directly involved in the production of speech are usually called /termed as the organs of speech. When we speak, air comes out through the lungs

and it is interfered at various places for the production of sounds. Sounds cannot be produced without air. The following diagram shows the main organs of speech.

The organs of speech are classified into: Active articulators and passive articulators. They have primary functions such as breathing, chewing, tasting, smelling, swallowing etc. but speech is their secondary but important function.



They can be studied under three systems:

- 1) Respiratory System
- 2) Phonatory System
- 3) Articulatory System.

I) Respiratory System:

This system consists of the lungs, muscles of the chest and wind-pipe or trachea. Of these organs **lungs** play an important role in this system. The primary function of the lungs as we all know, is to enable us to breathe or **respire**. The air- stream expelled from the lungs provides the source of energy for our vocal activity. The basic function of lungs and windpipe in speech is the supply of air- stream as energy.

II) Phonatory System:

This system deals with the organs like the larynx, the glottis and the vocal cords.

The Larynx:

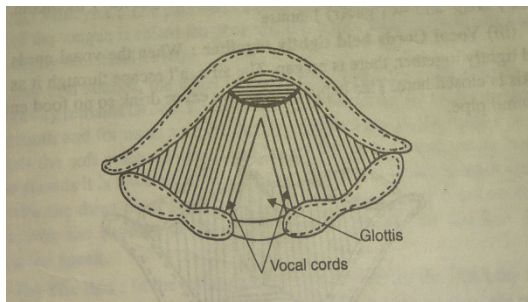
The upper part of the wind pipe or trachea is called as Larynx. It is situated at the top of the wind pipe. It is commonly known as “Adam’s Apple”. The air-stream that pushed out of the lungs through the wind pipe enters the larynx. Inside the larynx, from back to front, are the vocal cords. The vocal cords are like a pair of lips operating like valves. The opening of the vocal cords can bring about a number of different states of the glottis by their action. Let us have a look at four states of the glottis:

- i) Open glottis (breath/ voiceless state)
- ii) Glottis in vibration (voice state)

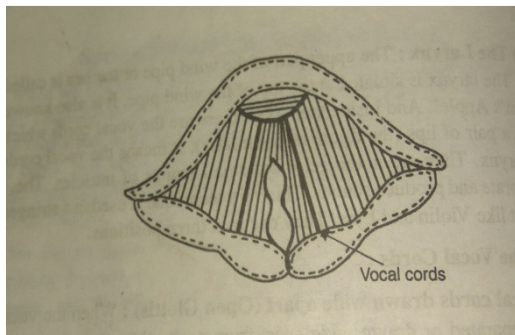
- iii) Closed glottis (a state in which a glottal stop is produced)
- iv) Narrowed glottis (whisper state)

FIGURE OF VOCAL CORDS

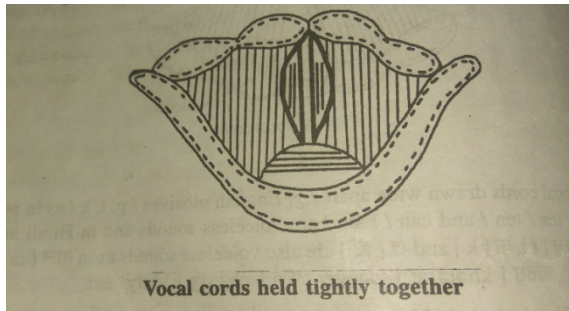
I Open glottis: When we say that the glottis is open, we mean that the vocal cords are drawn wide apart so that an air – stream can pass through them quite freely. This is the state of the glottis for normal breathing. The sounds produced in this state are called voiceless or breathed. For e.g. / p, t, k, f, θ, S, ʃ, tʃ, h / are voiceless sounds.



II Glottis in vibration: By glottis in vibration, we mean that the vocal cords are brought into contact, and blown apart by the force of the pulmonic air – stream flowing through the glottis. At this time the vocal cords vibrate. This vibration of the vocal cords produces voiced sounds. For e.g. / b, d, g, m, n, ŋ v, ð z, ʒ, dʒ, l, r, j, w / are voiced sounds.



III Closed glottis: The glottis is entirely closed means that the vocal cords are brought together with sufficient firmness to prevent stop the air-stream from forcing them apart. The glottis takes this position for coughs, hiccups.



IV Narrowed glottis: When the glottis is narrowed, we mean that the vocal cords brought close together, but not so close that they are set into vibration. This state of glottis produces a soft hissing sound called a whisper.

III) Articulatory system:

This system deals with the articulators such as pharynx, the lips, the teeth, the tongue, the palate (Roof of the Mouth) and the Uvula.

Pharynx:

It is the part that lies from the top of the larynx to the part of the tongue. It is a tube like cavity divided into oral cavity and nasal cavity. In the production of speech sounds, when the lungs air passes out through the mouth, the sounds produced are called oral and when it escapes through the nose, the sounds produced are called nasal.

For oral sounds, the soft palate is raised. Uvula blocks the nasal cavity. But the soft palate is lowered for nasal sounds. Thus the use of the nasal cavity is made only to produce nasal sounds as far as English is concerned otherwise the passage to the nasal cavity is blocked by the soft palate when we speak.

The Lips:

The lips play an important role in the production of speech sounds. They can take various positions and shapes to produce certain sounds. They are spread (unrounded), neutral and rounded. For instance, for Bilabial sounds / p, b, m, w /, the lips are brought together. Then labio-dental fricatives /f, v/, are produced when the lower lip is raised towards the upper front teeth.

As far as vowel sounds are concerned, lips can be spread (unrounded), neutral and rounded. For instance, for front vowels, lips are spread, including back/ a: /, for central vowels, the lips are neutral and for back vowels, lips are rounded.



The Tongue:

Like lips, tongue also plays an important role in the production of speech sounds. It is the most flexible organ of speech because it has greater variety of movement. It is boneless organ. It can assume many different shapes and can take several positions during the production of speech sounds. For the convenience of speech sounds description, Linguist divides the tongue into four parts:

1) Tip or Point 2) blade 3) front 4) back of the tongue.

The tip of the tongue stands opposite to the teeth ridge, the front of the tongue lies below the hard palate and the back of the tongue lies opposite to the soft palate/ velum.

The Teeth:

Certain consonants are produced with the help of teeth. We have upper teeth and lower teeth. For instance, for Labio-dental fricatives /f, v/, the lower lip is raised towards the upper front teeth and for dental sounds /θ/, /ð/ the tip of the tongue is raised towards the edge of upper teeth.

The upper jaw is a large area called roof of the mouth. It includes the parts such as alveolar ridge/ teeth ridge, hard palate and soft palate or Velum.

The Palate: (The roof of the mouth):

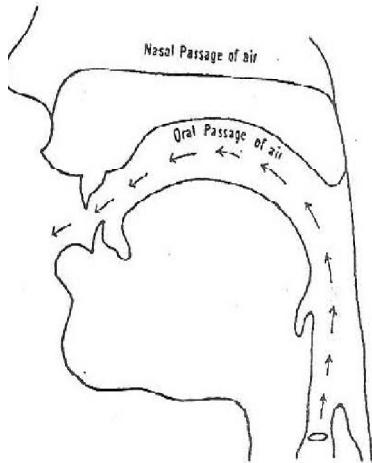
The part that lies behind the upper teeth is called the palate. It is also called as the roof of the mouth. It is divided into three parts moving backwards from the upper teeth:

1. Alveolar ridge/ Teeth ridge,
2. Hard palate and
3. Soft palate or Velum.

The Alveolar ridge: It is very hard and bony part of the roof of the mouth lying immediately behind the upper teeth. There are many sounds which are produced at this state. Such sounds are called alveolar sounds. e.g. alveolar plosives /t, d/

The Hard Palate: It is the part that lies against the front of the tongue. It is also hard, bony and concave part. It lies between the teeth ridge and the soft palate. The sounds produced at this state are called palatal. e.g. palatal semi vowel / j /.

The Soft Palate: As compared to the alveolar ridge and hard palate, it is a fleshy, soft, smooth part. It is movable. It can be lowered or raised. The sounds produced at this place are called Velar sounds. e.g. / k, g /.



3 Soft palate in the raised position

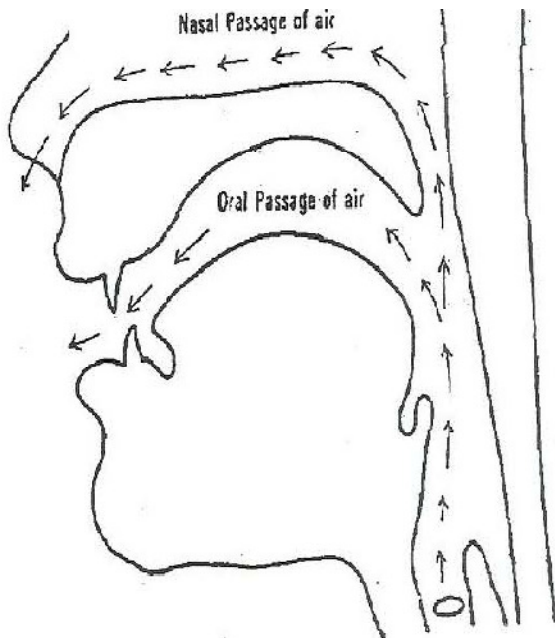


Fig. 5 Production of nasalise sounds

The Uvula: At the very end of the soft palate, there is a small fleshy organ called the Uvula. It is also known as the little tongue.

ARTICULATORS:

Articulation is a process resulting in the production of speech sounds. It consists of a series of movements by a set of organs of speech called the *Articulators*. The articulators that move during the process of articulation are called active articulators and the articulators which remain relatively motionless are called passive articulators. The points at which the articulator are moving towards or coming into contact with certain other organs are the *Place of articulation*. The type or the nature of movement made by the articulator is called the *Manner of articulation*.

