

PAPER 6 (DESCRIPTIVE LINGUISTICS)
DIPHTHONGS

From the point of view of their quality vowel sounds are of two types - 'monophthongs' and 'diphthongs'. Monophthongs are pure vowels while diphthongs are gliding vowels. In other words, a vowel that does not change in quality is monophthong, and a vowel sound with a continually changing quality may be called diphthong.

A diphthong is a vowel sound consisting of an intentional glide, the organs of speech starting in the position of one vowel and immediately moving in the direction of another vowel. A diphthong, moreover, consists of a single syllable, that the vowel glide is performed in a single impulse of breath. Thus, a diphthong always occupies one syllable. If the two adjacent vowels form the nuclei of two successive syllables, they are not diphthongs. For example, boy, lay and try are diphthongs but not laying, trying, etc. because laying and trying consist of two different vowels.

One end of the diphthong is generally more prominent than the other. In diphthong the first element is louder or more prominent than the second, it is termed as 'decrecendo' or 'falling'. All the English diphthongs are falling, because in them the first element is more prominent than the second one.

Diphthongs are represented in phonetic transcription by a sequence of two letters, the first showing the position of organs of speech at the beginning of the glide, the second their position at the end. In the case of 'closing' diphthongs the second letter indicates the point toward which glide is made.

In English there are two kinds of diphthongs: the closing diphthongs and the centering diphthongs. The closing diphthongs in English are:

- /ei/ as in /lei/ (lay)
- /ou/ as in /bout/ (boat)
- /ai/ as in /flai/ (fly)
- /au/ as in /bau/ (bough)
- /i/ as in /t i/ (toy)

The centering diphthongs are as follows:

- /i / as in /bi / (beer)
- /e / as in /pe / (pair)
- /u / as in /pu / (poor)

Diphthongs are described by indicating the position of the tongue and the lips in beginning and at the end of the glide. For example, /ai/ in the word 'fly' can be described as a glide from front, open, unrounded to front, open unrounded to front, half - close, unrounded.

NASALIZATION

A nasal consonant is produced by a complete oral closure, that is, the oral passage of air is completely blocked by the articulators coming into firm contact with each other but the soft palate is lowered so that the nasal passage of air is open. Thus air has a free passage through the nose.

There are three nasal consonant phonemes in English. They are

/m/ - bilabial

/n/ - alveolar

/ŋ/ - velar

1. During the articulation of /m/, two lips are brought together blocking the oral passage of air completely. The soft palate is lowered and the air escapes through the nose. The vocal cords vibrate, producing voice. Thus /m/ is a voiceless bilabial. Spelling: /m/ is represented by m, mm, mb and mn as in many, summer, comb and autumn respectively.

/m/ can occur initially, medially and finally as in man, enemy and some.

2. During the articulation of /n/ the tip of the tongue makes a firm contact with the upper teeth ridge, thus blocking off the oral passage of air completely. The soft palate is lowered so that the air escapes through the nose. The vocal cords vibrate producing voice. Thus /n/ is a voiced alveolar nasal. Spelling: /n/ is represented by the letter 'n' as in near, neat; by the letters 'nn' as in running; initial 'kn' as in knight, knife and final 'gn' as in sign, assign, etc. Thus /n/ occurs initially, medially and finally as in number, many and burn respectively.

3. During the articulation of /ŋ/ sound, the oral closure is made by the back of the tongue making a firm contact against the soft palate. The soft palate is lowered, thereby allowing the air to escape freely through the nose. Thus /ŋ/ is a voiced, velar, nasal. Spelling: /ŋ/ can be represented by 'ng' as in sing, king; 'kn' as in donkey, monkey, etc.

/ŋ/ occurs medially and finally as in 'uncle' and 'king'. It never occurs initially.

SYLLABLE

The units or sections into which words are divided while pronouncing them are called syllables. When we speak, the air from the lungs does not come out in a continuous stream at a constant pressure. The muscles of the chest push the air out in small puffs at the rate of appropriately five times a second, and each puff of air produces

a syllable and each movement of the chest is called a 'chest pulse'. Occasionally a chest pulse is produced by greater muscular effort. This is called a 'reinforced chest pulse' which produces a stressed syllable. For example, the English word 'accident' has three syllables / k-si-dent/ and the first syllable is stressed while the rest of the two syllables are unstressed. And it is on the arrangement of stressed and unstressed syllables and the way they follow one another that the rhythm of a language depends.

The syllable can be analyzed in terms of its elements or segments, also called speech sounds. These segments fall into two classes: vowels and consonants. In other words, a syllable is made up of one or more speech sounds. For example, the first syllable ta /tei/ of the word 'table' has two speech sounds - a consonant /t/ and a vowel /ei/.

