

## **Definition**

**Phonology** is the study of how sounds are organized and used in natural languages.

**Phonetics** deals with the production of speech sounds by humans, often without prior knowledge of the language being spoken.

## **Discussion**

The phonological system of a language includes

- an inventory of sounds and their features, and
- rules which specify how sounds interact with each other.

Phonology is just one of several aspects of language. It is related to other aspects such as phonetics, morphology, syntax, and pragmatics.

Here is an illustration that shows the place of phonology in an interacting hierarchy of levels in linguistics:

**Phonetics** deals with the production of speech sounds by humans, often without prior knowledge of the language being spoken. **Phonology** is about patterns of sounds, especially different patterns of sounds in different languages, or within each language, different patterns of sounds in different positions in words etc.

## **What Is a Phoneme?**

A **phoneme** of a language or dialect is an **abstraction** of a **speech sound** or of a group of different sounds which are all perceived to have the same function by speakers of that particular language or dialect. For example, the English word "through" consists of three phonemes: the initial "th" sound, the "r" sound, and an "oo" vowel sound. Notice that the phonemes in this and many other English words do not always correspond directly to the letters used to spell them (English **orthography** is not as strongly **phonemic** as that of certain other languages).

## **Phoneme Segmentation**

You can **segment**, or break apart, any word to recognize the sounds or phonemes in that word. In order to figure out how many phonemes a word has, it's best to say the word out loud to focus on the sounds that make up the word rather than looking at the letters on paper. For example, if you say the word 'sun,' you will hear that there are three sound units, or phonemes, in that word: /s/ /u/ /n/.

Look at the image below and notice how the man is able to segment the word 'table' into its phonemes with the consonant /t/, the vowel /a/ and the **consonant blend** /bl/. Consonant blends are two consonants, such as the letters 'b' and 'l' put together to create one sound, or phoneme.

**Every word is made up of phonemes.**

There are about 40 phonemes, or sound units, in English, thanks to the many ways that the 26 letters of the alphabet can be used and arranged. For instance, the phoneme or sound /f/ can be spelled using the letters f, ff, or ph.

**Allophone**, one of the phonetically distinct variants of a [phoneme](#). The occurrence of one allophone rather than another is usually determined by its position in the word (initial, final, medial, etc.) or by its phonetic environment. Speakers of a [language](#) often have difficulty in hearing the phonetic differences between allophones of the same [phoneme](#), because these differences do not serve to distinguish one word from another. In English the *t* sounds in the words “hit,” “tip,” and “little” are allophones; phonemically they are considered to be the same sound although they are different phonetically in terms of aspiration, voicing, and point of articulation.

**Minimal pairs**

A minimal pair is a pair of words with ONE phonemic difference only.

In order to decide whether a pair of words is a minimal pair or not, you need to know what sounds make up the word, and you need to IGNORE the word's spelling.

If you are a native English speaker, you *may* find this easy. Most people have to look up the words in a pronunciation dictionary.

This can best be shown with examples.

Spelling		Pronunciation	
cat - bat	Yes, a minimal pair!	-	only <b>c</b> and <b>b</b> are different
wide - wise	Yes, a minimal pair!	-	only <b>d</b> and <b>z</b> are different

**The organs of speech.**

***The function of the eight parts of human speech organs***

Lips, Teeth, Tongue, Uvula, Glottis, Alveolar Ridge, Alveolar Ridge, Hard Palate, and Velum (Soft Palate)

Lips form different shapes, such as an oval, and movements in order to make different sounds. Sounds can be formed by using the teeth to shape the lips, in combination with the tongue, or to block air from escaping the mouth. The tongue moves throughout the mouth and with many of the other organs, as well as making shapes like the lips, in order to formulate speech. The uvula

is used to make guttural sounds. It helps to make nasal consonants by stopping air from moving through the nose. The glottis is used in controlling the vibration made by the vocal chords, in order to make different sounds. The alveolar ridge helps us to make different sounds, known as alveolar sounds, the tongue touches the ridges found on this organ. Hard palate, like the alveolar ridge, is the organ of speech where the tongue touches and taps the palate when articulating speech. The movable velum can retract and elevate in order to separate the mouth from the nasal cavity, helping to make speech less nasally. When the tongue hits the velum, it also makes a special sound called the velar consonant