ACTIVE AND PASSIVE ARTICULATORS:

Before we talk about the description and classification of speech sounds, it is important for us to know about **active** and **passive** articulators and how they differ each other.

The articulators are those vocal organs which are situated along the vocal tract above the glottis.

Active articulators:

The articulators which are located in the lower jaw are called active articulators. They are lower lip, lower teeth, and tongue. It is upper surface of the tongue which is mostly concerned with articulation. There are other organs such as vocal cords which can be treated as active articulators. The uvula also is usually included among the active articulators. They are called active because they can move. They are movable articulators.

In the production of speech sounds the active articulators move from their position towards the passive articulators. For example, in the production of / t, d, s, n / sounds, the tip and blade of the tongue move from their position of rest to articulate against the teeth ridge which remain motionless.

Passive articulators:

Passive articulators are those organs of speech that cannot move. They are upper lip, upper teeth, and palate / roof of the mouth and the back wall of the throat or pharynx. They are located in the upper jaw. The soft palate is both an active and a passive articulator. When it is raised to shut off the nasal passage of air for the production of oral sounds it is an active articulator. When the back of the tongue is raised and makes contact with the velum to produce sounds such as the initial consonants in the English words, 'girl' 'goggle' the velum is a passive articulator.

PHONEMES IN ENGLISH

Each and every language has the sound system. In that sound system there are sound units. Such sound units are called phonemes. In English there are 44 phonemes or basic speech sounds. All these sounds are used in English language. Thus any speech sound is a phone.

Phonemes are significant sounds in a specified language. So they are called language-specific. There are no universal phonemes. Each language has its own set of phonemes or speech sounds (in its sound system). For instance English has 44 phonemes in its sound system. Marathi has 48, Hindi 48, Tamil 41 and Kannada 47 etc.

DEFINITIONS:

- 1) The **smallest unit** at the level of **sound** is called a phoneme.
- 2) Leonard Bloomfield defines phoneme as, 'the **minimal distinctive sound unit** of a language.' In other words, phoneme is defined as 'the **smallest contrastive sound unit** of a language.' e.g. / p /, / t /, / k / in English.

CHARACTERISTICS OF PHONEMES:

Phonemes have the following characteristics.

1. Contrastive sound units:

Phonemes are contrastive or distinctive sound units. For instance, if we use one phoneme in place of another in a word, the meaning of that word changes..e.g. 'bat' is a word with three phonemes. They are / b /, / æ /, / t /. But when we use the phoneme / m / in place of / b /, the meaning of that word changes and the word 'bat' becomes 'mat'.

It means the substitution of one of the phonemes (in the word) for the other gives us a new word. For example, in the word 'son' we replace each phoneme by the other phonemes and get new words. For example, 'run', 'sun' and 'sum'. So they are different phonemes. In this sense we call phoneme as the distinctive or contrastive sound unit of a language.

2. Minimal or Smallest sound units: Phonemes are the minimal or the smallest sound units. They cannot be sub divided. For example, we can divide the word 'fat' as / f /, / æ /, / t / into three phonemes. But we can't divide each Phoneme further.

3. Minimal pair technique:

We can identify the phonemes in a particular language by the technique called the minimal pairs. For example:

The pair 'bit' and 'sit' shows / b / and / s / are different sounds.

The pair 'bat' and 'bet' shows / æ / and / e / are different sounds and

The pair 'but' and 'bun' shows / t / and / n / are different sounds.

4. Slant lines // are used to indicate phonemes) or

Phonemes are written in two slant lines / t /.

Minimal Pairs:

We can identify the phonemes in a particular language with the help of minimal pair technique.

DEFINITION:

A minimal pair is a set of two or three sound clusters that differ from each other only in one sound.

e. g. ‘pill and ‘bill’ make a minimal pair in English. They differ from each other in the initial position / p/ and / b /

‘last’ and ‘lost’ make a minimal pair. They differ from each other in the medial sounds /a:/ and /ɒ /

In ‘sun and ‘sum’, / n / and / m /are different sounds at the final position.

Thus, this is a very useful technique to find out the basic sounds of a language with the help of ‘**the native speaker of that language**’ (Informant).

On the basis of his knowledge of Marathi, the informant makes distinction between the following pairs:

कण — खण

रत्न — रमन

कप — कर

The concept of Phonology

Phonetics and Phonology are both concerned with the same subject matter or aspect of language i.e. **speech sounds**, but they are concerned with them from different point of view. Phonetics is the study of speech sounds of a language in general i.e. without reference to a particular language while phonology is the study of speech sounds of a **particular** language. For example, the study of English speech sounds.

Phonology studies the function, selection and organization of speech sounds of a language. It deals with the study of phonemes and their variants (allophones) in a particular language and suprasegmental features such as stress and intonation. For example, English phonology considers 44 phonemes, their organization and function.

Phonology of one language differs from the phonology of another language. For example, English phonology considers 44 phonemes and Marathi language 48. Phonology describes the sounds of a particular language. In this way phonology is functional and is different from language to language. Phonemic transcription is written in two slant lines .e.g /p/

Difference between Phonetics and Phonology

Sr. No	Phonetics	Phonology
1	Phonetics is the study of speech sounds of a language in general i.e. without reference to a particular language.	Phonology is the study of speech sounds of a particular language. For example, the study of English speech sounds.
2	Phonetics is the study of production, transmission and reception of speech sounds. It is studied under three branches: 1)Articulatory Phonetics: It deals with production of speech sounds with the help of organs of speech. 2) Acoustic Phonetics: It deals with the sound waves and transmission of speech sounds. 3) Auditory Phonetics: It deals with the reception of speech sounds and hearing act.	Phonology studies the function, selection and organization of speech sounds of a language. It deals with the study of phonemes and their variants (allophones) in a particular language and suprasegmental features such as stress and intonation. For example, English phonology considers 44 phonemes, their organization and function.
3	Phonetics is one and the same for all languages of the world.	Phonology of one language differs from the phonology of another language. For example, English phonology considers 44 phonemes and Marathi language 48.
4	Phonetics considers speech sounds independently.	Whereas Phonology describes the sounds of a particular language.
5	In this way phonetics is descriptive and classificatory.	while phonology is functional and is different from language to language.
6	Phonetic transcription is written in square brackets e.g [p ^b It] as in' pit'.	Phonemic transcription is written in two slant lines .e.g /p/ .

PHONETICS AND PHONOLOGY

Phonetics and Phonology are both concerned with the same subject matter or aspect of language i.e. **speech sounds**, but they are concerned with them from different point of view. Phonetics is the study of speech sounds of a language in general i.e. without reference to a particular language while phonology is the study of speech sounds of a **particular** language. For example, the study of English speech sounds.

PHONETICS

Phonetics is the study of production, transmission and reception of speech sounds. It is studied under three branches:

1 **Articulatory Phonetics:** This system deals with production of speech sounds with the help of organs of speech. It studies the articulators such as pharynx, the lips, the teeth, the tongue, the palate (Roof of the Mouth) and the Uvula. The organs of speech are classified into: Active articulators and passive articulators.

The articulators which are located in the lower jaw are called active articulators. They are lower lip, lower teeth, tongue, soft palate and vocal cords. Passive articulators are located in the upper jaw. They are upper lip, upper teeth, and palate / roof of the mouth and the pharynx.

Consonants are classified according to ***Place of articulation, Manner of articulation*** and ***voicing***.

Place of Articulation:

Place of articulation means the study of which organs of speech are involved in the production of speech sounds and what role they play in their pronunciation. Consonants sounds can be classified according to the place of articulation as follows.

- I) **Bilabial:** Bilabial sounds are produced by pressing the two lips together e.g. / p, b, m, w/.
- II) **Alveolar:** Alveolar sounds are made by raising the tip & blade of the tongue towards the alveolar ridge e.g. / t, d, n, l, s, z/
- III) **Velar:** Velar sounds made by touching the back of the tongue to the soft palate called the velum. e.g. /k, g, ŋ /
- IV) **Labio- Dental:** These sounds are produced when the lower lip is raised towards the upper front teeth. e.g. / f, v /
- V) **Dental:** Dental sounds are produced by touching the tip of the tongue to upper front teeth. e.g. / θ, ð /
- VI) **Palato – alveolar:** These sounds are produced when the tip and blade of the tongue is raised towards the alveolar ridge simultaneously the front of the tongue is raised towards the hard palate. e.g. / ʃ, ʒ, tʃ, dʒ /
- V) **Post alveolar:** tip of the tongue is raised very close towards the back of alveolar ridge, for e.g /r/
- VI) **Palatal:** The front of the tongue is raised towards hard palate. for e.g /j/
- IX) **Glottal:** The sound is produced at the glottis and the vocal cords are the articulators.

for e.g /h/

Manner of Articulation:

Consonants can be classified according to the manner of articulation as given in the table:

Classification	Examples
Plosives / Stops	/p/, /b/, /t/, /d/, /k/, /g/
Nasals	/m/, /n/, /ŋ/
Fricatives	/f/, /v/, /s/, /z/, /θ/, /ð/, /ʃ/, /ʒ/, /h/
Affricates	/tʃ/, /dʒ/
Frictionless-continuant	/r/
Lateral	/l/
Semi vowels	/j, w/

Voicing:

On the basis of voicing, sounds can be classified into voiced and voiceless sounds. For example, / p, t, k, f, θ, S, ʃ tʃ, h, / are voiceless sounds whereas all vowels and consonant sounds like / b, d, g , m, n, ŋ v, ð z, ʒ, dʒ l, r, j, w / are voiced sounds.

2 Acoustic Phonetics: It deals with the sound waves and transmission of speech sounds.

3 Auditory Phonetics: It deals with the reception of speech sounds and hearing act.

While studying Phonetics, it can be observed that Phonetics is one and the same for all languages of the world. It considers speech sounds independently. In this way phonetics is descriptive and classificatory. Phonetic transcription is written in square brackets e.g [p^hIt] as in ‘pit’.

