

**NONSEGMENTAL PHONOLOGY: A STUDY OF PERFORMANCE BY POSTGRADATE
STUDENTS OF ENGLISH, AKWA IBOM STATE UNIVERSITY, NIGERIA**

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ABSTRACT

This research set out to test the performance of postgraduate students of English in English prosody. The theoretical base was descriptive linguistics of which Dineen is an outstanding proponent. A second theoretical framework: applied linguistics with Catford as one of the proponents was also adopted for the research. Through a purposeful sampling method, four postgraduate students of English from different language backgrounds were given a passage of seven sentences to read. The oral productions were recorded with Android phone (Infinix Hot 60i), played back multiple times and scored on stress, intonation and rhythm. The findings indicated that our informants as L₂ speakers exhibited provinciality in English prosodies. This abysmal performance is capable of causing misunderstanding in communication in international fora where English is used as a medium of communication. The poor performance is suspected to be caused by lack of constant practice in and exposure to appropriate English speech forms and English lexis. It is recommended that L₂ speakers such as our experimental group should listen to native speakers of English speak English. The L₂ speakers of English should also use English language in informal communication to acquire proficiency and competence in both spoken and written forms of the language.

KEYWORDS: Intonation, stress, accentuation, rhythm, pronunciation, provinciality, informants, subjects, phonology, suprasegmental, nonsegmental, autosegmental.

INTRODUCTION

Alternative labels of non-segmental phonology are suprasegmental phonology, prosody and autosegmental phonology. The elements or constituents of non-segmental phonology are stress, intonation and rhythm. Christopherson (1981) observes that stress is a characteristic feature of English compared with many African languages. The source goes ahead to explain that in any English utterance consisting of several syllables some of the syllables are strongly stressed and some are weakly stressed. According to him, a syllable that is strongly stressed is uttered with great energy. Similarly, Gimson (1984) avers that stress is "greater breath effort by the speaker which results in loudness for the hearer. This research is not bothered about the controversies in the literature concerning the exact description of stress. The commonsensical definition of stress is the emphasis of pronunciation placed on a portion of the syllable, word or sentence. Okono (2019) observes that accentuation and Stress could be used interchangeably. The source quotes Eka (1996:112) as observing that we can analyze in perceptual terms: the place that the hearer perceives

prominence whether in the sound or in the syllable or the word or a longer utterance. We can therefore analyze accentuation in phonological terms; the way prominence is organized in relation to sounds, syllables, words or other utterances. (Okono, 2019, p.73). Where therefore we use the word accentuation... the reader is free to think about stress, its component in perceptual or phonetic terms. Accentuation as prominence can be achieved through a very intimate combination of two or more of length, stress, pitch and inherent sonority (Ward, 1972.p.156).

Christopherson (1981) distinguishes three styles in spoken English: formal style, slower colloquial style and familiar (or rapid colloquial) style. In this research, only the formal style is considered. The formal style is identified with fewer assimilations and elisions and more strong forms than in ordinary conversation. Slower colloquial style is an intermediate style which may safely be used for most purposes. Familiar or rapid colloquial styles is characterized by more assimilations, dictions and weak forms than the other styles (Christopherson, (1981, p.178). This choice of style will therefore direct scholarly engagement in the succeeding sections of his research.

Christopherson (1981) also identifies primary stress and secondary stress. According to him, if a word has three or more syllables, we often get an extra degree of stress intermediate between strong and weak stress. We call this secondary stress. He uses the word “caravan” in which the main or (or primary) stress is most often on the last syllable; but the first syllable is almost as strongly stressed, and so we say that it has secondary stress. The secondary stress is marked by a low vertical stroke at the beginning [ˌkərəˈvæn]. It should be noted that Merriam-Webster’s Collegiate (Tenth Edition) Dictionary (1999) reverses this stress pattern for “caravan” thus: [ˈkərəˌvæn]. The primary stress is on the first syllable while the secondary stress is on the last syllable. Here, we go with the stress pattern of Merriam-Webster’s because that is what we hear always, and, we do not know the English dialect of Paul Christopherson. His illustration has helped in the explanation of a language phenomenon. The primary stress is sometimes called principal stress or main stress. Once again, this research is concerned with the primary stress because the informants were tested formally. A combination of stressed and unstressed syllables gives an English sentence its characteristic rhythm. Christopherson uses the sentence: “He didn’t know the reason why” [hɪˈdɪn̩t̩ ˈnuː ðə ˈriːzn̩ ˈwaɪ] (four stressed syllables and four unstressed syllables) which are evenly distributed so that unstressed and stressed syllables alternate. This particular sentence has an iambic rhythm: dee-dum, dee-dum, dee-dum, dee-dum. (Christopherson, 198, p 153). All sentences in English do not fit into this morphophonemic shape. Acquisition of this competence by second language speakers can only come with a dint of hard work and practice.

