

1. Introduction

The production of speech is a complicated process. First of all, a concept is formulated in a linguistic form in the speaker's brain and then a message is transmitted to the organs of speech by the nervous system. When the organs of speech move to produce the speech sounds, they cause "disturbances in the air in the form of varying air pressures and these sound waves strike the listener's ear". The listener's ears receive these waves which are conveyed to his brain by the nervous system. It is in the brain, the message is decoded or interpreted. Hence, it becomes essential that the speaker as well as the listener should share a common linguistic code.

2. Code and Content of Communication Skill

Code has been defined as a "group of symbols that can be structured in a way that is meaningful to another person". In other words, "Code is a system of rules to convert information into another form or representation." In a way all languages are codes.

Content in communication means any "text matter of a document or publication in any form." Content is defined as what is inside or included in something. An example of content is the words inside a book. (content dictionary definition- <https://www.yourdictionary.com>). In brief code and content in a layman's language means communicating message (content) through some symbols (code).

3. Stimulus and Response in Communication

Any message or information that evokes a response is stimulus in communication whereas response is defined as a reaction to a stimulus. Communication, as we all know, is a two-way process hence the stimulus (message) caused by the sender leads to a response (reaction after receiving the message) by the receiver.

4. Encoding and Decoding in Communication

In order to convey his message, the sender encodes his message i.e. he translates the message in the form of symbols. On the other hand, the listener or the receiver decodes the encoded message i.e. he interprets the encoded message.

5. Pronunciation in Communication

Pronunciation refers to the way a word is spoken.

Pronunciation affects the way we communicate. Right pronunciation helps in communicating more effectively and clearly. On the contrary, incorrect or improper pronunciation can lead to misunderstanding and ineffective communication. As a result, the entire exercise becomes futile.

A native speaker need not make artificial or conscious efforts to learn his mother tongue because rich exposure to the mother tongue enables him to pick up the right pronunciation of words of his native language. Also he naturally learns grammar of his own language. But when he tries to learn the pronunciation of L_2 (i.e. foreign language such as English to the Indians), he commits errors and spoils the meaning. Below are listed some blunders which are generally committed by the Indian speakers when they speak in English.

1. 'Vine' due to wrong pronunciation becomes 'wine'
2. Indians pronounce the words 'price' and 'prize' alike.
3. They pronounce 'zoo' as 'joo'.
4. 'Is' is pronounced as 'iz'.

6. Etiquette in Communication

Communication etiquette in the workplace is an important skill to master. As communication is a two way process, the speakers as well as the listeners have to follow some norms. Peter Murphy writes in detail on etiquettes in conversation. He writes, "What's most important is that you put the person you're talking to at ease and that they feel as though they had chance to say what they wanted to say and that you listened to them and responded to them sensitively." He mentioned ten secrets of social etiquette in conversation.

1. Don't hijack the conversation.
2. Give people time to speak.
3. Invite others in conversation.
4. Also ask questions.
5. Give people a chance to answer and make sure you listen.
6. Respect other people's opinions.
7. Don't rain on someone's parade.
8. Don't be a know-it-all.
9. Don't make disagreement personal.
10. Difficult conversations were never meant to be easy.

Besides it, there may be many more things which the speaker and the listener must follow during the conversation such as don't interrupt, think before you speak, talk not only to one person but to a group, wait for your turn to speak and so on.

7. The Organs of Speech

How are speech sounds made? We use our tongue and lips to produce speech sounds. But, of course, tongue and lips are not sufficient to produce any audible¹ sound. Paul Christophersen beautifully discusses the entire process of producing speech sounds. While defining this process, he writes that what happens in most cases when we speak is that a stream of air is breathed out from the lungs. And this stream of air, when passing through the narrow spaces in the human throat and mouth, makes a sound in the same way as a strong wind blowing through a house will produce a rushing or howling² noise. Now the noise of the wind is not always the same: the wind sounds different when blowing through a narrow crack and when blowing through a wider opening. In the same way, by modifying the shape of the passage through which the air passes when we speak, we can make a number of different sounds, in fact a surprising number. A new and distinct sound can be produced by varying the passage slightly at one particular point, for example at the teeth or at the lips. Together, the organs situated at these points constitute the *speech organs*. Before we discuss these speech organs, let us discuss in brief the *Air-stream mechanism* that produces the speech sounds.

