

Functions of Some Non-Linear (Suprasegmental) Features in English Language Sentence

By

Basiru Ibrahim Musawa

Department of European Languages

School of Languages

Dr. Yusufu Bala Usman College, Daura.

abdulbasirmusawa@gmail.com

08034087687

&

Sani Abubakar Umar

Department of European Languages

School of Languages

Dr. Yusufu Bala Usman College, Daura

Abstract

The paper captures the uses of non-linear (suprasegmental) features in English language. Although language is basically segmental sounds, vowels and consonants, especially in English cannot by themselves achieve the desired meaning without using the non-linear features such as stress and intonation. This is because linguistics units from the level of phoneme to the level of discourse are interdependent in their functions. In this sense, stress or intonation can bring about changes in meaning or attitude on any linguistic unit they are placed. This paper presents the definition and the various branches of phonology and the suprasegmental or non-linear features such as stress and intonation as they function in English language sentences. It also consist of written materials such as books and information obtained from websites.

Keywords: Segmental, vowels, consonants. Non-linear, suprasegmental, stress, intonation, sentence.

Introduction:

This discussion begins with some definitions of phonology, so as to highlight the subject matter of phonology. These definitions reveal the areas concern in phonology as a field of study. The

relevance of this cannot be over emphasized because the main issues in this paper are phonological features.

Concept of Phonology

The word phonology emerged from Greek terms 'Phone' meaning voice or sound and 'Logos' means subject of discussion (study). It is a subfield of linguistics which studies the sound system of a particular language or languages. Phonology describes the sounds function within a given language. It studies the distinctive sound units within a language and how a sound alternates depending on its position relative to other sounds such as aspiration of voiceless plosives in English (Wikipedia).

Crystal (2006:350) defines phonology as a branch of linguistics which studies the sound system of language. The aim of phonology is to demonstrate the pattern of distinctive sounds found in a language. It is concerned with the range and function of sounds in specific languages and with specific rules which can be written to present the types of phonetic relationships that relate and contrast words and other linguistic units.

Linguistics library. Phonology is the study of how sounds are organized and used in a National Language. The phonological system of a language includes an inventory of sounds and their features and rule which specify how sounds interact with each other. It analyses the sounds patterns of a particular language by determining which phonetic sounds are significant and explaining how these sounds are interpreted by native speaker.

According to Yule, (1997:54) phonology is essentially the description of a system and patterns of speech sounds in a language. It is concerned with the abstract or mental aspect of the sounds in a language rather than with the actual physical articulation of speech sound. It is about the underlying design and blueprint of the sound that serves as the contrast basis of all variations in different contexts.

Though phonetics and phonology are concerned with language, they are different in the sense that while phonology is concerned with the organization of speech within specific languages, phonetics is concerned with the speech organs and the sounds they produce irrespective of language. Phonetics is also concerned with the features and characteristics of the sounds produced by the organs of speech. The branches of phonetics are articulatory phonetics, auditory phonetics, acoustic or perceptual phonetics and forensic phonetics. For the purpose of this discussion, the definitions by Linguistics library and Crystal (2006) are very important because

they incorporate sounds and their features and the rule governing how these sounds interact with each other to form larger units and also how other features affect the functions of the physical sounds for effective communication in a particular language.

The scope of this paper however, is mainly the functions of phonological features such as stress and intonation in English which are aspects of phonology. In this regard, various branches of phonology are discussed below.

Branches of Phonology

There are various theories of phonology. These theories depend on the ways in which various scholars perceive the scope or the concern of phonology as a subfield of study in linguistics with regard to the analysis of speech sounds in a particular language. The branches of phonology are thus, presented below.

Linear Phonology

This refers to a representation of structure as a series of segments occurring in a strict horizontal sentence, each segment being analysed vertically in an unordered column of features. For example (S) being (- syllabic), (- voiced), (+ nasal), (+ carnal) etc.

The weakness of these binary features is however their inability to handle features which are certain are placed over domains greater than individual segments such as certain properties of tones and vowel harmony and also their inability to represent structure relationship within column features (Crystal, 2006:317). Linear phonology treats individual sound segments. That is to say individual vowels and consonants are treated independently without any reference to their functions and relationships with other segments in a sentence or connected speech. It does not mind any larger unit than the individual phoneme.

