

COURSE TITLE: BASIC PHONETICS AND ENGLISH PHONOLOGY

**MAIN TOPIC: DEFINITION OF PHONETICS AND PHONOLOGY
& BRANCHES OF PHONETICS**

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LINGUISTICS

Who is a linguist?

Most people mistakenly refer to a linguist as one who speaks many languages so that when someone says she is a linguist, she is normally asked how many languages she speaks. Being a linguist does not however mean that one has to necessarily speak many languages. Most linguists are fluent in only one language.

Being a linguist helps one who wants to learn a new language. A linguist would probably understand the structure of a new language much faster than a non-linguist.

Being a linguist has nothing to do with one's ability to speak any specific number of languages but,

- One's ability to talk about language.
- Knowing about the principles on which language can be said to work.
- Knowing about the differences that may exist between languages.

What one gains by being a linguist or by having the tools of linguistic analysis is the ability to approach the study of language confidently and methodically. A linguist has an analytic state of mind towards all kinds of things concerning language. Linguistics may help one in learning a new language but this is just a by-product of the training one receives and is quite incidental.

One who speaks many languages is called a polyglot, not a linguist.

WHAT IS LINGUISTICS?

Linguistics is briefly defined as "the scientific study of language". It is usually divided into two parts:

Diachronic (or historical) and Synchronic linguistics respectively. Diachronic linguistics examines the development of languages or families of languages through time. Synchronic linguistics investigates languages as systems of communication used by groups of people at some particular point in time.

Language is the primary object of the study of linguistics and linguists approach the notion of language from different points of view.

Linguistics is usually defined as the science of language or as the scientific study of language. But why should we want to defend the scientificness of linguistics? Disciplines whose scientific status is not in doubt like Physics, Chemistry etc, feel no need to justify their claim to be called sciences. The first point to be made clear is that the English word science is much narrower in scope than many of its translation equivalents in other languages. In French for example, the word science covers, knowledge, art, skill etc. whereas in English, it is very specific: Knowledge that can be made into a system and which usually depends on seeing and testing facts and stating general natural laws – this refers to the natural science.

Most linguists who subscribe to the definition of linguistics as the scientific study of language do so because they have in mind some distinction between a scientific and a non-scientific way of doing things.

They may not agree on some of the implications of the term ‘scientific’, just like scholars in other disciplines do not agree on many issues. But they generally agree on the principle differences between the scientific and the non-scientific study of language. The most important of these points of agreement is that linguistics is empirical rather than speculative or intuitive – It operates with publicly verifiable data obtained by means of observation or experiment. To be empirical in this sense is for most people the very foundation or the very hallmark of science.

Linguistics relies on scientific procedures in its studies (i.e., it uses scientific methods. It is generally agreed that for any enterprise or study to qualify as scientific, it has to have scientific characteristics.

BRANCHES OF LINGUISTICS

- ▶ Morphology
- ▶ Semantics
- ▶ Historical linguistics
- ▶ Computational linguistics ‘
- ▶ Discourse analysis
- ▶ Pragmatics
- ▶ Syntax
- ▶ Phonetics

► Phonology

PHONETICS AND PHONOLOGY

These are seen as twin branches because studying one involves studying the other. Phonology uses the raw materials of phonetics to describe sound systems of specific languages

The dual function of language makes it possible for one to study human language at any linguistic level. In the language hierarchy, 'Phonetics' comes first and it is followed by 'Phonology'. Phonetics constitutes the study of the smallest unit of speech and it provides the raw materials for phonology to build on. As such, without phonetics there would be no phonology. The aim of this unit is to help you understand the basics of linguistic study, especially as it relates to phonetic/phonological study.

Phonetics is concerned with the study of the sounds of natural languages- languages into which human beings are born. You are able to recognize the difference and distinguish between sounds of the English language. The approach to phonetics is scientific in the sense that its analysis of the subject matter is accurate and verifiable.

Phonetics is the study of production of sounds as produced by the organs of speech. It deals with the analysis of the sounds of languages in terms of articulation, transmission and perception. Phonetics seeks to identify sounds that constitute speech units which are distinct from all other possible human sounds.

There are three major branches in the study of phonetics, namely:

- Acoustic Phonetics,
- Articulatory Phonetics
- Auditory Phonetics.

Branches of phonetics

Acoustic Phonetics.

This deals with the transmission of speech sounds through the air (sound waves).

Different instruments are used to measure the characteristics of these sound waves.

This branch of phonetics concentrates attention on studying the physical properties of the sound waves generated when the speech organs go into activity. It also seeks to explain how sound is transmitted through the air from the speaker to the hearer.

Recently this branch has made a lot of progress and has helped to clarify a lot of information relating to articulatory phonetics. Acoustic phonetics has emphasized the fact that speech is a continuous flow speech sounds. It utilizes machines such as the spectograph and the oscillogram to measure sound waves particularly the frequency and the amplitude of sound wave. Engineers, builders and construction experts frequently make use of acoustic information.

Articulatory Phonetics.

Articulatory phonetics is the study of how speech sounds are produced. Sounds are classified according to the place of articulation in terms of the organs of speech used in their production (bilabial, alveolar, palatal), and according to manner of articulation in terms of the how airflow from the lungs is obstructed in their production e.g. stops, fricatives, affricates etc.

