Brief Difference Between Phonemics and Phonetics

Researcher: assistant Professor Awas khan Dawlatzai

Abstract

In this article differences between phonemics and phonetics have been identified.

Some grammarians have also pointed out clear differences between them, but generally professionals use them in the same sense and meaning although they are grammatically very different.

Phonemics in analysis of phonemes and phonetics in phonology introduce our goals and objectives of understanding physical characteristics of sound articulation.

I. Introduction

As Almighty Allah has created human, Quran has clearly pointed to this issue, “خلق الإنسان علمه البيان” which means First, Almighty Allah created human and then enabled him to talk. So, we can say that a language is the sounds which Human beings under specific system and through vocal parts take them out of their mouth in order to express their thoughts and ideas. More than that, a language in the existence of communications creates mutual relations. Also, grammar is base, origin and foundation for a language which has an important role in morphological and Syntax aspects and many internal and foreign linguists have written some grammatical articles and books about grammatical rules of languages for long period of time.

Key words: Phonemics and Phonetics

Importance of the Issue:

In this article, relative difference between phonemics and phonetics will be clarified and students will be able to briefly distinguish the limits of the differences.

Objectives:

1. Specifically drawing a grammatical distinction between phonemics and phonetics.
2. Analyzing such the issues from professional point of view
3. Familiarizing students and fans of the profession with the usage of these points and general value of the phonology.

A Glance at the Previous Articles

Professionals of grammar and linguistics do not accept the difference between phonemics and phonetics, therefore I decided to cast light on this issue considering the professional and grammatical origins, in order to clarify the obstacles in linguistic areas.

II. Material and Methodology:

This is a library-based research and the method that has been used in this research is analytical. The information that I have collected for the preparation of the article has been taken in a systematic and organized way from different reliable sources and internet sites.

III. Discussion:

Brief Difference between Phonemics and Phonetics

Language is a collection of sounds which under a specific system and discipline are used in speaking. These sounds are articulated in mouth, nose, and throat and then they form words and sentences. This way humans articulate their thoughts with each other.

If someone wants to study a language that he cannot speak, first of all, he must study its sounds.
A number of specific human vocal parts, move and vibrate while articulating sounds.

If someone practices different movement of the vibrating vocal parts and becomes completely skilled in the movement produced while articulating a sound, he can articulate different sound of any language. The reason is, sounds of all languages are articulated by the movements of the said moving vocal parts which join non-moving vocal parts.

If someone makes a formula which can show the movement of moving vocal parts and their relation with the non-moving parts, he can show the sounds of a language by such formulas.

For example, (B) symbol expresses the movement of lungs which moves the air upward. When the air comes to mouth from the throat, it vibrates the vocal cords. The symbol (b) also shows that during the movement of air, nose gets blocked and the air only goes out through mouth. The lips close at this time which pauses the articulation and then suddenly the sound comes out of the mouth.

The explanation above shows that sounds which are used while speaking are produced by air movement and vocal part movements which are all related to phonetics.

**Sounds are studied in two ways in phonetics:**

Sounds which are studied during the movements in which moving vocal parts and non-moving vocal parts join each other. This part of phonetics is called (Articulatory Phonetics). On the other hand, sounds which are studied according to the sound waves after they are articulated by vocal parts and come out of mouth. This part of phonetics is called (Acoustic Phonetics).

Phonemics is a branch of linguistics which discusses phonemes. Phonemics deals with the study of phonemes, their analysis, and their classification.

Phonetics and Phonemics are two branches of linguistics which deal with the study of sounds. Therefore, they are closely related to each other, but phonetics deal with the study of one aspect of sounds while the phonemics deal with the study of the other side of sounds. Therefore, it is important to distinguish between the two branches and their contents should not be mixed with each other.

In Phonetics, sounds are clearly studied according to their joining and their movements which are formed while articulating a sound. A symbol is chosen for every sound which only represent that sound. Such sounds are called phonetic alphabets. In Phonetics, a symbol may show numerous sounds which are the members of the same sound. For instance, if a phoneme of a language has several allophones, each allophone of the phoneme is shown with a different symbol in phonetics. In contrast with it, there is only one symbol for all the allophones in phonemics. These phonemic symbols make the alphabet of a language.

For example, in (دود) and (درد) words the first (د) is needs more breath and the second one does not need breath at all. Similarly, in (پند) and (توپ) words we can give similar examples in which the (پ) forms one phoneme.

In this section, we can say that phonemics deals with knowledge of phonemes of a language and phonetics deals with the knowledge of speech sounds. Generally, no distinct difference is felt. Therefore, Grammarians use these terms in the same sense although they are different. It is clear that both terms are grammatically closely related to each other, but despite of it, there are many differences which differentiate them. In my opinion, although this issue is related to phonology, its most analysis can be related to Sound Physics in order to find a fundamental solution to this issue. Linguists have presented comparative differences, but sometimes these distinctions do not seem satisfactory to the readers.

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From the above research we can reach a conclusion that Phonetics discusses speech sounds and is a physical and ordinary phenomenon.
Phonemics discusses vocal system and deals with the roles of sounds and is a mental or abstract phenomenon. Vocal system of a language makes a section of these different systems. Phonemics is a section of linguistics and the research of Phonetics in the area of Phonemics is start of the research. It means, if we first do not study the phonemes of a language in phonetics, we cannot research about a system in phonetics which exists among phonemes and rules and regulations which dominates the mentioned system.