Christopherson (1981) calls the main stress single stress and one or more secondary stress double stress. For example, the word “archbishop” the pronunciation is [ˈɑːtʃbɪʃəp] as if it were not one word, but a phrase consisting of an adjective and a noun, an arch bishop. We call this kind of stress double stress. Double stress is rare in simple uncompounded words, but it is not uncommon in compounds. (Christopherson 1981, p, 164)

Eka (1996) observes that natural languages are never spoken at one level of voice pitch for a considerable length of time. When people speak (or read aloud) the voice pitch is always falling or rising, rising or falling, falling and then rising, rising and then falling and only occasionally

level for a special effect. In some languages, Eka continues, the variations indicated here are generally noticed in relation to the sentence, the clause, the group or the word if such a word has been rank shifted to function at a higher grammatical rank. In other languages the variations indicated above are usually noticed in relation to the word. When the variations relate to items higher than the word, they are normally said to signal intonation, the patterns of which occur at the ends of specific utterances. Languages which use pitch variations in this way are generally said to be intonational. When the variations in pitch relate to the word, they are usually said to signal tone. The languages which use pitch in this way are usually classified as tonal. Chinese, Spanish, Italian and the majority of African and Nigerian languages like Hausa, Igbo, Yoruba and Ibibio belong to this group. Conversely, English is an intonational Language.

Eka (1996) describes rhythm as melody of speech. He avers that the English of L₁ speakers as well as L₂ and foreign speakers educated in the language has generally been considered to be stress- timed. This description stems from the fact that there is generally a noticeable attempt by L₁ speakers to maintain some measure of equality in timing between one accented syllable and the next accented syllable in an utterance. For example, the sentence: Peter thinks that he wants us to play will be uttered by L₁ speaker with the same amount of time between the accented syllables thus://Peter/.thinks that he//wants us to/play//this can also be presented as:

- i. //Peter//
- ii. //thinks that he//
- iii. //wants us to//
- iv. //play//

In this manner, Eka observes that syllable accentuation (stress, pitch placement, duration) and intonation all have a part to play in our description of rhythm. The odds that are stacked against the foreign learner of English suprasegmentals are enormous. The odds include L₁ influence and intralingual elements. Bamgbose (1971) gives a critical summary of the difference existing between Nigerian English and native usage. The source observes that the English spoken by Nigerians exemplifies:

1. Characteristic stress patterns for certain words;
2. Syllable –timed instead of stress– timed rhythm;
3. a more restricted system of intonation and small number of vowel distinctions.

On the contrary, Cruttenden (2016) argues that the learning of word accentual patterns is not as large a task as might be imagined since in conversation monosyllables may account for more than 80% of words.

In his contribution, Amayo (1986) avers that:

the supra-segmental features almost exclusively give a language its characteristic accent; without a proper manipulation of these features, the pronunciation of the speaker is bound to sound very unnatural to the extent the speaker could be heard as speaking language B when he is actually speaking Language A. (Amayo, 1986. P.318)

The source further says that majority of Nigerian languages are tone languages of the non-contour type, and for proper mastery of the English prosodic features, these inherent features would have to be overcome. The source asserts that the task of teaching English pronunciation to a bilingual traditionally consists in making him suppress a lot of the speech habits he has acquired from his mother tongue. An effective way of doing this, the source explains, is to identify and highlight the similarities between the first language and the target language; such a similarity as pitch would make things less difficult for the Nigerian learner of English.

In view of the situation highlighted above, Gimson (1984) advises the foreign learner of English such as Nigerians to avoid an attempt to approach the productive and receptive competence of the native speaker but to adopt a standard model characteristic of the geographical region in which they find themselves, such a variety is called careful colloquial style.

Ideally, the effect of the mother tongue also known as L₁ on a child's learning cannot be underestimated; Okono and Enang (2020) emphasize the overwhelming influence of L₁ on child's studious capacity. The goal of this research is not to get Nigerian postgraduates to speak English exactly like the first language speakers but to achieve what Gimson (1984) calls "a careful colloquial style." This will yield for communication a minimum general intelligibility which equates high international acceptability. (Okono, 2023 p. 28a). The main objective of this research is to find out how the level of competence acquired by postgraduate students of English has aided them to handle English prosodies.