There are three main **air-stream mechanisms**:

1. **Pulmonic air-stream mechanism:** Air-stream mechanism consists of lungs and the respiratory muscles. The walls of the lungs act as the initiator. They are moved by the respiratory muscles so that air is drawn into the lungs or pushed out of them. When the air-stream mechanism is used to push air out, it is called **egressive**³ and when it is used to draw air in, it is called **ingressive**⁴. In fact, all the sounds of English and most Indian languages are produced with this air-stream mechanism. Moreover, no language uses the ingressive mechanism for the production of speech sounds. We use this air stream mechanism for yawning and snoring, but not for speaking.
2. **Glottalic air-stream mechanism:** Both egressive and ingressive glottalic air-stream mechanisms are used by some languages of the world for the articulation of speech sounds. The closed glottis acts as the initiator for this and the air in the pharynx is used.
3. **Velaric air-stream mechanism:** The back of the tongue is the initiator and the air in the mouth is set in motion during this air-stream mechanism.

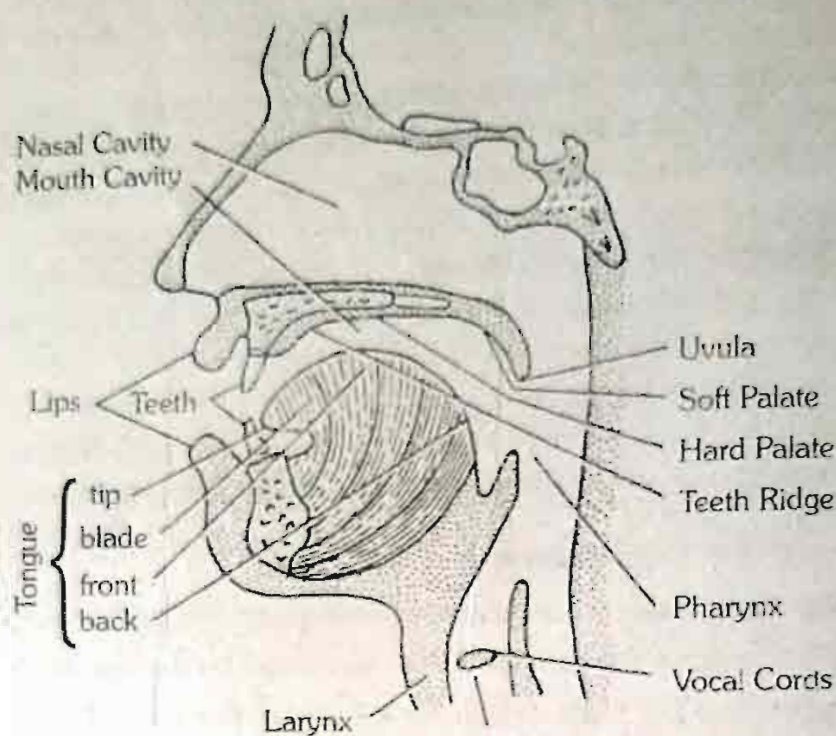
Most sounds of most languages in the world are produced with a *pulmonic egressive air stream mechanism*. The air that we breathe out comes out of lungs. Before it gets out into the outer atmosphere, various organs in our body convert it into speech sounds. These organs are called the **organs of speech**.

The organs involved in the production of speech can be divided into three groups as mentioned below:

- (i) **The respiratory system:** The respiratory system includes the lungs, the muscles used to expand and compress⁵ them, the bronchial⁶ tubes and the windpipe or trachea⁷.
- (ii) **The phonatory system:** It consists of the larynx⁸ which contains the vocal cords⁹.
- (iii) **The articulatory system:** The articulatory system includes the nose, the mouth, the tongue, the teeth and the lips.

1. Which can be heard; 2. Very fierce; 3. Produced by breathing out; 4. Produced by breathing in; 5. To press or squeeze; 6. The two main branches of the windpipe; 7. Windpipe-the tube in the throat that carries air to the lungs; 8. The area at the top of the throat that contains the vocal cords; 9. Thin strips of muscles in the throat that move to produce the voice.

