

# Phonology

# What is phonology?

Phonology is the study of the sound systems of languages.

Phonology is the aspects of language related to the distinctive features of the representation and reception of sounds of language.

Phonology is the study of the sound system of a given language and the analysis and classification of its phonemes.

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

Phonology is the study of the way sounds function in languages, including phonemes, syllable structure, stress, accent, intonation, and which sounds are distinctive units within a language; The way sounds function within a given language.

# Branches of phonology

There are four branches :-

1. Segmental phonology :- It analyses speech into discrete segments, such as phonemes.
2. Supra- segmental phonology :- It analyses those features which extend over more than one segment such as intonation , stress.
3. Diachronic phonology :- It studies the patterns of sound system through the history of language.
4. Synchronic phonology :- It studies the patterns of sound regardless of the process of historical change.

# Define phone , phoneme , allophone

Phone :- 1. Phone is the smallest , perceptible , discrete segment of sound in the stream of speech.

OR

Phone is the minimal unit of speech.

2. Phones are the physical realization of phonemes.

3. The speech is segmented and each of the segment is called phone.

4. Phone are grouped into phonemes through phonemic analysis.

5. Phone is enclosed within square bracket i.e [ p ]

Phoneme :- 1. Phoneme is the smallest , distinctive and segmental unit of sound.

OR

Phoneme is the minimal distinctive unit in the sound system of a language .

2. Phoneme is enclosed within slants i.e / p /

3. Phonemes are useful to analyze language at the phonological level.

4. Phonemes /p/ and /b/ are similar in place of articulation and manner of articulation but differ in voicing. So they are two phonemes.

Allophone : - Allophone is a variant of a phoneme. The allophones are very similar to each other ; they do not change the meaning of a word and they don't occur in the same phonetic environment.

for example :- Syllable initial as opposed to syllable final.

All allophones are phones but all phones are not allophones.

# Syllable

## Definition

A syllable is a unit of sound composed of :-

1. a central peak of sonority (usually a vowel), and
2. the consonants that cluster around this central peak.

or

The syllable is a basic unit of speech studied on both the phonetic and phonological levels of analysis.

or

A syllable is a unit of organization for a sequence of speech sounds. For example, the word water is composed of two syllables: wa and ter. A syllable is typically made up of a syllable nuclear (most often a vowel) with optional initial and final margins (typically, consonants)

# *Types of Syllables*

There are six types of syllables:

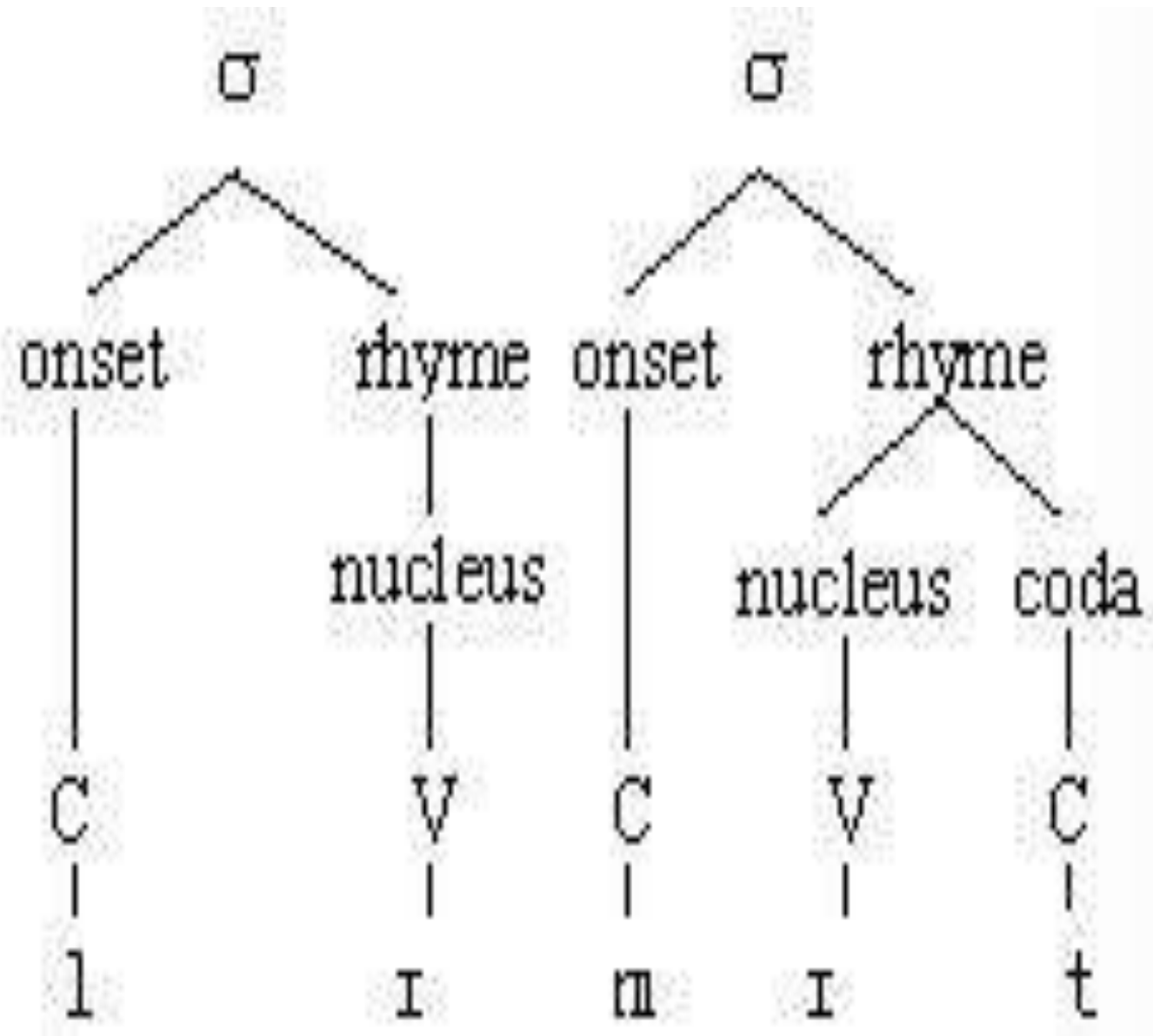
1. A **closed syllable** ends in a consonant. The vowel has a short vowel sound, as in the word *bat*.
2. An **open syllable** ends in a vowel. The vowel has a long vowel sound, as in the first syllable of *apron*.
3. A **vowel-consonant-e syllable** is typically found at the end of a word. The final e is silent and makes the next vowel before it long, as in the word *name*.
4. A **vowel team syllable** has two vowels next to each other that together say a new sound, as in the word *south*.
5. A **consonant-le** syllable is found in words like *handle*, *puzzle*, and *middle*.
6. An **r-controlled syllable** contains a vowel followed by the letter r. The r controls the vowel and changes the way it is pronounced, as in the word *car*.

