

A REFLECTION ON TONE AND ITS PEDGOGICAL IMPLICATIONS

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ABSTRACT

Tone is central to the study of English speech beyond the individual words. This is obvious in languages like English, but tone and intonation interfaced in the study of the global theory of intonational phonology. This paper takes another look at tone, beyond its conception in relation to words, it sees it as inclusive term precluding both tone and intonation. The first part of the paper introduces intonation as phenomena central to the learning of second language like English without which it could not be learnt properly. In the second part of this paper pitch as vibration of vocal cords caused by pressure from lungs in an attempt for humans to speak specific to particular languages was handled. The third part addresses tone as contrastive and relative phonological term in relation to words of a language. In part four issues like tone floating syndrome and functions of tone in African languages and English were explored. Part five summed the major arguments of the paper that intonation needs to be properly and pragmatically taught and future direction of matching theoretical formulations and practical drills and exercises and mode of designing them was proposed as area of research in English/Nigerian languages.

Key words: Implications, Pedagogy, Pitch, Tone, Tone Floating, Tonmorphs

Introduction

In the process of second language learning intonation is probably one of the phenomena in language without which one can never speak English like a native speaker. Adegtubgo (1984) asserts that the English spoken in Nigeria is different from the English spoken in Britain. He cites examples of requests which are made with rising tone final intonation pattern contrasted with the falling tone final intonation in Nigerian English form. Therefore the gap between Nigerian English and British

Received Pronunciation RP seems to be wider in the area of intonation than any other area of speech. This paper reflects on intonation, tone and related matters, as well as their pedagogical implications. A tone is important in this investigation for the fact that Nigeria as an ESL country most of the languages are tone languages trying to learn a second language-English which is intonational. While intonation is voluntary pitch patterns that are used in English language at the levels of the sentences a tone language is (one) in which pitch is significant, contrastive, but

relative...on each syllable Pike (1984). All these have implications based on the above parity between tone and intonation in both teaching and learning, tone and related matters are further explored. Let us begin by discussing pitch as a relevant aspect in the next section.

Pitch

This is the name commonly associated with the vibration of the vocal cords caused by air pressure from the lungs Fromkin and Rodman (1978). Speakers of all languages change the pitch of their voices when they talk and the pitch so produced depends upon the speed of the vocal cords or the frequency of the vibration: the faster the vibration, the higher the pitch perceived. In other words, all speech sounds arise from the physical act of making the vocal cords or folds vibrate in the larynx. Without phonation there is no perception of pitch. Pitch can be associated with the resonance of the speaker's voice and contrasts with whispered speech (where there is no vocal cord vibration). Robin (1964:110-112) describes pitch as the result of the speed of the vibration of the vocal cords in the voiced parts of utterances. Abercrombie (1967:107) while accepting Robin's definition cautions that pitch is by no means a random fluctuation but follows well-defined melodic patterns

which are common to the speech community and which are of considerable linguistic and social importance.

A number of observations can be made from the above definitions. First, pitch largely depends on the speed of vibration of the vocal cords. Thus if the vibration of the vocal cords is fast: the pitch of voice accordingly becomes high. To that extent, therefore, pitch is a feature of voiced sounds. Secondly, although pitch variation is common to all natural languages, it is by no means distributed at random; it is organized: and the way pitch is utilized by languages seems to be specific to them. In other words, every language has its way of utilizing pitch either to signal intonation (like English or German), accent (like Japanese or Ancient Greek) or lexical (like Hausa, Yoruba, Igbo, Chinese or Korean languages). Normally when a language makes use of pitch over phrases to define intonation, it does not simultaneously as a distinctive feature signaling words. This therefore means that emphasis or prominence will also be signaled differently across languages. English for example uses focus, or emphatic accent, to signal prominence, e.g. 'Zaid went to the market (not Abba)', while Hausa (because it is a language with lexical tone) uses word order movements for the same function, e.g. '*Ai Zaid nee yaa tafii kasuwa*'.