SPEECH SOUNDS IN ENGLISH

**Dr. Mrs. Sarita Mane, Mudhoji College,
Phaltan**

English Alphabet

- There are 26 Letters in English Alphabet.

- Capital Letters

A B C D E F G H I J K L M
N O P Q R S T U V W X Y Z

- Small Letters

a b c d e f g h i j k l m
n o p q r s t u v w x y z

Consonants and vowels

a b c d e f g h i j k l m n
o p q r s t u v w x y z

Vowels: The letters in circle are called vowels. It means a,e,i,o,u are vowels.

Let's find vowels in the following words.

- 1) cat – Here 'a' is the vowel.
- 2) hen- Here 'e' is the vowel.
- 3) Kid - Here 'i' is the vowel.
- 4) owl- Here 'o' is the vowel.
- 5) Up - Here 'u' is the vowel and
- 6) Glue - Here 'u' and 'e' are the vowels.

Consonants: All letters other than vowels are consonants.

Let's find consonants in the following words.

- 1) **cat** – Here 'c' and 't' are consonants
- 2) **hen**- Here 'h' and 'n' are consonants
- 3) **Kid** - Here 'k' and 'd' are consonants
- 4) **owl**- Here 'w' and 'l' are consonants
- 5) **Up** - Here 'p' is a consonant
- 6) **Glue** - Here 'g' and 'l' are the vowels.

Now see another words which have both vowels and consonants.

- | | | |
|-------------------|-------------------|------------------|
| 1) mother | 2) house | 3) go |
| 4) got | 5) pencil | 6) seat |
| 7) boy | 8) machine | 9) unique |
| 10) public | 11) tall | 12) bus |
| 13) girl | 14) across | 15) fat |

- In the above words the letters in **red color** are vowels.

AND

- The letters in purple **color** are consonants.

1) mother

2) house

3) go

4) got

5) pencil

6) seat

7) boy

8) machine

9) unique

10) public

11) tall

12) bus

13) girl

14) across

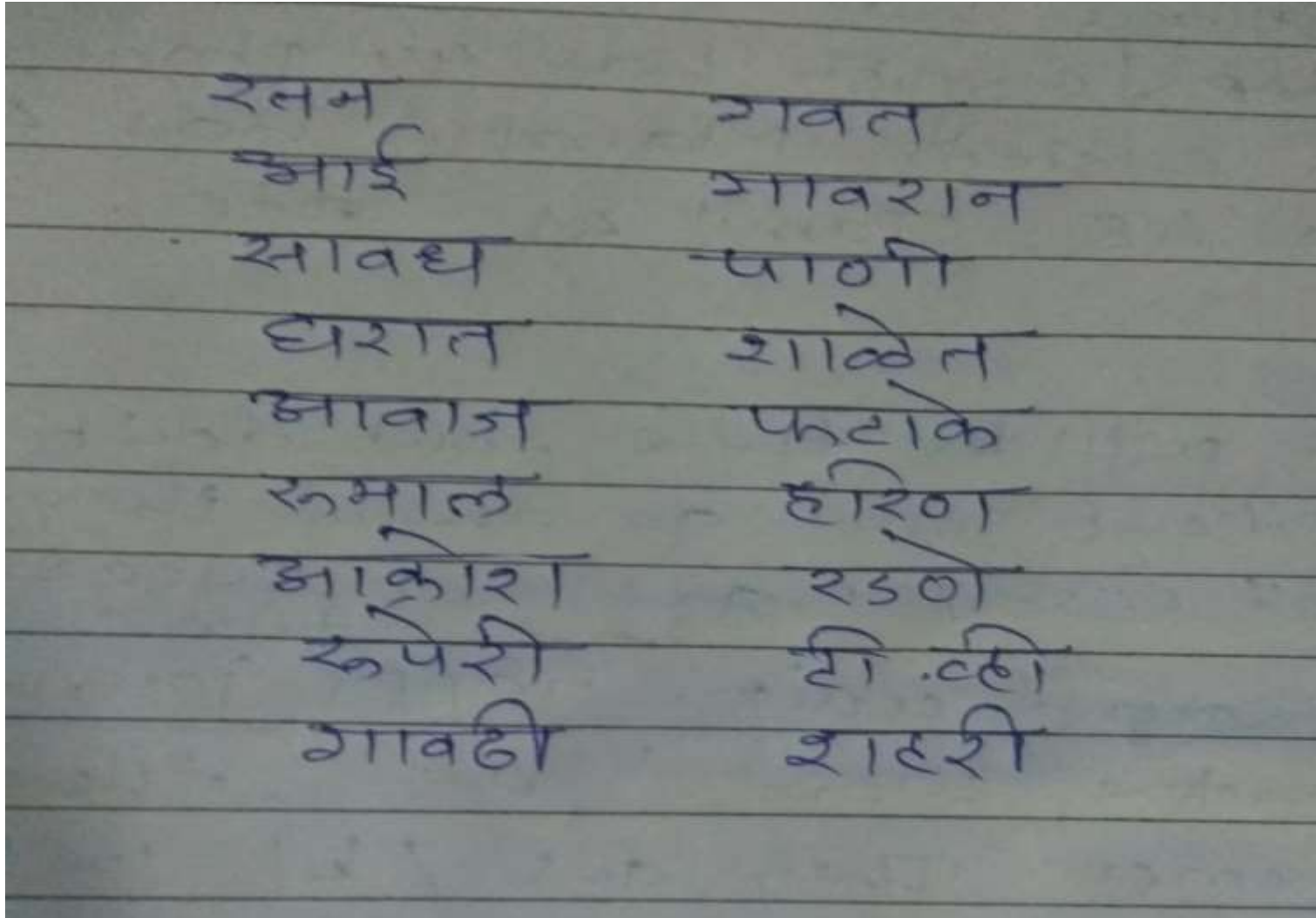
15) fat

Marathi speech sounds

- Marathi language has 48 speech sounds in its sound system. These speech sounds are classified into 36 consonants and 12 vowels. It means in Marathi speech sounds and letters are the same. But we don't find it in English. In English letters and speech sounds are different.
- (But now we found two new vowels अँ and आँ due to the use of English language. Now Marathi Vowels are 14 instead of 12. So now Marathi Barakhadi is called as Marathi Chaudakhadi)
- **The list of Vowels:**
- अ आ इ ई उ ऊ ए ऐ ओ औ अं अः (अँ आँ ऋ)
- **The list of Consonants :**
- [In Marathi there are 36 consonants (consonants that stop air from moving out of the mouth). They are:
- क ख ग घ ङ च छ ज झ ञ
ट ठ ड ढ ण त थ द ध न
प फ ब भ म य र ल व
श ष स ह ळ क्ष ज्ञ

WORD	Pronunciation	Hindi	Marathi
Menu	मेनु	यादी	भोजनसूची
Mere	मयर	केवल	केवळ
Merely	मेरली	केवल	फक्त
Mess	मेस	गडबड	गोंधळ
Message	मेसेज	संदेश	निरोप
Metal	मेटल	धातू	धातु
Meter	मिटर	मीटर	मीटर

- Let us see the words from Marathi Language which have both vowels and consonants.



Now see these letters show different sounds (speech sounds) .

For example ‘o’ letter in the words shows different sounds:

1) mother : /ʌ/ in /mʌðə r/

2) house : / aʊ/ in /haʊs /

3) go : /əʊ/ in go / gəʊ /

4) got : /ɒ/ in / gɒt /

• ‘a’ letter in the words shows different sounds:

1) mat

2) village

3) machine

4) about

5) ask

6) caught

7) age

8) have

Phonetics and Phonology

Phonetics and Phonology: two branches of Linguistics

- **Subject matter : speech sounds** The two branches of Linguistics, are concerned with the same subject matter or aspect of language but they are concerned with them from different point of view.
- For example, Phonetics is the study of **speech sounds of a language in general** (i.e. without reference to a particular language)
- Phonology is the study of **speech sounds of a particular language**. (i.e. The study of English speech sounds.)
- Phonetics: deals with the pronunciation of the words.
- A phone is a speech sound.
- Phones are represented with phonetic symbols which seem to be similar to a letter in an alphabetic language like English. different phones of English, particularly British, showing how they are produced and how they are represented symbolically.
- These symbols are prepared by the **International Phonetic Association (IPA)** to establish and maintain international intelligibility and uniformity in the pronunciation of English all over the world.

IPA SYMBOLS

- Given below are the **IPA** symbols which are used to transcribe sounds of English language. These symbols are taken from A.S. Hornby's The Advanced Learner's Dictionary of current English (ALD) 4th edition.

- **CONSONANTS:**

- In English there are 24 consonants.

- /p/ - pen / pen /
- /b/ - bell / bel /
- /t/ - tell / tel /
- /d/ - dance /da:ns/
- /k/ - key / k i:/
- /g/ - gas /gæs/
- /m/ - man /mæn/
- /n/ - new /nju: /
- /ŋ/ - sing / sɪŋ /
- /f/ - flood / flʌd/
- /v/ - van /væn/

- /θ/ - third / θɜ:d /
- /ð/ -they / ðeɪ /
- /s/ - stool / stu:l /
- /z/ - zoo / zu: /
- /ʃ/- shine / ʃaɪn /
- /ʒ/ - garage / ɡæra:ʒ /
- /h/ - hill / hɪl /
- /tʃ/ - charge / tʃ a:dʒ /
- /dʒ/ - judge / dʒʌdʒ /
- /l/ - light / laɪt/
- /r/ - right / raɪt /
- /j/ -yes / jəs /
- /w/ - week / wi:k /

PURE VOWELS (MONOPHTHONGS)

- PURE VOWELS (MONOPHTHONGS):

- In English there are 12 pure vowels.