Non-linear Phonology

According to the Linguistic Library, —Any model which avoids linear representation of the phonological structure of a word is a non – linear approach. Thus, prosodic, metrical and suprasegmental phonology grew out of non-linear phonology. In non-linear models of phonology a stream of speech is represented as multi-dimensional, not simply as a linear sequence of sound segments. The inability of the linear approach to handle features which extend over individual sound segments results in the development of non-linear models such as prosodic, metrical and auto segmental phonology.

Prosodic Phonology

According to Crystal (2006:181) this was proposed by Firth (1890-1960) who was a professor of general linguistics in the University of London between 1944 and 1955. The proponents of this approach are of the view that prosodic features extend over stretch of utterances. The features involve rhythm, stress, and intonation and may reflect the emotional state of a speaker. These are the features that indicate whether an utterance is a statement or a command and whether the speaker is being sarcastic or ironic or emphatic.

In fact prosodic phonology is concerned with those elements of language which may not be encoded by grammar. Thus pitch, stress, juncture patterns, features of secondary articulation such as lip rounding, nasalization are all under prosodic phonology.

Finch (2000:39) points out that —Prosody entails examining units larger than the phoneme, in particular the syllable, the foot and the tone unit which are units above segmental levels of phonemes. In this case phonology is important to areas of linguistics such as discourse analysis and pragmatics.

Metrical Phonology

According to LinguaLink library, metrical phonology is a phonological theory concerned with organizing segments into groups of relative prominence. These linguistic segments are organized into syllables, into metrical feet, feet into phonological words and words into larger units. In this theory, phonological strings are represented in hierarchical manner. Finch (2000:70) asserts that because of the way in which stresses move about in running speech, many linguists argue that there are linguistic domains above the syllable which account for the distribution of stress in an utterance. This is the concern of metrical prosody and has the foot as its principal domain. He further explains that —A foot is a rhythmic unit immediately above that of a syllable, consisting of a stressed syllable and unstressed syllables which may be attached to it.

From the foregoing, we can understand that there are two broad branches of phonology. The branches are linear and non-linear phonology. This is clearly stated by Crystal (2006:408) that

—Within phonology, two branches of study are usually recognized: segmental and suprasegmental.

Other aspects such as prosodic and metrical are studied under suprasegmental. Non-linear phonology helps realize meaning in longer utterances, thus, it makes phonology related to other aspects of linguistics such as discourse analysis and pragmatics which are concerned with

meaning in deeper sense of utterances. The essence of language is meaning and meaning cannot be realized in individual linguistic segments. Linguistic items interact right from the level of phonetics through phonology, morphology, syntax and semantics to pragmatics. —This is the concern of the Firthian approach to linguistics of polysystemism. In other words, an analysis is based on the view that language patterns cannot be accounted for in terms of single system of analytic principle and categories with strong emphasis on social context of situation; prosodic (as opposed to phonemic) phonology and collocation. Crystal (2006:181). This approach was proposed by James Rupert Firth (1890 – 1960) who was a professor of general linguistics in the University of London (ibid).

Suprasegmental Features and Their Uses in Sentences

Now that various branches of phonology have been pointed out and discussed, there is the need to understand that it is the suprasegmental phonology that deals with the phonological features, as they function and bring about changes in meanings as especially in utterances, larger than words. A point of focus is therefore the suprasegmental features and their uses in sentence in English language.

What is a Sentence?

A sentence is a group of words that make sense. A sentence consists of more than one sound segment. It is made up of a number of linguistic items joined together to form expression. According to Crystal, (2006:97) sentence refers to a spoken language analysis in continuous sequence as in normal utterances and conversations. It has been realized that important changes happen to individual linguistics units when they are used in sentence or connected speech as demonstrated by such processes as assimilation and elision.

Stress and its Functions

Stress in phonetics refers to the degree of force used in providing a syllable. The stressed syllable is more prominent than the unstressed because there is an increase in the loudness of the stressed syllable. In English, the main function of stress is to provide the means of distinguishing degree of emphasis or contrast in sentence as in the case of sentence stress.

Stress, which is inherent in polysyllabic words, is used to distinguish many pairs of words and sequences of words because of stress variation. Gimson, (1976:24) avoided the use of word 'Stress' because it has been used in different and ambiguous ways in phonetics and linguistics.

