**Micro-linguistic Branches**

**III. Phonology:** is that part of linguistics which deals with sounds and their possible combinations. It is by means of phonological rules that we can specify that a given combination of sounds is a possible English word or not.

**Examples:**

* brave: is a possible combination (English word); /breiv/: showing courage.
* bnave: this combination is impossible because the ***plosive+nasal*** cluster (bn) is not allowed at the beginning of a word in English.
* ***Difference* between phonetics and phonology**

Phonetics is a branch of linguistics which studies the basic sounds of speech; it investigates ***all possible sounds*** that human speech organs can produce regardless of any particular language. In other words, phonetics is not restricted to studying the sounds of any one language or group of languages; it is ***general***. It has three main branches:

* *Articulatory phonetics:* is concerned with how the sounds of a given language are produced by the vocal organs (in the mouth).
* *Acoustic phonetics:* is the study of how speech sounds are transmitted from the mouth of the speaker to the ear of the receiver (in the air).
* *Auditory phonetics:* deals with the way speech sounds are perceived by the listener (in the ear).
* Out of the total range of sounds that humans can produce, only a limited number of sounds are used in any one language. The ***sound system*** refers to the kinds of sounds which occur in a given language, and the patterns into which they fall. Phonology is the study of this sound system. ***Phonetics is, therefore, different from phonology in that the former (phonetics) studies all human sounds, where as the latter (phonology) studies the sounds of a language and how they function in relation to each other.***
* The major differences between these branches can be summarized in the table below:

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| --- | --- |
| ***Phonetics*** | ***Phonology*** |
| * Investigates all speech sounds (General); * Studies phones ; * Production, transmission and reception of sounds; | * Studies only sounds of a given language (for instance, the sound system of the English language); * Studies phonemes; * Selection, classification, and relation between sounds; |

* ***The phoneme:*** is the smallest unit of speech that serves to distinguish between meanings of words. That is to say, changing a single phoneme can result in a new word.

**Examples**:

* the phonemes or sounds ***/b/*** and ***/s/*** serve to distinguish between the words ***bet*** and ***set***.
* the phonemes ***/r/*** and ***/l/*** serve to distinguish between the words ***rock***/***lock*** and the words ***arrive/alive.***

In the above examples, changing a single phoneme or sound results in a new word i.e. a different meaning.

* Most books of phonologyclaim that the ***English language*** has 44 phonemes. However, various classifications and categorizations of sounds may give different numbers. English phonemes include: / p, v, s, w, e, k, eɪ, r, θ, ə/, etc.
* The phonetic variants of a phoneme are called ***allophones***. An allophone is one of a set of possible pronunciations of the same phoneme depending on the phonetic context.

**Examples:** in English, word-initial voiceless stops (/p/ /t/ /k/) are aspirated.

* The aspirated [tʰ] of ***top*** and the unaspirated [t] of ***stop*** are allophones of the phoneme /t/.

The aspirated [kʰ] (allophone): Car

* /k/ (phoneme)

The unaspirated [k] (allophone): sky