- /i:/ - green / gri:n /

- /ɪ / - mill / mɪl /

- /e/ - men- / men /

- /æ/ - fat /fæt /

- /ɜ:/ - bird / bɜ:d /

- /ə/ - alone / ələʊn /

- /ʌ/ - shut /ʃʌt /

- /u:/ - pool /pu:l /

- /ʊ/ - pull /pʊl /

- /ɔ:/ - force / fɔ:s /

- /ɒ/ - follow / fɒləʊ /

- /ɑ:/ - cast / ka:st /

DIPHTHONGS

- **DIPHTHONGS:**
- In English there are 08 diphthongs.
- /ɪə/ - fear / fiə /
- /eə/ - fair / feə /
- /ʊə/ - sure / ʃʊə /
- /eɪ/ - table / teɪbl /
- /aɪ/ - five / faɪv /
- /ɔɪ/ - coil / kɔɪl /
- /əʊ/ - go / gəʊ /
- /aʊ/ - how / haʊ /

Speech sounds in English and Marathi

- **Phoneme:** In English the speech sound is called a Phoneme and it is shown by two slant lines. For e.g /p/
- **Varna :** The speech sound in Marathi is called a 'Varna' and it is shown by small slant dash at the bottom . For e.g / /
- **Script:** English uses **Roman** script where as Marathi uses **Devnagari** script.
- English has **44** speech sounds: **24** consonants, **20** vowels which are further divided into **12 monophthongs and 08 diphthongs.**
- Marathi has **48** speech sounds: **32 consonants, 12 vowels.**

- **Difference between the speech sounds and letters in Marathi and English:**
- In Marathi the speech sounds and letters not different.
- There is always one-to- relationship between the speech sounds and letters.
- In English the speech sounds and letters are not necessarily the same.
- They differ each other. There is no one-to- relationship between the speech sounds and letters.

- There are 26 letters of English Alphabet but 44 speech sounds in English. It means 26 letters are pronounced in 44 different ways.
- But in Marathi we see 48 letters of Marathi Alphabet and 48 speech sounds are same. They are not different sounds.
- In English one letter can have different speech sounds and one speech sound can have different letters. For example, the letter 'a' is pronounced as /æ/ in apple, /ɑ:/ in cart, /ɪ / in village, /ɔ:/ in all, /e/ in men and /ə/ arrest.
- On the contrary, different letters are pronounced as one speech sound in the following words that is /ɪ / . The pronunciation of all bold letters in the following words is /ɪ / .

city, village. be women, sit.

- Furthermore one letter can stand for two speech sounds i.e letter 'c' stands for /k/ in 'call' and /s/ in 'cite'.
- Similarly two letters can stand for one speech sound. For instance, letters 'ch' stand for /k/ in 'chemistry' , /tʃ/ in 'child' and /ʃ/ in 'machine'.
- But in Marathi whatever we pronounce, we write. For example , if we write 'k' we pronounce 'k'. There is always one-to-one relationship between the letters and speech sounds.

PHONEMIC TRANSCRIPTION OF THE WORDS

/ ə'gəʊ /

/di'faɪn /

/rɪ'leɪt /

/kə'leɪʃn /

/hɪs'tɔːrɪk /

/'sɪrɪəs/

/'ɔːrɡnaɪz /

/di'mɒkrəsi /

/dʒɪ'pləʊdʒɪ /

/kə'riə /

/ʃaɪ'niːz /

/kən'dʌkt /

/ ə'krɒs /

/rɪ'mæri /

/rɪ'vaɪz/

/hɪs'tɔːrɪk /

/ɪ'sensɪv /

/'ænimet /

/'klærɪfaɪ /

/'deməkræt /

/kən'teɪn /

/'dentl /

/ək'sept/

/səb'dʒekt /

/bɪ'treɪ/

/dɪs'tʃaːdʒ/

/kə'lekt /

/hɪs'tɔːrɪkl/

/tek'nɪʃn/

/kəm'pleɪnɪŋ/

/əd'vɜːsəti /

/'pærəgrɑːf /

/mɪljə'neə /

/ɪ'sensɪv /

/kəm'pleɪn /

/'rekɔːd /

SPEECH SOUNDS AND PHONEMIC TRANSCRIPTION

- **Transcription:** is a process to **Standardize Pronunciation**.
- It is a visual representation of speech sounds (or phones).
- Two ways of Transcription: **Phonemic and Phonetic**.
- ***Phonemic transcription:*** the most common type of phonetic transcription used in many English dictionaries.
- Known as ‘**broad**’ transcription.
- Represents speech using just a unique symbol for each phoneme of the language.
- The following words are transcribed phonemically as:
 - pin /pɪn / -- / p- ɪ - n / = 3 sounds/ phonemes
 - kill /kɪl /-- / k- ɪ - l /-- = 3 sounds/ phonemes
 - till /tɪl/ -- / t- ɪ - l / -- = 3 sounds/ phonemes
 - table /teɪbl/ -- / t- eɪ - b - l/ = 3 sounds/ phonemes
- (Note: The phonemic transcription is placed between two slash brackets or slant lines: / /.)

- **Phonetic transcription:**
- This kind of transcription is known as ‘narrow’ transcription.
- The same three words mentioned above transcribed phonetically as follows:

pin	[p ^h ɪn]	[p ^h -ɪ- n]	spin	[spɪn]	[s-p-ɪ-n]
kill	[k ^h ɪl]/	[k ^h -ɪ-l--]	skill	[skɪl]	[s-k-ɪ-l]
till	[t ^h ɪl]	[t ^h -ɪ--l]	still	[stɪl]	[s-t-ɪ-l]
table	[t ^h eɪbəl]	[t ^h -eɪ-b-l]	stable	[steɪbəl]	[s-teɪ-b-l]

- (Note: The phonetic transcription is placed between square brackets: []).

SYLLABLE

- It is generally said that syllable is a very important unit, that is, it is found in all languages and in all words.
- **Definitions**
- Roach (1998:67) states that the syllable is a very important unit in both Phonetics and Phonology.
- Skandera and Burleigh (2005:65) says that syllable can be probably defined as the smallest rhythmic unit of spoken language, or a unit that is typically larger than a single sound smaller than a word.
- Crystal (1985:164) believes that syllable is an element of speech that acts as a unit of rhythm, which is noticeable in English pronunciation and consisting of a vowel, a syllable consonant or a vowel plus consonant combination.
- Syllable is a unit of spoken language consisting of a single uninterrupted sound.
- It consists of one or more vowel sounds alone or of a [syllabic](#) consonant alone or of either with one or more consonant sounds preceding or following

- **Syllables:** A word can be segmented or broken down into smaller units called syllables.
- A word contains at least one syllable. For example in the word 'I' or 'eye', there is only one vowel sound i.e. / ai /, so we say 'I' or 'eye' is one syllable word. It is **monosyllabic**.
- Then the word "doctor" has two *syllables*. They are 'Doc' and 'tor'. So "Doctor" is a two-*syllable* word. Similarly the word 'watchman' has two syllables in it; they are 'watch' and 'man'. But the word 'remember' has three syllables in it. e. g. 're' 'mem' and 'ber'.
- We usually mark syllabic division with a hyphen.
- e. g. 're-mem-ber'.
- **Vowel:** The most important segment in the syllables is the vowel. The number of the syllables depends upon the number of independent vowels in it.
- Thus we can have a syllable without any consonant but there can be no syllable without a vowel.
- A vowel is a very important part of syllable so it is called Nucleus (centre).

The structure of the English syllable

- **Consonant clusters:** Sequences of (two or more) consonants at the beginning as well as at the end of a syllable are called consonant clusters. For example, in the word ‘straight’ [streɪt], there is a consonant cluster [str] in the beginning followed by a diphthong [eɪ] and final consonant [t].
- **Nucleus:** The Vowel or diphthong is the nucleus or peak of a syllable. The consonant(s) before the peak is called the ‘onset’ and the consonant(s) after the peak is called the ‘coda’.
- The ‘onset’ and the ‘coda’ are optional.
- **Open syllables and Closed syllables:** If the syllable ends in a vowel, it is called an ‘open’ syllable and if it ends in a consonant, it is a ‘closed’ syllable. For example, syllables like, the / ðə/ or were / wə/ have an onset and a nucleus, but no coda. They are known as ‘open’ syllables. When a coda is present, as in the syllables on / ɒn/, up /ʌp/ or of / əv/, they are called ‘closed’ syllables, because the coda is present here. (Yule, 2006:47).
- Both the onset and coda can consist of more than one consonant, also known as a consonant cluster.

- For instance, in the word 'I' or 'eye', / ai /, there is onset or coda. But in the word 'straight' [streit], [str] is the onset, [ei] is the peak/ nucleus and [t] is the coda. It can be represented as : cccvc.
- In the Hindi words like [pi:o:] and [ja:o:] , the words fall into two separate syllables [pi:] [o:] and [ja:] [o:] , the vowel combinations are to be treated as sequences and not as diphthongs.
- We find that the word can begin with a vowel, or with one, two, or three consonants. **No word begins with more than three consonants;** it can end with a vowel, or with one, two, three or (in a small number of cases) four consonants. **No word ends with more than four consonants** (Roach, 1998:67).
- The general structure of English syllable is 'cvc'.
- When we describe the structure of syllable, we use the symbol 'c' to represent a **consonant** and 'v' for a **vowel**. For example:
- The structure of the syllable can be shown as follows:

1) cat /kæt/
/cvc/

2) bet /bet/
/cvc/

3) rate /reit/
/cvc/

4) feel /fi:l/
/cvc/

5) caught /kɔ:t/
/cvc/

7) acts /ækts/
/cvcc/

8) asks /a:skz/
/vccc/

Monosyllabic words:

The words having one syllable are called monosyllabic words. The words given above are monosyllabic.