Articulatory phonetics refers to the approach to the phonetic medium that seeks to explain and classify speech sounds in terms of the variations in the production of the speech sounds.

It is about the most highly developed and longest established branch of phonetics. It sees speech as an activity of the speaker and concentrates attention on the human speech organs and how these organs function singly and in combination with each other to modify exhaled air from the lungs into speech sounds.

In articulatory phonetics speech sounds are described in terms of the organs which produce them and how these organs behave during their production. For instance, a description of the sound [p] will include the fact that the two lips come together and momentarily completely block the passage of air from the lungs and then a sudden release of the air or a sudden parting of the lips occurs resulting in some kind of explosion. It is for this reason that the phonetic description of [p] includes the terms “bilabial plosive”.

A third way is to classify sounds as voiced or voiceless. Voiced sounds are produced with an open glottis and a voiceless sound is produced with a closed glottis. Hence, /s/ is voiceless and /z/ is voiced.

Auditory Phonetics.

Auditory phonetics studies how the human hearing organ perceives sound. It uses the tools of physics to study the nature of sound waves produced in human language. A common rule of thumb used to describe human hearing is that human hearing is sensitive in the range of sound wave or frequency of 20 decibel or Hertz to 20 kHz.

This branch of phonetics sees speech mainly as an activity of the hearer: how the hearer perceives and interprets speech sounds. This branch of phonetics is also sometime said to be perceptual. In addition to being concerned with the basic sounds of natural languages, it deals with such properties of sounds as pitch, accentuation and loudness – non-segmental issues which affect sound perception.

PHONOLOGY

Phonology on the other hand deals with the organization, grouping, patterning and distribution of the basic sounds of natural languages (vowels and consonants). It studies the restrictions and regular patterns of sound combinations. The syllable is the basic unit of study. Later we shall see that the syllable consists of three parts (the onset, nucleus and the coda).

Phonology focuses on sounds of a particular language: Hence, phonology of English, phonology of Swahili or any other language.

When the differences in sound combinations are as a result of non-segmental phenomena like tone, intonation, pitch, stress, rhythm and accentuation, it is referred to as suprasegmental phonology.

For example, when the first syllable in the word import is stressed, it constitutes a difference in meaning in that it functions as a noun, but as a verb if the stress is on the second syllable.

Relationship between Phonetics and Phonology

The relationship between phonetics and phonology is such that human speech is subject matter. However, Phonetics is the starting point while phonology takes off from where phonetics ends. The example of aspiration in English will illustrate this relationship. Through phonetic analysis,

the consonant /p/ is a distinct speech sound in English in terms of the parameters of classification, place and manner of articulation.

Through phonological analysis, /p/ is a distinct phoneme because it constitutes a difference in meaning when in combination with other sounds in a syllable. Also, /p/ is produced with a puff air when it occurs in word initial position and before a vowel as in people [pi:p]. This production of /p/ is a variant called an allomorph. It is aspirated and represented as [ph]. The second /p/ in people does not meet the conditions of occurrence and so is not aspirated. Note however, that the aspirated [ph] is not a distinct sound nor is it a distinct phoneme of English. In other words, its occurrence does not constitute a difference in meaning.

Phonetics and phonology are closely related that they can hardly be separated. However, they are studied at different levels of linguistic analysis, because they constitute different levels of language structure.

Phonetics as a level of language study deals with the physical realization of sounds as produced by the organs of speech. It deals with the study and analysis of the speech sounds of languages in terms of articulation, transmission and perception. Thus, phonetics has three major components, which are acoustic phonetics (the physics or instrumental production of sounds), articulatory phonetics (production of sounds with the speech organs), and auditory phonetics (perception of sounds with the ears).

Details deriving from these branches (of phonetics) facilitate the development of writing systems, that is, orthographies. Without phonetics, it will be extremely difficult to study phonology as it produces the basic raw materials or building blocks for phonology to build on.

Human beings produce a whole lot of sounds ranging from the non-linguistics (belching, grunting, and hissing) to the linguistics (consonants and vowels). Out of all the sounds produced some of them are not linguistically relevant. So, phonetics deals with the production of the relevant and the irrelevant sounds in languages.

These sounds in phonetics do not belong to any particular language, they are universal sounds. Phonetics basically deals with all possible sounds by human beings, the useful and the useless

sounds. Human beings can produce even the novelty sounds, which nobody had ever produced or heard.

These phonetic and non-phonetic segments which are universal sounds constitute the raw material for phonology to build on. Without some output from phonetics there will be no input for phonology. It is where phonetics leaves off that phonology starts.

Summary

Human speech begins with phonetic analysis and is followed by phonological analysis.

Phonetics has to do with the physical realization of sounds as produced by the organs of speech.

Phonetics is studied under three branches: articulatory, acoustic and auditory.

Phonological analysis takes off where Phonetic analysis ends.

Phonology is language specific and deals with sounds of the language of interest and how the sounds combine to form words.

Further, it has its focus on aspects beyond the word. These are called supra-segmentals or prosodic features.

Questions

1. Define Phonetics and discuss its various components.
2. Describe the branches of phonology
3. What is Phonology?
4. Explain the relationship between phonetics and phonology.

References

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