He rather refers to it as accent. Roach (2000:94) asserts that —Many experiments have been carried out on the perception of stress. He further opines that all stressed syllables have one characteristic in common, and that is prominencel. He further argued that at least four different factors make a syllable prominent, which is as follows:

- a. Loudness is a component of prominence. That is to say that in a sequence of identical syllables, one syllable that will be heard as stressed is made louder than the rest.
- b. The length of syllables contributes to the prominence of the stressed syllable. If a syllable in a word is made longer than the other. There is quite a story tendency for that syllable to be heard as stressed.
- c. Another thing which is related to prominence is voicing or the frequency of the vibration of vocal folds.

A syllable will tend to be prominent if it contains a vowel that is different in quality from neighboring vowels.

Roach, (2000:95) summarized thus, —Prominence is produced by loudness, length, pitch and quality which in combination, although syllables may sometimes be made prominent by means of only one or two of theml. However, the strongest effect is produced by pitch and length which is also a powerful factor. He further maintains that there are two levels of stress: primary and secondary. The strongest type of pitch movement is the primary stress while the weaker one is the secondary stress.

Certain classes of monosyllabic English words are normally stressed but some other classes do not take stress. The following classes of one syllable English words according Uzoemie (1994:141) are usually stressed:

Nouns - man, rice, sun

Adjectives - red, tall, strong

Numerals - ten, six, eight

Main verbs - dance, cat, try

Adverbs - there, now, quit

Interjection - ah!, oh!

Demonstrative - this, that, those

Grammatical monosyllabic words are normally not stressed. The classes of words in this category include:

Personal and relative pronouns - he, us, which

Prepositions - in, for, by

Conjunctions - and, but, with

Articles - a, an, the

(Uzozie, 1994:141).

All monosyllabic words are, however, usually stressed for emphasis or for the purpose of achieving an effect. Disyllabic and polysyllabic words have an inherent stress. Changing the stress position means changing the structure or even the meaning of the word. In English, there are certain pairs of disyllabic words which have their grammatical changed due to change in stress patterns. Examples of such words are:

'Compound (noun) vs com'pound (verb)

'Object (noun) vs ob'ject (verb)

'Record (noun) vs re'cord (verb)

'Insult (noun) vs in'sult (verb)

Rhythm

It has been claimed that English speech is rhythmic which is as a result of the occurrence of stressed syllables at regular intervals. English has a stressed time rhythm which implies that stress will tend to occur at regular intervals weather they are separated by unstressed syllable or not. According to Gimbon, (2001:300) in connected speech unstressed syllables, majority which include reduced vowels, considerably outnumber those carrying primary or secondary stress. In this, we can say that the stress patterns and sentences and the number of syllables in each word we utter in a continuous speech lead to variation in the movement of sound we make and the stream of speech produces rhythm. In Nigeria being one languages tone language, we tend to speak English with pitch patterns of our languages thereby producing a syllable – time rhythm as against stress – time rhythm.

It is stated in FME course book (2007:117) that we should bear in mind that rhythm produces melody in speech and it is also to be noted that several elements of speech combined to produce the various and overall rhythms of English that we perceive as we listen to utterances. These

elements characterize both the segmental sounds and more of the suprasegmental features of English. They include:

- a. Differences in the varied sounds of segmental phonemes of English (vowel and consonants in combination).
- b. The alternation of strong and weak stress on syllable in various combinations.
- c. The number of syllables making up the utterance.
- d. Variation in the level of pitch of voice.
- e. The natural break or pauses that occur at some intervals within utterances.

Tone and its Functions

English is not a tonal language but it is an intonation language. According to Crystal (2006:465) tone is the distinctive pitch level of syllable. —Tone refers to the way in which pitch is used in a language.

Finch (2000:50) asserted that in the study of intonation in English, a sequence of tones constitutes a contour or tone unit. In many languages, the tone carried by a word is an essential feature of the meaning of that word. In English tone does not differentiate words in this way. The tone in this case has suprasegmental function which means it operates above the level of individual segment or words (Finch, 2000:50). Therefore, in the situation there is no clear-cut difference in meaning when a word is said with different pitch or tone. For example saying 'Yes' with a high pitch and saying it with a low pitch will not change the meaning but will only reflect change in attitude. In this case tone makes difference in intonation as against in tone languages where —pitch is used to make difference of tone where a syllable or a word consisting of the same segmental sequence has different lexical meaning according to the pitch use with it (Gimson, 2001:53).