Polysyllabic words:

The words having more than one syllable are called polysyllabic words.

For example, unhappily

/ʌnhæpɪli/

/vccvcvcv/

/ʌn-hæ-pɪ-li / 3 syllable word

Syllabic Consonants

There are some consonants which takes the place of nucleus (vowel/ syllable). So they are called syllabic consonants. They are: / m /, / n /, / l /

Syllabic consonants are marked with short vertical stroke at the bottom [/ m /]

They usually occur at the end of a word e.g. in the word 'tension' / ten- jn /
CVC- CV

e. g. / m / = rhythm - / rɪ - ðm / = 2 syllables

= prism - / prɪ - zm / = 2 syllables

/ n / = mutton - / mʌ - tn / = 2 syllables

= cotton - / kɒ / - tn / = 2 syllables

/ l / = cattle - / kæ - tl / = 2 syllables

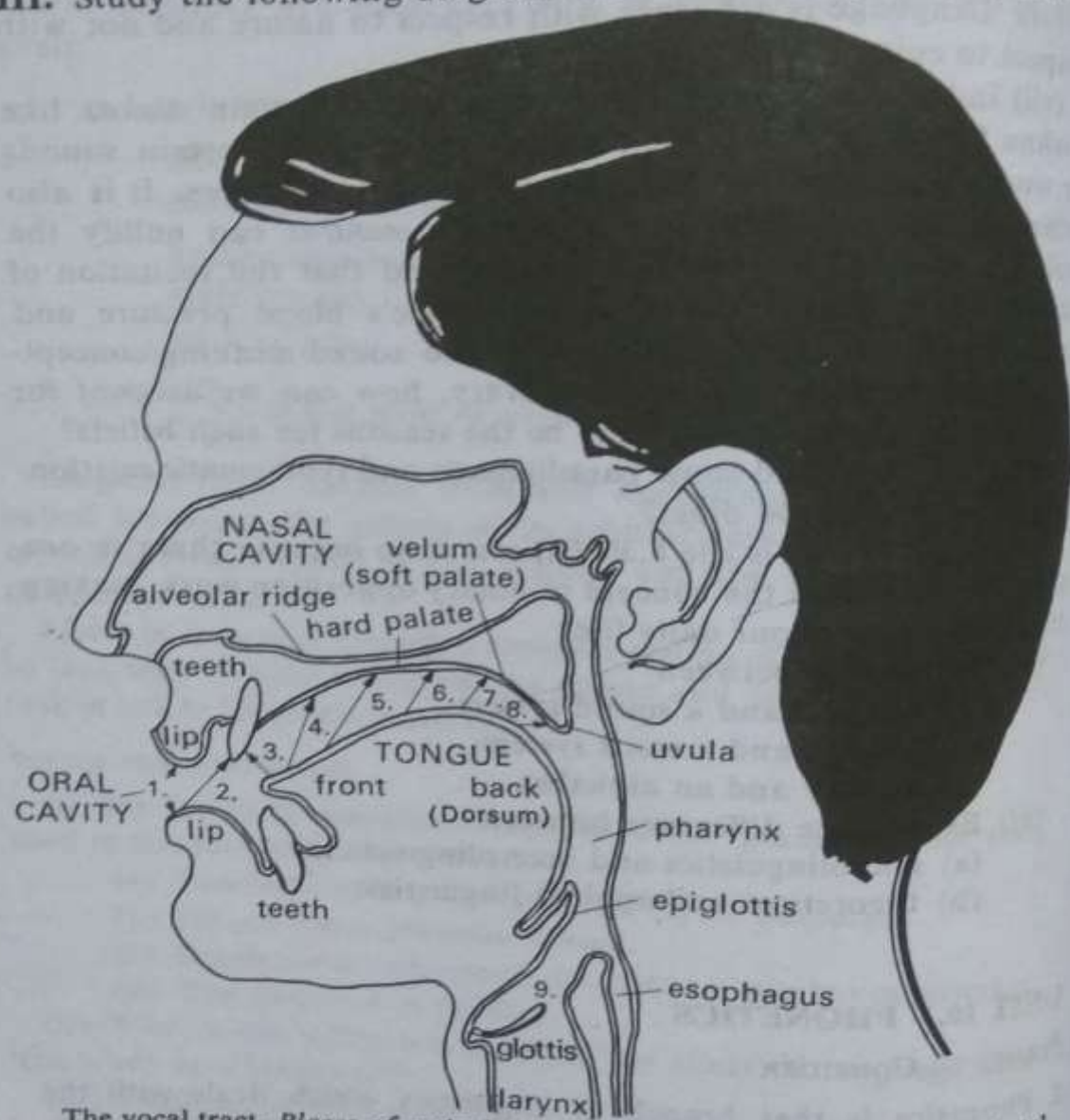
= battle - / bæ - tl / = 2 syllables

Strong and Weak Syllables

- **Strong and weak syllables :**
- One of the most noticeable features in English is that many syllables are weak. Then phoneticians have found that it is useful to make separate syllables that have more prominent nucleus, that is, which is normally pronounced loud, and less prominent nucleus, because of this, they divided the syllables into strong (have more prominent nucleus) and weak (have less prominent nucleus).
- **The stress:** is a major factor in determining whether a syllable is strong or weak, so these two types of syllables can be described in part in terms of stress since they are closely associated with this aspect. We could describe them partly in terms of stress by saying that strong syllables are stressed and weak syllable are unstressed.
- **Content words and structure words:**
- The content words or open word classes like noun, main verb, adjective and adverbs are stressed words while the structure words or closed word classes like pronoun, aux. verb, determiners, enumerators, prepositions, conjunctions and interjections are unstressed words.