(Mary Freeman. *The Eight Parts of Human Speech Organs & Their Definitions*. Accessed from [http://www.ehow.com/facts\\_5114438\\_eight-human-speech-organs-definitions.html](http://www.ehow.com/facts_5114438_eight-human-speech-organs-definitions.html))

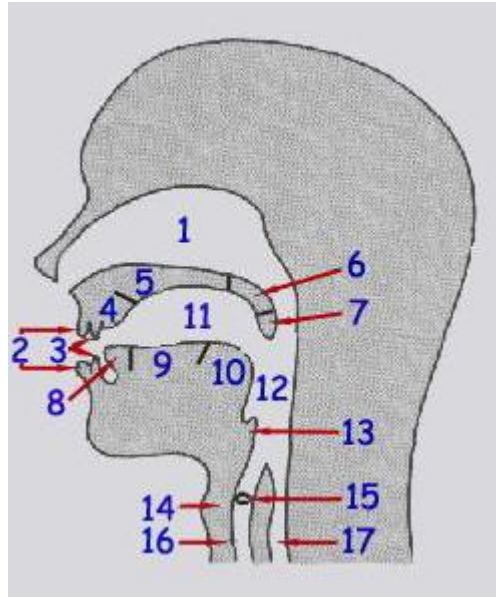
**Table of Consonant**

Mode of Production / Manner of Articulation	Voiceless	Voiced	Place of Articulation	Keywords	
Plosives or stops	p	b	bilabial	pin	bin
	t	d	alveolar	tin	din
	k	g	velar	cap	gap
Fricatives	-	w	bilabial	-	west
	f	v	labio-dental	fan	van
	q	ð	intra-dental	thin	then
	s	z	alveolar	sue	zoo
	-	l	alveolar		leaf
	-	r	alveolar		red
	ʃ / ʃ	ʒ / ʒ	alveo palatal	shoe	measure
	-	J / y	palatal		yes
	h	-	glottal	hat	
Affricates	tʃ / ʃ	dʒ / ʒ	alveo palatal	chew	jew
Nasals		m	bilabial		man
		n	alveolar		name
		ŋ	velar		song

(C. Baruah : 2004; 32).

## The Organs of Speech

- 1-nasal cavity
- 2-lips
- 3-teeth
- 4-veolar ridge
- 5-hard palate
- 6-velum (soft palate)
- 7-uvula
- 8-apex (tip) of tongue
- 9-blade (front) of tongue
- 10-dorsum (back) of tongue
- 11-oral cavity
- 12-pharynx
- 13-epiglottis
- 14-larynx
- 15-vocal cords
- 16-trachea
- 17-esophagus



### **Manner of Articulation**

1. Stops or plosives. The manner of articulation of stop or plosive sounds is produced by complete 'stopping' of the airstream and let it go abruptly.
2. Fricatives. The manner of articulation of stop or plosive sounds is produced by almost blocking the airstream and pushing the air through a narrow opening. By pushing the air through, a type of friction is produced and the produced sounds are called fricatives. If you for example put your palm in front of your mouth when producing fricative sounds, you feel the stream of air being pushed out.
3. Affricates. The manner of articulation of affricate sounds is produced by a brief stopping followed by an obstructed release which results in some friction.
4. Nasals. The manner of articulation of nasal sounds is produced by lowering the velum and following the airstream to flow out through the nose to produce nasal sound (Yule:2003; 46)

### **Place of articulation**

1. Bilabials. Bilabials are produced through upper and lower lips.
2. Labiodentals. Labiodental sounds are produced through the upper teeth and the lower lip.
3. Dentals. Dental sound is produced by placing the tongue tip behind the upper front teeth.
4. Interdental or intra-dental is sometimes applied to describe a manner of pronunciation with the tongue tip between the upper and lower teeth.
5. Alveolars. Alveolar sound is produced through the front part of the tongue placed on the alveolar ridge.
6. Alveo-palatals. These are produced by placing the tongue at the very front of the palate, which is near the alveolar ridge.
7. Velars. The production of velar sound is done by placing the back of the tongue against the velum
8. Glottal. This is produced without the active of the tongue and other parts of the mouth. This sound is produced in the glottis- a space between the vocal cords and the larynx (Yule: 2003; 42-44).