# Syllable structure

Syllable structure, which is the combination of allowable segments and typical sound sequences, is language specific.

<b>Parts</b>	<b>Description</b>	<b>Optionality</b>
Onset	Initial segment of a syllable	Optional
Rhyme	Core of a syllable, consisting of a nucleus and coda (see below)	Obligatory
– Nucleus	Central segment of a syllable	Obligatory
– Coda	Closing segment of a syllable	Optional





# Distinctive feature

**Distinctive feature** is the most basic unit of phonological structure that may be analyzed in phonological theory.

**Distinctive features** are grouped into categories according to the **natural classes of segments** they describe:-

**1. Major Class Features:** -The features that represent the major classes of sounds.

- [+/- consonantal]
- [+/- sonorant]
- [+/- syllabic]

**2. Laryngeal Features:** -The features that specify the glottal states of sounds.

- [+/- voice]
- [+/- spread glottis]
- [+/- constricted glottis]

**3. Manner Features:** -The features that specify the *manner of articulation*.

- [+/- continuant]
- [+/- nasal]
- [+/- strident]
- [+/- lateral]
- [+/- delayed release]

**4. Place Features:** -The features that specify the place of articulation.

- [LABIAL] Labial segments are articulated with the lips.
  - a. [+/- round]
- [CORONAL] Coronal sounds are articulated with the tip or blade of the tongue.
  - a. [+/- anterior]
  - b. [+/- distributed]
- [DORSAL] Dorsal sounds are articulated by raising the dorsum of the tongue. All vowels are dorsal sounds.
  - a. [+/- high] [+high]
  - b. [+/- low] [+low]
  - c. [+/- back] [+back]
  - d. [+/- tense]
- [RADICAL] Radical sounds are articulated with the root of the tongue.

# English Consonant Features

	syll	cons	son	cont	debel	sib	voise	nas	high	back	ant	lab	cor	distr	lat
p	-	+	-	-	-	-	-	-	-	-	+	+	-	+	-
b	-	+	-	-	-	-	+	-	-	-	+	+	-	+	-
t	-	+	-	-	-	-	-	-	-	-	+	-	+	-	-
d	-	+	-	-	-	-	+	-	-	-	+	-	+	-	-
k	-	+	-	-	-	-	-	-	+	+	-	-	-	-	-
g	-	+	-	-	-	-	+	-	+	+	-	-	-	-	-
tʃ	-	+	-	-	+	+	-	-	+	-	-	-	+	+	-
dʒ	-	+	-	-	+	+	+	-	+	-	-	-	+	+	-
f	-	+	-	+	0	-	-	-	-	-	+	+	-	-	-
v	-	+	-	+	0	-	+	-	-	-	+	+	-	-	-
θ	-	+	-	+	0	-	-	-	-	-	+	-	+	-	-
ð	-	+	-	+	0	-	+	-	-	-	+	-	+	-	-
s	-	+	-	+	0	+	-	-	-	-	+	-	+	-	-
z	-	+	-	+	0	+	+	-	-	-	+	-	+	-	-
ʃ	-	+	-	+	0	+	-	-	+	-	-	-	+	+	-
ʒ	-	+	-	+	0	+	+	-	+	-	-	-	+	+	-
h	-	+	-	+	0	-	-	-	-	-	-	-	-	-	-
m	-	+	+	-	0	-	+	+	-	-	+	+	-	+	-
n	-	+	+	-	0	-	+	+	-	-	+	-	+	-	-
ŋ	-	+	+	-	0	-	+	+	+	+	-	-	-	-	-
l	-	+	+	+	0	-	+	-	-	-	-	-	+	-	+
r	-	+	+	+	0	-	+	-	-	-	-	-	+	-	-
w	-	-	+	+	0	-	+	-	+	+	-	+	-	+	-
j	-	-	+	+	0	-	+	-	+	-	-	-	+	+	-



THANK YOU