ORGANS OF SPEECH
&
AIRSTREAM MECHANISM

III. Study the following diagram

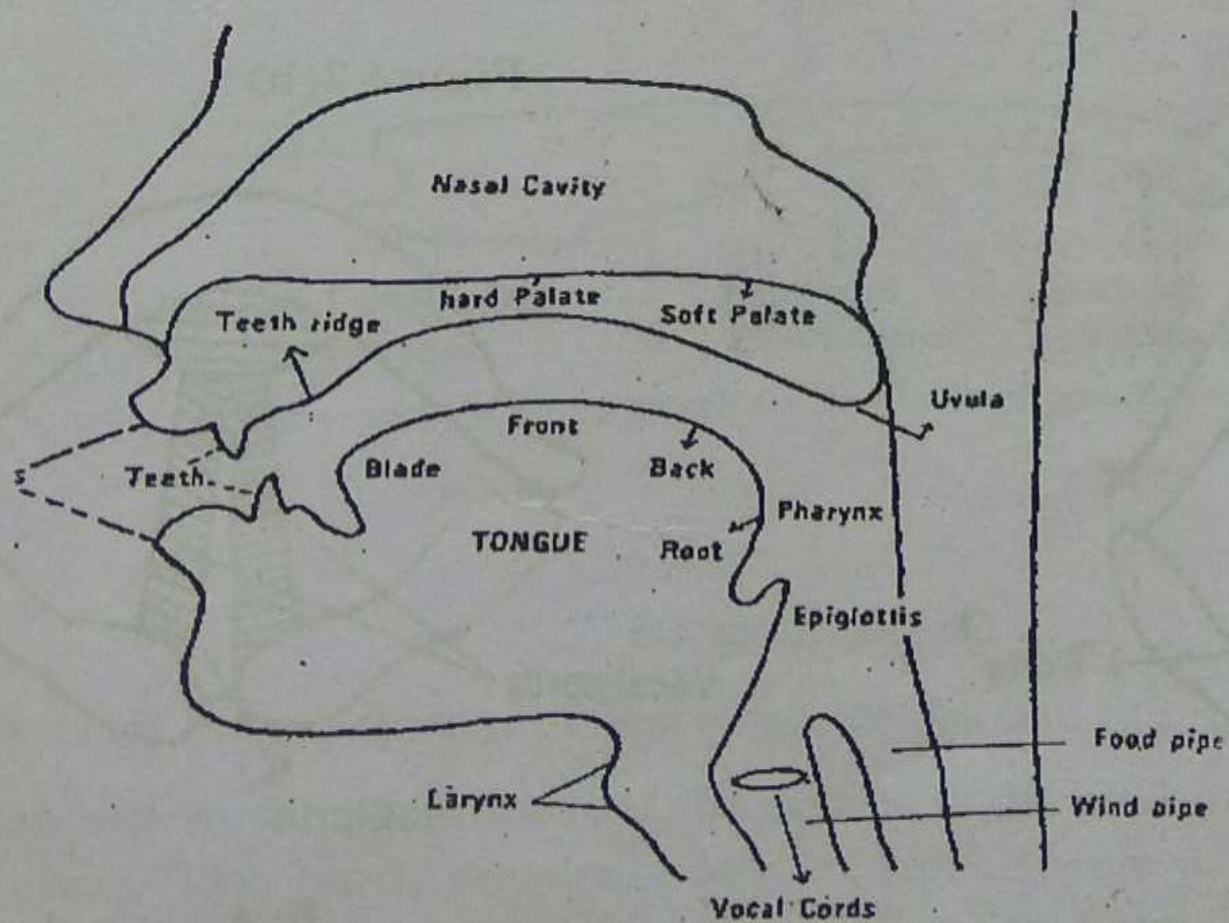


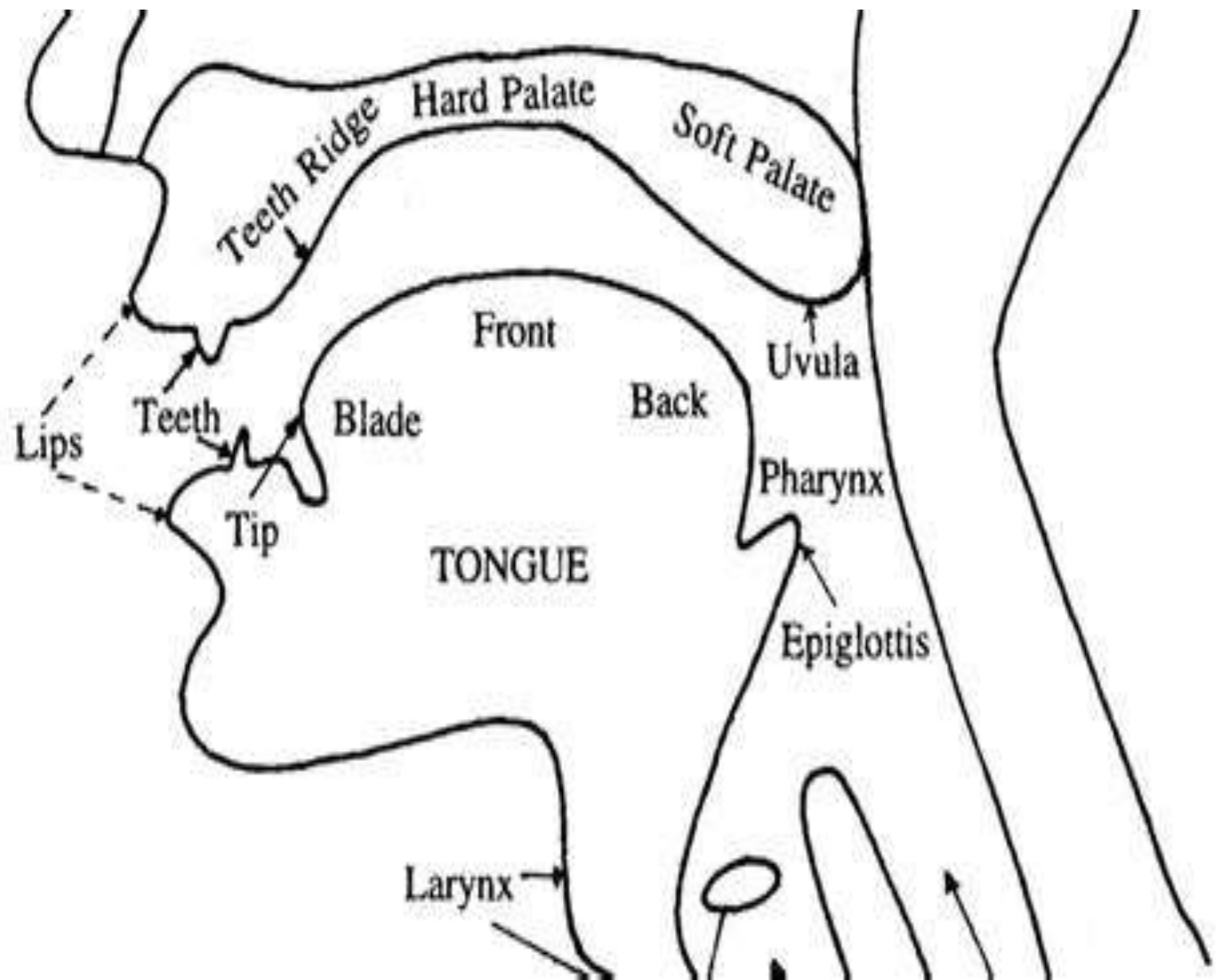
The vocal tract. *Places of articulation:* 1. bilabial, 2. labio-dental, 3. dental or inter-dental, 4. alveolar, 5. palato-alveolar, 6. palatal, 7. velar, 8. uvular, 9. glottal.

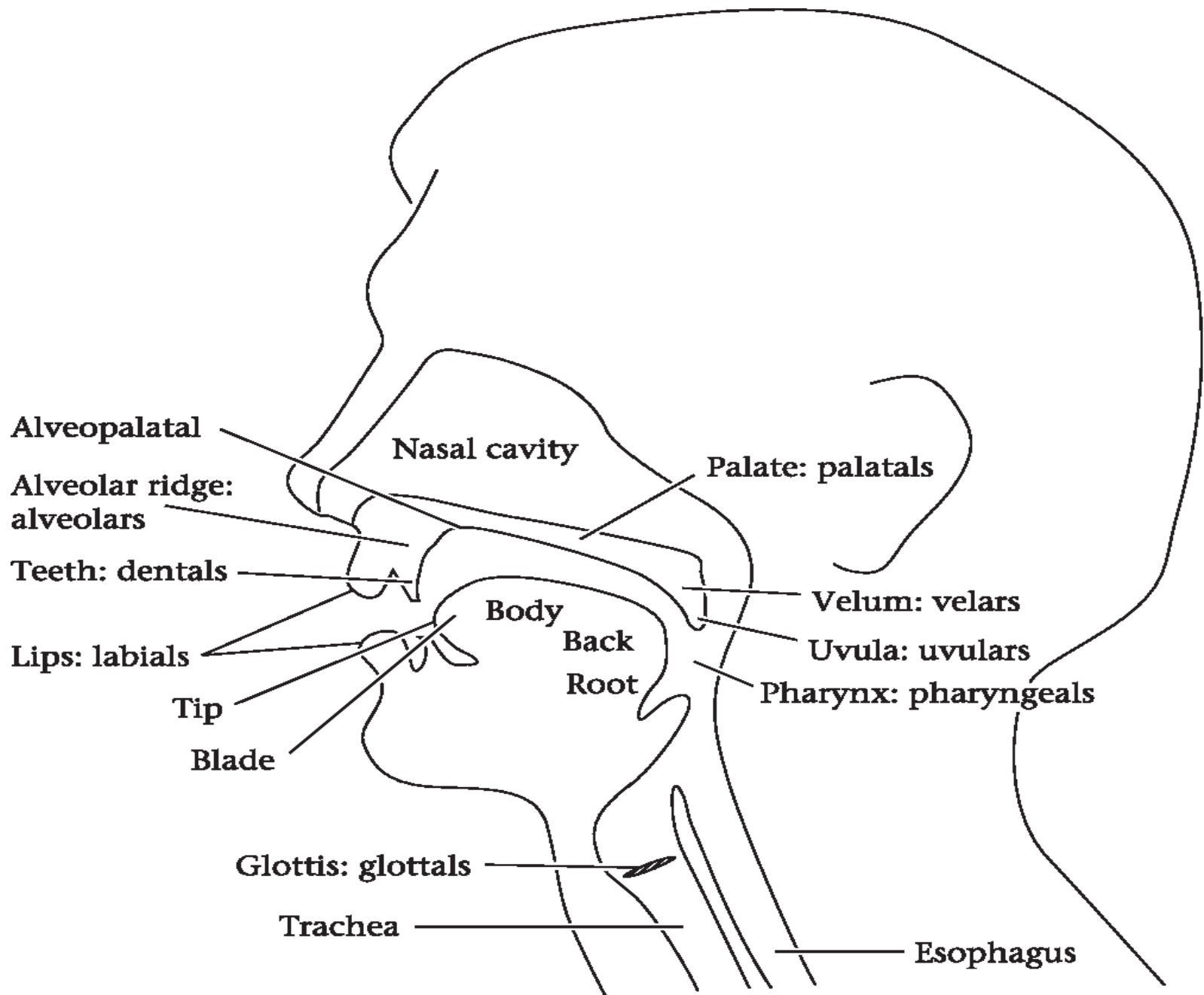
Organs of speech

4) Various positions of lips in the production of speech sounds.