In the English language again, it does not matter whether one says (dog) with a high pitch or a low pitch: it will still mean (dog). However, if one should say (*ha*) with a high pitch in Hausa it will mean "open your mouth" as mothers often say to their children. Whereas if one says (*ha*) with a low pitch, it will mean, "something has happened" or someone has been thrown as in a wrestling bout. Languages in which regular sequences of different pitches characterize stretches of speech between sounds are said to be intonation languages, whereas languages in which pitch differentiation marks the distinction between one word and another are known as tone languages. English, French, German and many Indo-European languages belong to the first category, while most African languages such as Hausa, Yoruba, Igbo, Izo and Ewe etc. belong to the second category. Discussion of pitch variation across languages is necessary to make sense of the overall focus of this paper. One important reason is that the subject of our paper is mainly on the differentiation in the utilization of pitch between the educated speakers of Nigerian English and the speakers of standard British English. We now link to the discussion of tone and related matters.

Tone

So much has been written on tone by both Nigerian and non Nigerian scholars so that our attempt to give it any undue prominence may risk the danger of being interpreted as a mere replication of the works of others. However, this does not mean it will not be mentioned. Sani (1984:40) describes tone as a pitch of voice on which individual syllables of a word are uttered naturally in order to convey a proper meaning to the listener. He goes on to explain that every syllable, in a tone language, has its assigned pitch of voice or tone. Thus, whereas some syllables are produced on a high tone others are produced on a low tone. The syllables uttered on a high pitch of voice are said to have a HIGH TONE, while the ones that are uttered on a low pitch are said to have a LOW TONE.

Pike (1948) defines a tone language as that in which pitch is significant contrastive, but relative...on each syllable. However, this definition is considered too strong by Welmers (1950) for its requirement of a significant pitch on each syllable. Thus, Welmers proposes a modified version: A tone language is (one) in which both pitch phonemes enter into the composition of at least some morphemes (Welmers, 1973 and Hyman, 1975). Welmers maintains

that since some morphemes (and therefore syllables) may actually be toneless, it is wrong to expect significant pitch on each syllable and this is especially so when one considers the Tone Floating Syndrome where tonal morphemes or 'tomorphs' are not carried on any segment of a given word. Hyman and Tadadieu (1976:61) report that Mbui, a language spoken in Cameroon, represents a good case of a language in which the phenomenon of tone floating is evident.

What we have just done is simply to present the scholars' views on the phenomenon of TONE FLOATING. We by no means, attempt to get embroiled in the discussion of the merits and demerits of Pike's (1948) position and Welmers (1959) modification of it. Having said that, we shall point out that nearly all phonologists agree that one of the basic functions of a tone language is that it requires a significant pitch on each syllable. In other words, every syllable in a tone language has a pitch that is determined by the inherent nature of the word itself. Ladefoged (1985) observes that although speakers of English often find it hard to consider the tone as an important, meaningful part of a word the truth remains that the attempt to play around with tones in a tone language can cause a loss of or confusion of lexical meaning or simply marks one out

as a non speaker. For instance, just as the substitution of /m/ or /b/ can change English 'make' to 'bake' and change the lexical meaning from creating, constructing or preparing something by combining materials or putting things together, to 'cooking something by dry heat in an oven or by making something'. So in Hausa the substitution of (n) for (d) can change 'nawa' (how much?) To 'dawa' (forest or jungle): but also substitution of a low tone for a high tone can change (ga) meaning (to) and (ga) meaning (see) so that 'ga Audu' becomes (to Audu) and ga Audu refers (to see Audu) low against high tone.

Tone languages can function in two basic ways: they have lexical and grammatical functions. When tone is used almost exclusively to distinguish word meaning as above, we say that such function is lexical.

In Igbo, tones (the distinctive patterns of pitch or pitch changes) are used not only in distinguishing several lexical items such as:

Akwa - 'cloth' (a high and low tone)

Akwa - 'bed' (two low tones)

Akwa - 'cry' (two high tones)

Akwa - 'egg' (a low and a high tone)

But also used mainly or exclusively for the signaling of grammatical distinction. This function Egbe (1986:8) describes as the verbo-nominal distinction. Thus:

Ije - 'Journey Ije to go
Ike - 'Strength Ike to shave
Ibu - 'Loud Ibu to carry

In Yoruba, Elugbe (1995:67) suggests that three tones (high, mid and low) are minimally distinctive and they can be shown to be so.

