***Phonology (Part Three)***

***4 .Allophone and complementary distribution:***

***4.1. Allophone***

Allo= other , of the phoneme

The allophone is any of the different variants of phoneme. The different allophones of a phoneme are predictably different but similar to each other, do not change the meaning of a word, and occur in different phonetic environments that can be stated in terms of phonological rules.

For example, the English phoneme / P/ is aspirated when it occurs at the beginning of a syllable (as in pot) but unaspirated when it is preceded by /s/ (as in spot) and may be released when it occurs at the end of an utterance (as in he is not her type). These aspirated, unaspirated and released sounds are all heard and identified as the phoneme /p/ and not as /b/; they are all allophones of /p/.

[P] and [ph] are acoustically (physically) somewhat different sounds, yet native English speakers ( who do not taken a linguistics class) perceive them as being the same sound. Therefore, native speaker would call them both the *p* sound.

/p/

[P] [ph]

Let’s take another example. Consider the English phoneme /l/. It has one form at the beginning of the word such as ‘lip’ the first consonant is a clear l pronounced by placing the tip of the tongue just behind the teeth and keeping the back of the tongue fairly low. In ‘pill’ the tip of tongue is in the same place but the back of the tongue is raised, resulting in a dark l.

So, the clear variant [l ] and the dark variant[ɫ].

***4.2. Free Variation***

Not all sounds of a language are necessarily distinctive sounds. Compare English and American pronunciations of dance [ dæns] versus [dɑ:ns]. Although there are different sounds in the pair, the meaning does not change. Thus, [ɑ:] and [æ] are not phonemes in this case we call this phenomenon free variation.

Free variation can be found in various dialects of the same language. In this case, the different pronunciations of words throughout a country do not change the meaning of those words.

***4.3. Complementary distribution***

Another example of sounds which are not phonemes are those which occur in complementary distribution. This means that where one sound of the pair occurs, the other does not.

For example, aspirated and unaspirated allophones of /p/. The initial consonant as in pill is aspirated. The consonant after/s/ as in spring is unaspirated [ phil] and [spriŋ] where [h ] indicates aspiration. Aspirated [ph ] as you can see, occurs only at the beginning of words. [ph] and [p]are only allophones of the same phoneme /p/.

***5. Shared Properties and distinctive features***

It would be a mistake to consider the 44 phonemes of English as being totally separate from one another, just as it would be a mistake to regard the members of human family as being totally different. Even though each individual in a family is a distinct person in his own right, he is nevertheless lightly to have certain genes in common with his brothers and sisters. Similarly, many phonemes share common features.

Take the English phoneme: /p/ /t/ /b/ /d/ /m/ /n/

-First, these all share the property of being consonant.

-Second, /b/ /d/ /m/ /n/ are all voiced that is they are pronounced with vibration of the vocal cords.

-Third, /p/ /b/ and /m/ are pronounced with the lips and so share the property of being labials

- Fourth, when /m/ and/n/ are produced air is expelled through the nose. They are therefore nasals.

We can draw a chart which shows the properties possessed by each phoneme.

A plus(+) sign indicates the presence of certain property and minus (-) sign signifies its absence.

/p/ /t/ /b/ /d/ /m/ /n/

Consonantal + + + + + +

Voiced - - + + + +

Labials + - + - + -

Nasals - - - - + +

The more usual linguistic term for property or component of the phoneme is the word **feature.** So we might describe the phoneme /m/ by saying that:

It has the features: consonantal, voiced and nasal

Compared with /m/ the phoneme /n/ lacks the feature labial. Otherwise they are the same. It is therefore the presence or the absence of the feature labial which separate /m/ from/n/. Any feature which distinguishes one phoneme from the other is called a **distinctive feature**.