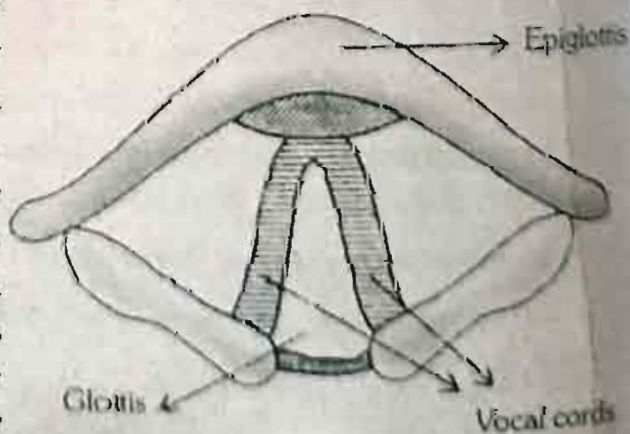
The Organs of Speech



8. Description of the Organs of Speech

The Lungs: The respiratory system, as mentioned above, consists of the lungs, the muscles of the chest and the windpipe or trachea. The lungs are spongy bodies. They are often called two bags which can be enlarged and compressed by the muscles of the chest. This happens regularly when we breathe and as a result the air is drawn in and forced out through the tube known as the **trachea** or the **windpipe**. It is through the trachea that the air that we breathe in passes through the throat into the lungs. This act of respiration involves two processes — taking outer air into the lungs, called **inspiration** and throwing out air from the lungs, called **expiration**. Generally it is the air that we breathe out (expiratory lung — air) that is the basis for the articulation of most speech sounds in all the languages that are spoken in the world.

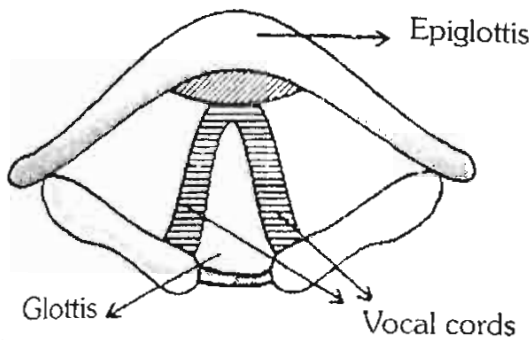
The Larynx: The first point where it is possible to modify the air stream is at the top of the windpipe, which ends in a bony structure called the **larynx**. The front part of the larynx protrudes¹⁰ and is popularly known as the **Adam's apple**. The air from the lungs has to come out through the windpipe and the larynx. Inside the larynx are the lip like structures called **Vocal Cords** which are placed horizontally from front to back. They are capable of acting in much the same way as the lips of the mouth and are attached in front and can be separated at the back. The opening or space between the cords is called the **glottis**.



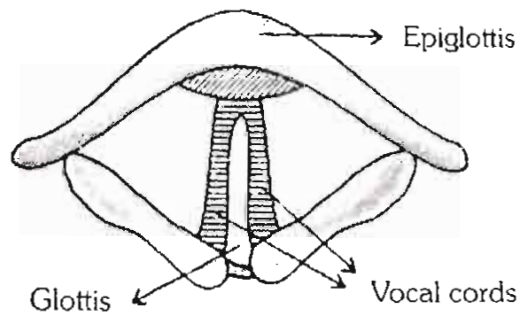
¹⁰ To stick out from a place.

The vocal cords can be opened and closed (because they can be separated at the back). When we swallow food or water, the vocal cords shut the glottis and prevent the food or water from entering the windpipe. When we produce some speech sounds, the vocal cords are wide apart and the glottis is open. The pressure of the air causes the cords to vibrate and they open and close and open afresh and then close and so on.

Voiceless and Voiced Sounds: The sounds produced with a wide-open glottis are called **voiceless sounds**. Balasubramanian suggests a good method of deciding whether a sound is voiceless or voiced. He suggests to place fingers lightly on the larynx during its production and if the fingers feel the vibration of the vocal cords, the sound produced is a voiced sound. But if the sound produced is voiceless, then the fingers will feel nothing. He cited an example that if we produce a prolonged SSSS (i.e., a prolonged hissing sound) with our fingers on the larynx. Then if we produce a prolonged ZZZZ (i.e., a prolonged buzzing sound), during the production of ZZZZ our fingers will feel the vibration of the vocal cords. They will feel no such thing during the production of SSSS. The hissing sound is therefore *voiceless* and the *buzzing* sound *voiced*.