In short, both phonemics and phonetics are two included parts of phonology. Some grammarians define phonemics as following:

(Phonemics or phonetics is the part of grammar which deals with the study of valuable phonemes of a language.) Hashemi, 1383)

Phonology as an introduction to grammar is the part which deals with the study of valuable phonemes of a language. (Khweshkai, 1397)

In fact, such definitions in the area of phonemics and phonetics are not only given too early, but also on the whole, we give practical definitions. Here readers may have questions.

Phonology is a major part of linguistics which studies the sounds of a particular language. Later, the Europeans called it phonemics. They just changed the name, but actually both deal with the same thing and has the same origin. After that, the Europeans and Americans used another term which was (Applied Phonetics). Then, people joined the terms, phonemics and phonetics and gave phonology another name (Phonemetics). All these terms were only about changing the name of phonology and carry the same sense and has the same quality. (Shakir, 1397)

Phonology or phonemics deals with the study of the sounds of a particular language and its relations and characteristics which makes the sound system of that language. (Khweshkai, 1394)

**Relations of Phonetics and Phonemics**

Phonemes of a language can be discussed and analyzed in two different aspects. Our goal is to see how phonemes are formed and which vocal parts are used to form them and how their physical characteristics are. Physical changes and reasons differentiate the phoneme of one language from the phoneme of another language. How sounds are heard, what kind of change is made when they are joined and how that change takes place? Phonetics deals with the study of such topics and others. In phonetics our goal and objective are to understand the production and physical characteristics of phoneme.

On the other hand, perhaps the goal of studying phonemes is to understand what kind of role a phoneme plays in a particular language. Which phoneme in a specific vocal group, if used instead of another phoneme, causes a lingual change? For example, it can change the meaning. In contrast with it, which phoneme does not cause change, but only causes a mess in speaking? According to which language rules, phonemes combine with each other and form large structures such as syllables and phrases? Although these changes occur in a language, but how do they occur and what are their rules? Phonology answers all these questions.

We can conclude from the explanation above, that phonetics deals with phoneme or in other words, it is a physical and ordinary phenomenon. In contrast with it, phonemics deals with sound system and the role of phonemes in it or it is a mental and abstract phenomenon. Phonemics is a part of linguistics. Phonetics in the area of phonemics is a preface to the research. It means if we do no learn the phonemes of a particular language in phonetics, we cannot research about a system in phonemics which exists among phonemes, rules and regulations which dominate the mentioned system. (Ziar, 1394)

**Phonetics:** Different positions of a sound or forms of allophones of a sound is called phonetics. For instance, the positions of sounds at the beginning, in the middle and end of a word, are called phonetics.

For example, in (ما) the sound goes up, in (مامه) the sound stays in the middle, and in (من) the sound is cut. These features also have a specific difference in noun and verb forms. (Rekhteen Zaie, 1395)
Phonetics has the following three branches:

1. **Articulator Phonetics**: deals with the study and analysis of language sounds according to vocal parts and their articulatory role. Language sounds are produced and perceived by humans and it is a result of the human organism. Movement of parts of the vocal system and the parts of the sound articulation and kinds of phonemes are studied in this branch of phonetics.

2. **Acoustic Phonetics**: In this part with the help of sound physics, the sound which are made by vocal parts and are used in a language, are analyzed and categorized by considering their physical features. The study of sounds considering their speed, height, repetition and air waves is related to acoustic phonetics.

When new machines such as “sound spectrograph” were invented in the recent years, phonetics helped linguistics a lot because the mentioned machine can record the state of sound waves the same as they occur in speaking. Also, the machine can describe and analyze the intensity of a phoneme and its other features. The invention of this machine is considered to be a great factor in the development of linguistics.

3. **Auditory Phonetics**: It deals with the study of sounds as they are heard by the listeners. As it is seen, articulatory Phonetics has developed a lot in this area and is used a lot. Acoustics Phonetics needs laboratory containers and equipment.

When someone speaks, the sounds go into the ears of people, and the listeners definitely show reaction. This reaction is called Auditory Phonetics. Auditory Phonetics is one of the three branches of phonetics whose topics can be easily studied. (Ziar, 1394)

**IV. Conclusion:**

World grammar writers recognize linguistics as a knowledge, and study phonology as a branch of comparative linguistics.

Therefore, we can say, first sounds and then phonemes are produced. After that, phonemes, words, phrases, sentences and dialogues are produced. In the area of some grammatical features, difference between phonetics and phonemics can take the grammar discussion to an unlimited extent. Possibly in general area, there is no problem between a phoneme and sound. Phonemics makes a part of different systems of the vocal system of the same language which is a part of the linguistics and research about phonetics in the area of phonemics is a start of the research. It means, if we first do not study the phonemes of a language in phonetics, we cannot research about a system in phonemics which exists among phonemes and their rules and regulations which dominate the mentioned system. We can say that both phonetics and phonology are included parts of phonology.

**References:**

1. Khweskai, Mohammad Saber. (1394), Pashtu Phonetics and Lexicology, Nangarhar: Khatitz Publication organization, First page
2. Khweshkai, Mohammad Saber. (1397), Pashtu Contemporary Grammar, Kabul: Jahan Danish Publication Organization, Page 22)
3. Rekhteen Zaiwar, Zarghoona. (1395), Pashtu Grammar, Teaching lecture note, Pashtu Department, Nangarhar University, Page 5
5. Shakir, Noor Ahmad. (1397) Language Research, Kandahar: Alama Rashad publication organization Page 28 and 29
7. www.ling.upeen.org