- (a) Oho 'hoe'
- (b) Oko 'husband'
- (c) Oke 'vehicle'
- (d) Ota 'enemy'
- (e) Ota 'champion'
- (f) Ota 'place-name'
- (g) Ko 'build'
- (h) Ko 'write'
- (i) Ko 'reject'

Good example of a downdrift system of intonation as can be seen from both the declarative and the interrogative sentences schematized in Sani (1989:46) below. Thus:

- 5.
- 4.
- 3.
- 2.
- 1.

Inaa suka tafiii?

- 5.
- 4.
- 3.
- 2.
- 1.

Kano ya tafii?

From the above intonation pitch curves the following deduction can be made- The effect of question intonation is to reduce considerably

the intensity of the downdrift: and it serves in raising the last high tone of the phrase to an extra pitch with a sharp fall or falling slur.

Perhaps this section on the review of tone and tone languages will not be complete without a mention of the Nigeria Pidgin (NP). This is not only because the language is indigenous to Nigeria but also because like most other Nigeria languages, it was in one way or the other influenced if not affected by the English spoken in Nigerian. Nevertheless, is Nigerian Pidgin a tone language? Mafeni (1971) suggests that it is a tone language because: One, it is syllable-timed (as opposed to stress-timed) and two, it makes lexical use of words as /fada/-father and 'fada' a (Roman Catholic Priest). However, Elugbe and Omamor (1991) think rather differently. In their opinion in as much as it is true to say NP is a syllable timed language in which each syllable is prominent and equidistant from its neighbours, it may not be true to say that NP is a tone language in the same sense as Yoruba, Igbo or Hausa for example. Their position and one which we are in agreement with, is that NP is neither a tone language nor a stress-timed language. This is not a new phenomenon among natural languages as we also indicate later in this paper under section on RHYTHM, but before then, let us very quickly review David Crystal's approach to tone.

According to Crystal (1969:142) tone is a feature of phonology. It is associated with either level pitch or the direction of pitch movement (falling or rising) within the most prominent syllable of an intonational phrase (intonational phrase simply put refers to the to be the domain relevant to the organization of tunes and the phonetic implementation of intonation; it also a unit of the phonology which corresponds to somewhat to syntactic phrase) or 'tone unit' in the vocabulary of the London School.

In any tone-unit (...) the majority of syllables are uttered with a level pitch (static tone) but a few are uttered with a perceptible pitch movement from one height to another... either a pitch glide (for example, when the syllable centre is a relatively long vowel or vowel-like sound) or pitch jump to a different level on the following syllable (as when the syllable contains a short vowel and there are other syllables in the word), the later being interpreted.

Tone in Hausa can also be grammatical, example:

Yaa zo high (he came) Past
Yaazo falling (he may come)
future e.g. 'Bari aiya zo (wait he may come)
Taa zo high (she came) past
Taa zo falling (she mat come)
future

Furthermore, in Hausa tone may be used in conditional clauses for example:

Idan yaa/taa zo za'a bata littafen
(likely conditional clause)

Idan yaa/taa zo za'a bata littafen
(unlikely conditional clause)

Idan yaa/taa zo da an has hi/t a littafen
(hypothetical/rejected conditional clause)

Tone language according to Katamba (1989) can also be classified as belonging to one of two categories because of the shape of their tones: REGISTER TONE language and ONTOUR TONE language. In a true register tone languages such as Hausa, Yoruba and Igala tones have level high or low pitch, in these languages the pitch hardly goes up or down during the production of a particular tone. Welmers (1973:116) reports that Igala represents the best example of a register tone language. Thus:

Awo 'guinea fowl' ()

awo 'aslap' ()

Awo 'an increase' ()

awo 'a comb' ()

Awo 'hole (in a tree) ()

awo 'a star ()

In a true contour tone language the pitch phonemes, or tones cannot be conveniently described in terms of single points within a pitch range. In other words, the tones in this type of language have a somewhat fluctuating pitch range. The

Vietnamese languages of South East Asia belong to this category with Mandrin Chinese providing the best example, thus:

<i>Ma</i>	'mother'	(level high tone)	()
<i>Ma</i>	'hemp'	(high rising tone)	()
<i>Ma</i>	'horse'	(falling rising tone)	()
<i>Ma</i> **	'scold'	(high falling tone)	()

We should also point out here that the above classification of tone languages is by no means watertight. In fact, there are tone languages that share the features of both categories. Luganda, a language in Uganda falls within this category (see Ladefoged, 1982:231).