Intonation and its Functions

Crystal, (2006:116) defines intonation as —a term used in the study of suprasegmental phonology referring to the distinctive use of patterns of pitch or melody. Roach, (2000:150) asserts that —no definition is completely satisfactory but any attempt at a definition must recognize that the pitch of the voice plays the most important part.....we describe pitch in

terms of high and low. According to FME course book (2007:118) there is no sharp distinction between tone and intonation.

In speech, tone of voice also means pitch. All languages use tone or pitch of voice to modify the significance of what is said. Finch, (2000:50) stated that —intonation refers to variations in the pitch of the speaker's voice, which is a mental phenomenon. Intonation and stress in English, according to FMC Course Book (2007:119) usually work hand in hand to produce appropriate implication of what is said because a high pitch coincides with primary stress, which is the point of greatest attention in our utterance. The meaning of the entire utterance however, depends on the spread of intonation pattern in the utterance. Intonation has attitudinal function in our utterance (Roach, 2000:183). This means that it is the pitch that enables us to express emotions and attitudes as we speak. It also adds a special kind of meaning to our feelings and attitudes. In this manner the same grammatical sentence can be said in different way to express anger, happiness, gratefulness, curiosity, surprise, enthusiasm, etc.

Intonation patterns in English are usually termed as tunes. Tune is usually characterized by change in the direction of pitch or tone. If the pitch falls to a low tone on the last syllable, that is regarded as falling tune 1 and if it rises at the same point, it is regarded as rising tune or tune 2. Therefore, two major tunes are considered in English.

Conclusion:

Thus, two broad branches of phonology, that is linear and non – linear or segmental and suprasegmental. Linear phonology is segmental phonology while non-linear phonology coincides with suprasegmental features are relevant in realizing different meaning effects in our utterances. Furthermore, it was shown that stress can be used for emphasis and that was a monosyllabic word can be stressed in connected speech for the purpose of lying emphasis on them. One other thing pointed out is that a shift of stress from one syllable to another in some disyllabic pairs of words brings about a change in the grammatical class of words. Another thing related to stress in English is the rhythm created by appearance of stressed syllables at regular intervals in our speech. The rhythm also creates a melody in our speech.

We have also seen that tone is an essential factor as far as meaning is concerned. With regard to intonation, it has been outlined that intonation contours are used by the speaker of English to express doubt, certainly, anger surprise, astonishment etc. In a nutshell, these non-linear

features make phonology related to the other aspects of linguistics which are concerned with meaning in larger contexts beyond the level of word or even sentence level such as discourse analysis and pragmatics.

Reference:

- Crystal, D. (2006) *A dictionary of linguistics and Phonetics (5th edit)*. Oxford: Blackwell.
- Federal Ministry of Education. (2000). *Special Teacher Upgrading Programme. (STUP) NCE Course Book on English Language Year 2*. Kaduna. NTI.
- Federal Ministry of Education. (2007). *The Structure of Modern English*. B. ED Course Book on English Language 200 Level. Kaduna ITA.
- Finch, G. (2000) *Palgrave Key Concepts, Linguistics Terms and Concepts*. London: Palgrave.
- Gimson, A.C. (1976) *An Introduction to the Pronunciation of English. (6th edit)*. Rev. Alan Cruttenden (2007). *Gimso's Pronunciation of English (6th edit.)*. London: Arnold.
- Lyons, J. (1981) *Language and Linguistics. An Introduction*. Cambridge University, Press.
- Pronunciation Course. (2nd edit). Cambridge University, Press.
- Roach, P. (2000). *English Phonetics and Phonology. A Self-Contained Comprehensive*
- Uzoezie, R.U (1992) *Phonetics and Phonology of English Undergraduate Teachers*. Onitsha: Hybrid.
- Yule, G. (1997) *The Study of Language (2nd edit)*. Cambridge: Cambridge University Press.
- www.sil.org/linguaink. www.wikipedia.org.