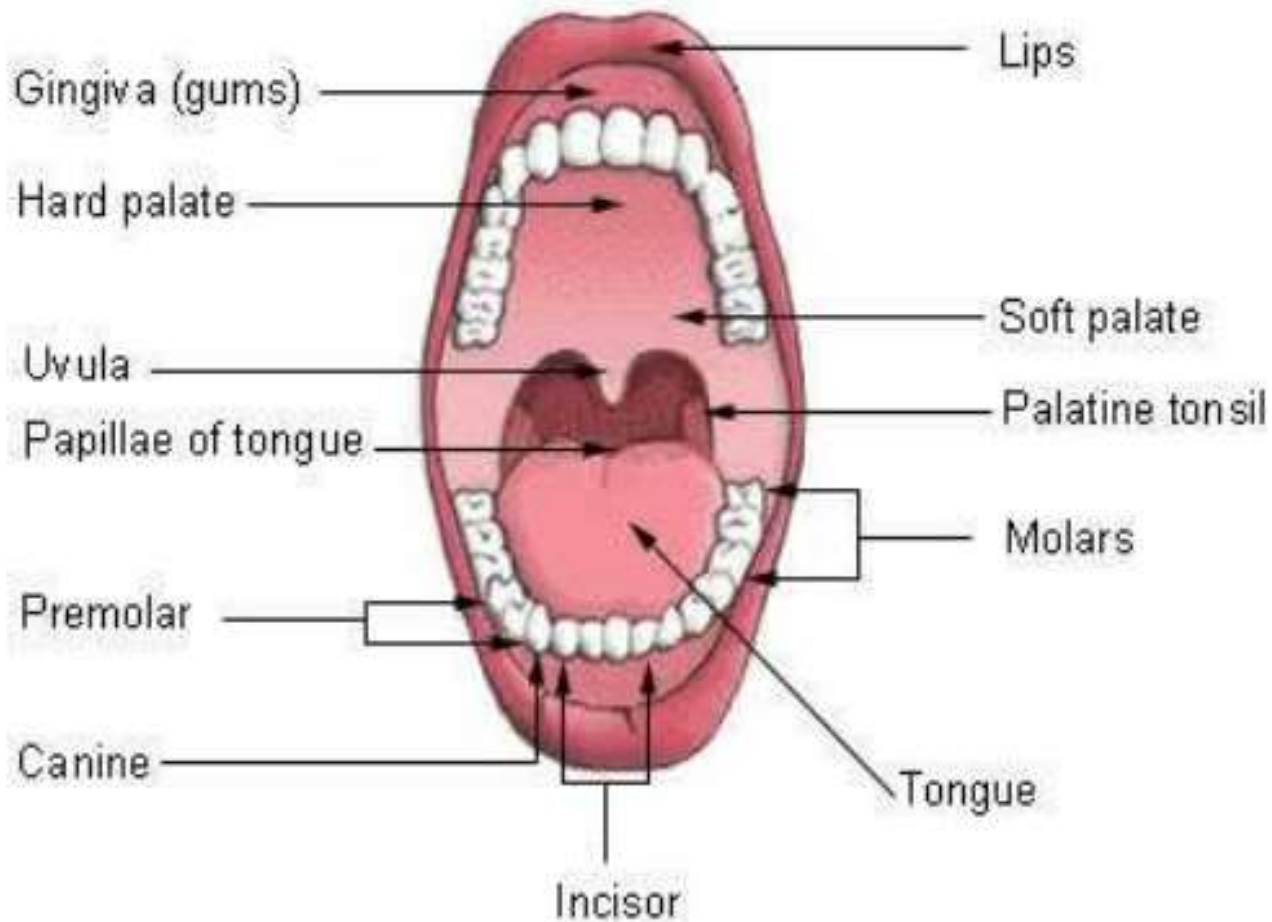
.4 Section 3: Organs of Speech

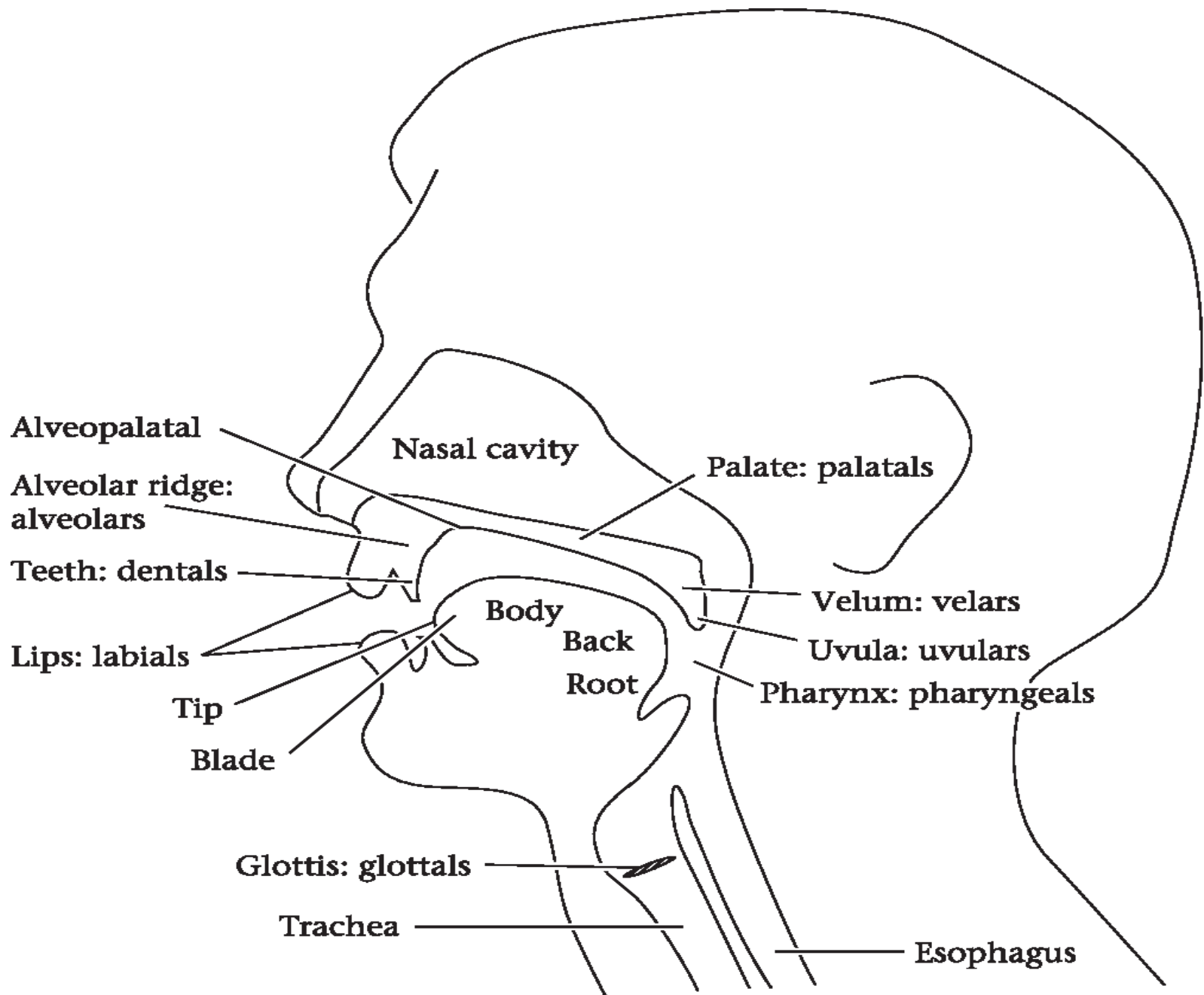


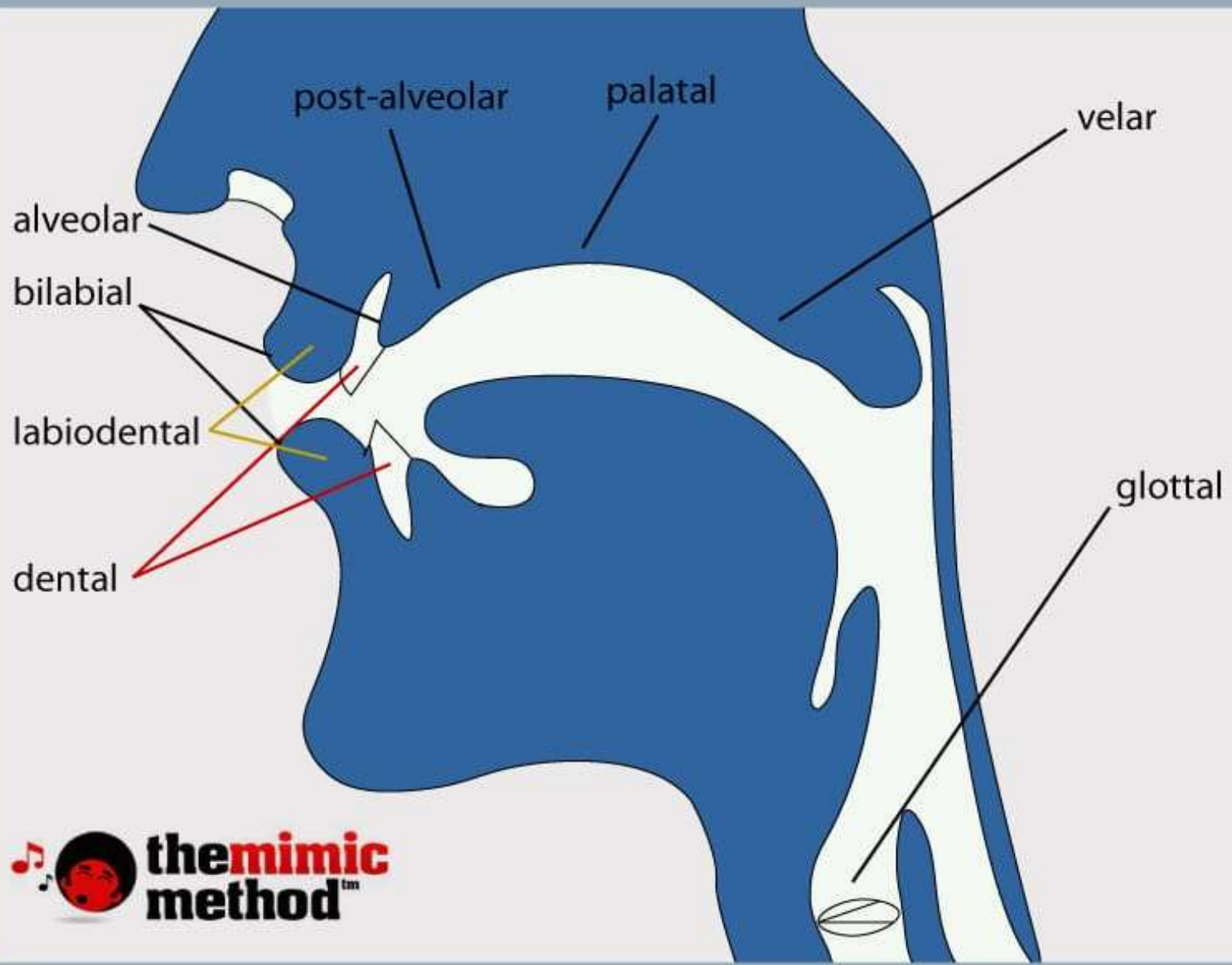




Mouth (Oral Cavity)







THE SOUNDS PRODUCING SYSTEM

- lungs : set air in motion
- trachea : windpipe
- larynx : the sound source (where the vocal cords are)
- Pharynx
- oral cavity
- nasal cavity

- Air goes from the lungs through the windpipe (trachea) and into the larynx →
- The air must pass between two small
- muscular folds, i.e. the VOCAL CORDS.
- The air passages above the larynx are
- known as the VOCAL TRACT.
- The VOCAL TRACT :
- ORAL TRACT (within the mouth)
- NASAL TRACT (within the nose)

ARTICULATORS

- ARTICULATORS
- parts of the vocal tract that can be used to form sounds.