Vocal cords wide apart and the glottis fully open-position for breath and during the production of voiceless sounds.



Vocal cords kept loosely together-position for vibration during the production of voiced sounds.

When the air stream has passed through the glottis, it enters the cavity, situated in the throat immediately behind the mouth and above the larynx. The learned name for this cavity is the **pharynx**. At the base of the tongue and projecting into the **pharynx** is the **epiglottis** whose function is to protect **larynx** during the action of swallowing, but it does not enter into the formation of any speech-sounds.

The Articulatory System: The articulatory system includes the nose, the mouth, the tongue, the teeth and the lips. The roof of the mouth comprises the *teeth-ridge*, the hard palate, the *soft palate* and the *uvula*. The bony part of the roof of the mouth which lies just behind the upper front teeth is called the *teeth-ridge* or *alveolar ridge* *alveolum*. Immediately after the *teeth-ridge* is the *bony surface* called the *hard palate*. Next to the *hard palate* is the soft part of the roof of the mouth called the *soft-palate* or the *velum*; the end of which is the soft, fleshy part called *uvula*.

What is Velic Closure ?

The soft palate or the velum acts like a valve in opening and closing the **nasal passage of air**. The breath may pass out through the mouth, or through the nose by way of the *nasal cavity*. If the breath is to pass out only through the mouth, the back part of the roof of the mouth i.e., velum, moves upwards and backwards and thus blocks the entrance to the nasal cavity. The air then cannot escape through the nose at all. Sounds

during the production of which the air escapes through the mouth are called *oral sounds*. All the sounds in English words *seal, cow, bush, far* are oral sounds, because during their production the passage to the nose is completely blocked by the soft palate. The closure of the nasal passage of air by raising the velum is called *velic closure*.

What is Velic Opening ?

When the soft palate moves downward and the back of the tongue moves upwards, the passage into the mouth is closed while the passage into the nose is opened. This indicates that the air stream has to pass out through the nose. The sounds during the production of which the air escapes through the nose are called *nasal sounds*. The opening of the nasal passage of air by lowering the velum is called **velic opening**. For example, during the production of the last sounds in the English words *song, sun, tongue* (for which phonetic symbol /ŋ/ is used) the soft palate is lowered, the velic opening is affected and the nasal passage is opened. There are certain sounds, during the articulation of which the oral passage of air is not completely blocked and thus both the oral and the nasal passages are open. Such sounds are called *nasalised sounds*.

The Tongue: The major organ in the mouth is the *tongue*. For the purpose of phonetics it is convenient to imagine the surface of the tongue divided into two parts, the **front**, and the **back**. The front of the tongue includes (a) the **blade** which normally lies opposite the teeth ridge and (b) the **tip** i.e., the extreme edge of the tongue. Actually, immediately after the **tip** lies the **blade**. Beyond the front is the back of the tongue which lies opposite the soft-palate when the speech organs are at rest. Beyond the back of the tongue is the root.

The tongue is extremely mobile. Thus, the tip can be made to touch any part of the roof of the mouth from the teeth to the beginning of the soft palate. By giving the tongue different shapes and by raising and lowering different parts of it, we can modify the space through which the air has to pass and thereby produce many different sounds. In the production of vowel sounds, the tip of the tongue is generally kept low, and some other part of the tongue — the front, the centre or the back is raised towards the roof of the mouth.

The Lips: The lips play their part in articulation of certain consonants. The movements of the jaw also influence the position of lips. Paul Christophersen in his book **An English Phonetics Course** gives four important lip positions: (a) the lips are *spread* (b) they are neither spread nor rounded hence are called *neutral* (c) they are rounded (open) and (d) they are rounded (close). Paul cites an example to convey the idea of the lip positions more clearly. To which of the four types would you like to assign the vowels in *seen* and *soon*? In *seen* the vowel sound is ee / i: /. When it is pronounced the lips are spread. In *soon* the vowel sound is oo / u: /. When it is pronounced the lips are in close round position. The lips are neutral while pronouncing the vowel / a: / as in *car, card* and they are in open round position when the vowel /ɔ:/ as in *cod* is pronounced.

With these few organs, then, man is able to produce the whole colourful range of sounds used in human speech.