As a syllable is produced by a chest pulse, there must be a free and unrestricted passage during, at least, a part of the production of the syllable. And it is during this part of the syllable that a vowel is produced. It carries the chest pulse and is the nucleus or the central part of the syllable. On the other hand, a consonant is marginal, that is, it occurs either at the beginning or at the end of a syllable, or both at the beginning and at the end. A consonant at the beginning of a syllable is called an 'arresting consonant'. For example, the word 'pick' consists of two marginal elements /p/, a releasing consonant and /k/, an arresting consonant and a nucleus /i/ which is a vowel.

While describing the structure of syllables, we use the symbol C & V for a consonant and a vowel respectively. For example, the structure of the syllable /tei/ of the word 'table' /teibl/ will be CV. It is also possible to have a cluster of two or more consonants before and/or after the nucleus as in the word 'school' /sku:l/ i.e. CCVC. Some syllables are made up of nucleus alone as in 'eye' or 'I' /ai/. It has no consonant or vowel before it.

A syllable which is arrested by a consonant is called a 'closed syllable' and one which has no arresting consonants is called an 'open syllable'.

It is on the basis of the number of syllables that the words are classified into monosyllabic, disyllabic and polysyllabic, consisting of one, two and many syllables respectively. Sometimes two syllables in a word may be fused into one by suppressing a vowel sound in pronunciation, i.e. wa-t (e) ry, lit (e) ral. This process is known as 'elision' or 'slurring'.

PAPER 6 (DESCRIPTIVE LINGUISTICS) SUPRASEGMENTAL PHONEMES

The phenomena of segmentation of consonants and vowels may be important in the analysis of the sound system of a language. Stress and pitch differences, for example, might result in difference of meaning. In one dialect of Chinese [ma] with a high-level pitch means 'mother', but [ma] with a low and mainly level pitch means 'horse'. We must therefore say that in this dialect of Chinese, pitch is phonemic because we have a minimal pair, just as 'bit' and 'pit' are minimal pair in English. In English, pitch

differences function syntactically, that is, they function in relation to whole utterances, rather than in relation to the individual meaning-bearing parts of utterances.

In English, the stress in words such as perfect, permit and pervert shifts according to how these words are used in context:

a perfect day to perfect the idea
a new permit to permit him to go
a sex pervert to pervert justice

Consequently we may argue that stress is phonemic in English and postulate several stress phonemes because the different syllables of certain expressions have different degrees of stress. For example, in a dusty briefcase, brief carries the most heavy stress //, dust the second most heavy stress //, (or alternatively, are unstressed), so the four degrees of stress distribute as follows:

a dusty briefcase // primary stress
// secondary stress
// tertiary stress
// unstressed

Furthermore, many minimal pairs can be found to justify these contrasts.

a hot rod a car
a hot rod a hot piece of metal

OR

a hot rod a hot piece of metal
a briefcase a container for papers
a brief case a case that was brief

OR

a brief case a brief case (not a brief something else)

English patterns have sometimes been related to pauses between words. For example, we can say that such words as 'nitrate', 'night rate', and 'Nay trait' require the postulation of a juncture phoneme to show the difference.

Nitrate
Night /+/ rate /+/ juncture
Nay /+/ trait

This juncture phoneme apparently indicates a significant pause. Its allophones are difficult to define, however, since it is a significant 'nothing', it has been claimed that in the presence of /+/ other phonemes have final allophones preceding /+/ and initial allophones following /+.

In the same way we can say that utterances such as:

He left.

He left?

"He left", I said.

must be differently represented phonemically because of the way the pitch of the voice falls on left in the first case, rises on left in the second, and stays level on left in the third.

Three phonemes have been postulated to account for the differences:

/#/ falling terminal contour
/'/ rising terminal contour
/'/ level terminal contour

The utterances themselves show pitch variations during the course of their production as well as in the production of the final phoneme or phonemes. Consequently, we may postulate four different pitch levels for English. These pitch levels are generally marked with numbers. /4/ is used for the highest pitch level and /1/ for the lowest, with /3/ and /2/ for the immediate levels.

The result of such searches for additional phonemes for English is the postulation of a phonemic system that requires the use of both "segmental" and "suprasegmental" phonemes which must be "overlaid" on the segmentals since they cannot occur without them.

(a) Segmental phonemes

(1) Consonants

(2) Vowels

(b) Suprasegmental phonemes

(1) stresses

(2) juncture

(3) pitches

(4) terminal contours

Such a system should allow us to transcribe any English structure in all its significant contrastive characteristics. For example, a full transcription of "He left", I said would look as follows:

"He left", I said.

/hiy + left/ ay + sed #/

The segmental phonemes require no comment, but it may be useful to summarize what the transcription indicates about the suprasegmental phonemes. There are two junctures indicated by /+/, a level terminal contours between left and I, a /231/ pitch sequence over "He left" and a /11/ sequence over I said, and a final falling terminal contour on said.