Furthermore, there exist instances where some tone languages have various types of pitches superimposed upon them. These superimposed pitches of voice may carry the implications of anger, sarcasm, disgust, astonishment or simple admiration. Scholars such as Sani (1989), Abdullahi (1990) and Na'isa (1992) refer to this phenomenon as TONE TERRACING and they all seem to agree that 'tone terracing' is made up of several distinguishable but related features.

We shall not attempt to review all of them here, nor shall we attempt to mention them. However, the one

that directly relates to this paper is DOWNDRIFT. In downdrift every high pitch following a low pitch is lower than the preceding high each time there is an intervening low thereby creating terracing effects. Thus, Hausa is said to provide a functionally as identical with a glide (...). The notion of kinetic tone is thus partially a functional abstraction to allow these substantial differences to be grouped under the same heading. At least one such tone is obligatory for a tone-unit to be interpreted as 'complete' (...) the categories of pitch glide discriminated include: *falling* (transcribed with 'over the vowel of the syllable), *rising* (*falling-rising* ()); *falling-rising—falling* (); *rising-falling-rising* (); *falling-plus-rise* (); *rise-plus-fall*(), with a certain variation of the first element. The first two, along with level tone ()(...) are referred to as *simple* tones: the next as *complex* tones (...) and the remainder as *compound* tones. It is also obligatory for the articulation of a kinetic tone in English that there is an increase in intensity on the syllable carrying the glide, which perceptually seems equivalent to the loudness of the term stress in the simple syllable *loudness* system", (Crystal, Ibid: 142 - 3). The categorization of pitch is characteristic pattern of the London School in that it falls between the phonetic characterization of intonation and a simple, abstract system

characterized by relations of dependency and structure. In the subsequent sections we will see that Janet Pierrehumbert's contribution to the description of intonation was to reduce the very complex of tones proposed by Crystal above to two tones - High and Low, which can combine in various ways to build up what she calls tunes, and to map tones onto pitch accents in an *auto segmental* analysis which is made up of several tiers of presentation.

Pedagogical Implications

The investigation on intonation tone and related matters above-revealed that since in most schools and colleges in Nigeria largely grammar and writing are taught as a result the beauty of speech is consequently lost. Intonation rather than tone in English is more natural and economical. Phonemic distinction is easier using intonation rather than tone via-sentence and words.

Lack of good teaching or learning of intonation leave some linguistic and communicative resources untapped, and the speech melody lost. All these are serious implications for teaching and learning of English as a second language. This in sum shows only one aspect (or few) is taught to the detriment of some which

remain unexplored and untapped. We recommend that this problem could be minimized in the following ways:

- a. Adequate time should be given to teaching of pronunciation not just limited to a couple of hours per day.
- b. Effort should be intensified in teaching spoken English in constant drills.
- c. Repetition and imitation of material learnt should be emphasized.
- d. Students should be encouraged to listen to good realization of intonation patterns of English from films, radios, television and above all good mothers.
- e. Student should be advised and encouraged as well to listen and learn from the English of newscasters on BBC, NTA and try to match their realization as much as possible with what is heard.

Finally in this age of globalization and internet the teaching and learning of English should take cognizance of the interface between acceptability and international intelligibility components.

Conclusion

What is obvious from this paper is that tone and intonation are different things. While the tone has its role on the syllable structure the intonation contours rely on the sentence or utterance and it refers to meaning distinctions. But most importantly this reflection has critical implications for teaching and learning of English in Nigeria since the beauty of English language is in its intonation which bears its melody and musicality; but what obtains is that grammar and writing takes precedence to spoken English thereby leaving the linguistic and communicative resources untapped. Way forward is to reorient the teaching and learning of English to incorporate spoken English especially the correct use of intonation patterns of English. In addition to these, the proper utilization of modern multimedia resources in both teaching and learning of spoken English in Nigeria.

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