- lips
- * teeth
- * Alveolar Ridge : the small protuberance behind the upper lip
- * Hard Palate : the front part of roof of the mouth →formed by a bony structure
- * Soft Palate (velum) : muscular flap at the back of the roof of the mouth
- * Uvula : small appendage hanging down at the lower end of the velum.
- * Pharynx : part of the vocal tract between the uvula and the larynx
- * Tongue:
 - ~ Tip and Blade → most mobile parts
 - ~ Body of the tongue
 - ▲ Front : behind the blade, lies underneath the hard palate
 - ▲ Center : partly beneath the hard palate and the soft palate
 - ▲ Back : beneath the soft palate
 - ▲ Root : opposite the back wall of the pharynx
 - * Epiglottis : attached to the lower part of the root of the tongue

- AIRSTREAM MECHANISM
- **The PULMONIC EGRESSIVE**
- ↓ ↓
- ? ?
- **AIRSTREAM MECHANISM**

- VOICED & VOICELESS SOUNDS
- ☐ airstream from the lungs moves out through the
- trachea and the opening between the vocal cords
- (glottis)
- ~ Voiced: when the airstream forces its way
- through and caused the vocal cords (which
- aren't apart) to vibrate
- e.g. /b, d, g, v, **ð, dʒ, z, ʒ**/
- ~ Voiceless: when the air is not obstructed at the
- glottis, -since the vocal cords are apart- and
- passes freely into the supraglottal cavities
- e.g. /p, t, k, f, **θ, tʃ, s, ʃ, h**/

- VOICED & VOICELESS SOUNDS
- (CONT.)
- ☐The formula:
- Voiced (+ voice)
- Voiceless (- voice)

- NASAL & ORAL SOUNDS
- [?] Nasal Sounds: produced when the velum is lowered, so the air escapes not only through the mouth but also the nose
- e.g. /m, n, ŋ/
- [?] Oral Sounds: produced when the velum is raised , so the air escapes only through the mouth
- e.g. /b, d, g,/
- [?] The formula:
- Nasal (+ nasal)
- Oral (- nasal)

**LECTURE
ON
PRAGMATICS**

**Dr. Mrs. Sarita Mane, Mudhoji
College, Phaltan**

PRAGMATICS

C3: Introduction to Modern Linguistics

SYLLABUS

- Unit 1: Nature, scope and branches of Linguistics
- Unit 2: Major Concepts in Linguistics: Langue/parole, signifier/signified, synchronic/diachronic, syntagmatic/paradigmatic, competence/performance, Jakobson's six elements/functions of Speech Event
- Unit 3: Semantics - Approaches to study of Meaning, Seven types of meaning
- **Unit 4: Pragmatics – Emergence of pragmatics, speech act theory, cooperative and politeness principles**

UNIT – 4

PRAGMATICS

- **Emergence of Pragmatics**
- **Pragmatics a recent discipline of study:** Pragmatics has emerged as an independent discipline in 1960 to study language in the context.
- **Pragmatic approach to meaning:** Philosophers like Wittgenstein, Austin, Searle, Grice and sociologists like Jefferson, Shagloff, Sacks etc developed certain theories , Principles and Mechanism to observe the actual use of language. All of them have in some way championed or supported a pragmatic approach to meaning.
- **The Pragmatics wastebasket:** For a long period in the study of language, there had been a very strong interest in the analysis of language structure and neglected many aspects that fall under the use of language (the aspect of performance) .
- **Pragmatics emerged as a separate branch of study:** Because it explains meaning that Semantics overlooks . Pragmatics is the study of all those aspects of meaning that are not studied or captured in a semantic theory.

Emergence of Pragmatics

- Semantics is concerned with the truth conditions of propositions expressed in sentence. It is a formal analysis. It is the basic literal meaning of a sentence.
- Pragmatics is the study of meaning minus truth conditions (Semantics).
- There are many aspects of language which cannot be studied under Semantics and so Pragmatics emerged as a discipline. For instance, an utterance having the different aspects of meaning as given below cannot be explained by a coherent semantic theory. For its complete study only Pragmatics can do justice.

Elements of the communicational context of an utterance

1. truth -conditions or Entailment
2. conventional implicatures
3. Presuppositions
4. Felicity Conditions
5. conversational implicatures (generalized)
6. conversational implicatures (particularized)
7. Inferences based on conversational structures

Emergence of Pragmatics

- 1 and 2 elements are conventional and can be studied under Semantics but 3 to 7 are context dependent and so Pragmatics can explain them.
- Pragmatics is concerned with the study of meaning as communicated by a speaker (or writer) and interpreted by a listener (or reader).
- It studies what people mean by their utterances than what the words or phrases in those utterances might mean by themselves.
- Pragmatics is the study of speakers meaning. It is the study of contextual meaning. It deals with what people mean in a particular context and how the context influences what is said.
- Pragmatics allows us to investigate how this “ meaning beyond the words” can be understood without ambiguity.
- Pragmatics is the study of unseen meaning. It is the study of how more gets communicated than what is said. For instance,

There is a lawn before your bungalow. The gate of your compound wall is open and your mother sees donkeys entering through the gate and says to you (Pinky)

Mother: Pinky ! Donkey!

- Pinky's mother by this remark meant that Pinky has to drive the donkeys off the lawn. The speaker here chooses only two words . Many words are left unsaid. Because the mother and daughter share the specific contexts
- The study of Pragmatics is concerned with different theories such as Speech Act theory, felicity conditions, conversational implicatures, Cooperative principle, Conversational maxims, Politeness principle, deixis etc.

DIFFERENCE BETWEEN SEMANTICS AND PRAGMATICS

- Semantics has been defined as the study of the meaning of language in the context of the language itself .
- In Semantics the meaning of language can be studied without any reference to the use of that language in the real world . Semantics studies the meaning of language in terms of **sense** only.
- Like Semantics, Pragmatics also studies the meaning aspect of language. However they differ each other in their orientations.
- They have different approaches towards the study of meaning.
- There are differences in the techniques or methodology they employ to study the meaning.
- Semantics ,like linguistics, deals with the competence aspect of language.
- Different scholars have defined the concept of ‘ Pragmatics’ in various way to illustrate the nature of this branch.

DIFFERENCE BETWEEN SEMANTICS AND PRAGMATICS

- Pragmatics studies the meaning of language in terms of **reference** only.
- Pragmatics studies the meaning of language in its actual use. It studies the meaning as communicated by the speaker and interpreted by the listener.
- For instance,
- There is a woman sitting on a bench in a park and a long log lying on the ground in front of the bench. A man comes along and sits down on the bench.

Man: Does your dog bite?

Woman: No

The man reaches down to pet the dog. The dog bites the man's hand.

Man: Ouch! Hey! You said your dog doesn't bite.

Woman: He doesn't . But this is not my dog.

Speech Act Theory

- **Introduced by** : J.L.Austin in his book “*How to Do Things with Words (1962)*”
- **Developed by** : J.R.Searle
- **Speech Act:** Actions which are conscious, purposeful and brings about changes in the original state.
- Speaking as an action
- Austin terms utterances as “ Performatives”
- J.L.Austin divided Speech Acts into three types:
 - 1) Locutionary Acts
 - 2) Illocutionary Acts
 - 3) Perlocutionary Acts

1) Locutionary Acts:

- Locutionary Act is the basic act of utterance
- Concerned with producing a meaningful linguistic expressions
- It is dependent upon the speaker's ability to produce well- formed and meaningful sentences
- This act means uttering certain words or sentences with sense and reference. For example, There is a book on the table.

2) Illocutionary Acts:

- Illocutionary Act or Illocutionary Force is the central act involved in Speech acts
- It refers to the purpose or intention of the speaker in producing the utterances.
- The intention of the speaker might be something like ' requesting', ' apologizing' or ' complaining.
- Illocutionary Force is the most important of all the three subsidiary acts involved in a speech Act.

For example, When did you come?

3) Perlocutionary Acts:

- Perlocutionary act means speaker brings about an effect in listener by saying something.

For example, Could I have a glass of water, please?

- **Illocutionary Force Indicating Devices(IFIDs)**
- The most obvious device for indicating the Illocutionary Force is the following type of expressions:
- I promise you I'll be back at 8 o'clock tomorrow.
- I warn you I'll see you tomorrow.

The underlined verbs would be called ‘ **The Performative Verbs**’

Types of Speech Acts

- **Representative:**
- These types of Speech acts commit the speaker to the truth of the expressed propositions. Representatives are those kinds of speech acts that state what the speaker believes.
- e.g The Earth is stationary
- It was a warm sunny day.

- **Directives:**
- These are the attempts or speech acts by the speaker to get the addressee do something. They express what the speaker wants. They are commands, requests, orders or suggestions etc. They can be positive or negative
- e.g Give me a cup of coffee. Make it black.
- Could you lend me a pen, please?
- Don't touch that

- **Commissives:** (These speech acts commit the speaker to some future course of action)
- With the help of this type of speech acts, the speaker commit themselves to some future action. Therefore they express what the speaker intends. They are ‘ promises’, ‘ threats’ etc, refusals’. They can be positive or negative.They can be performed by the speaker alone or by the speaker as a member of a group.
 - e,g I’ll be back.
 - I’m going to get it right next time.
 - We will do that.
- **Expressives:** (These speech express a psychological state of the addresser)
Expressives state what the speaker .Therefore they express what the speaker feels. They are the statement of pleasure, pain, likes, dislikes joy or sorrow.
 - E.g I’m really sorry!
 - Congratulations!
 - Oh, yes, great,
 - Shutt!

- **Declaratives:** : (These speech acts cause immediate changes in the institutional state of affairs)
- **Declaratives are those kinds of speech acts that change the world via their utterance.**
- E,g
- **Priest: I pronounce you husband and wife.**
- **Referee: You're out!**
- **Jury Foreman: We find the defendant guilty.**