Methodology

The subjects used in this study are four postgraduate students of English language in the Department of English. The four students were selected through purposive sample technique. The subjects were coded A to D. Subject A's mother tongue is Annang language in Akwa Ibom State; Subject B belongs to the same speech community. Subject C's L₁ is Etsako in Edo State, Nigeria while subject D's mother tongue is Ibibio language spoken by the majority tribe in Akwa Ibom state and it is the fourth in Nigeria in terms of population of speakers.

The Passage read by the informants consisted of seven (7) sentences. Sentence I had 3 instances of accentuation; sentence two had 7 instances of accentuation; sentence three possessed 4 cases of Primary stress; sentence four contained 2 examples of primary stress; sentence five contained 7 instances of accentuation; sentence six, 8 examples of accentuation; and sentence seven had 3 cases of accentuation. Since a combination of stressed and unstressed syllables in a connected speech produces the rhythm, it follows logically that a subject who scored all the cases of accentuation in a sentence achieved the rhythm. Accordingly, a subject who failed in one or more

instances of accentuation did not attain the required rhythm. Still on point of logic, an informant who produced all the cases of accentuation in a sentence could also produce the unstressed syllables in that sentence.

For intonation, the informants were tested on seven points since we were interested in only falling tune at the end of each sentence. The only sentence medial tune occurred in sentence two where a rising or falling tune was expected at the end of the subordinate clause before the main clause. Android phone, Infinix Hot 60i was used to record the reading of the passage by the four postgraduate students of English. The reading was played back and listened to multiple times and scored. Stress was scored out of over 35; intonation, out of 7 and rhythm out 7. The actual scores were converted to percentages.

Quantitative and Qualitative Limitations

This work did not include secondary and attitudinal stress patterns. It did not also show some examples of rhythm such as the iambic pentameter. The population of informants was restricted to four Masters degree students in the Department of English. Students of other Nigerian language backgrounds could have been tested to aid greater generalization of results.

Theoretical Framework

The major theoretical base for this research is descriptive linguistics. Okono (2020) and Okono (2023b) quote Dineen (1966) as saying that a course in descriptive linguistics usually includes training in phonetics as well as in phonological and grammatical analysis. In this regard, units, categories, descriptive techniques, their value and justification come from a general theory of language founded on a good deal of experience in Scientific description of languages. Another theoretical framework adopted for the research is applied linguistics. Okono (2023)c reports Catford (1965) as stating that applied linguistics is a term used to cover all those applications of the theory and categories of general linguistics which go beyond (i) the elucidation of how languages work and (ii) the description of a particular language or languages for its/their own sake. These two theoretical frameworks are suitable to this research in that the informants are supposed to apply the instructions on English speech sounds including the suprasegmentals to their daily articulation of the speech patterns of English.

Data Analysis

Passage

Inse'curity in Nigeria is now a fa'miliar 'topic. In the 'seventies, 'eighties and 'nineties, inse'curity of a 'volatile nature existed in some spots in 'northern Nigeria. Lives were lost and 'property of ines'timable 'value was de'stroyed. Resi'dential 'structures were razed down. The brazen de'struction of civili'zation and 'mindless 'bloodletting were alleged to have roots in re'ligious 'bigotry and 'acrimony. The 'firebrands were Islamic funda'mentalists who were 'promised a 'conjugal bliss with 'seventeen 'virgins in 'after life each time they kill an 'infidel. But none of them has come back from the e'ternal desti'nation to 'testify of this myth.

TABLE 1: SHOWING THE PERFORMANCE OF INFORMANTS IN ACCENTUATION

S/N	SUBJECT	SCORE	PERCENTAGE
1	A	25	73%
2	B	29	85%
3	C	25	73%
4	D	26	76%

TABLE 2 SHOWING INFORMANTS' PERFORMANCE IN INTONATION

S/N	SUBJECT	SCORE	PERCENTAGE
1	A	7	87.5
2	B	8	100
3	C	7	87.5
4	D	8	100

TABLE 3 SHOWING THE PERFORMANCE OF INFORMANTS IN RHYTHM

S/N	SUBJECT	SCORE	PERCENTAGE
1	A	1	12.5
2	B	2	25
3	C	2	25
4	D	3	25

Table 1 above shows that Subject B scored the highest in stress otherwise called accentuation in this research. She scored 29 out of a total of 34 instances of primary stress. Like the other three informants she committed errors in “insecurity” in which she recorded two primary stress “'inse'curity instead of ɹ inse'curity .She also had difficulty in pronouncing “volatile” and, pronouncing “violet” instead. In the third sentence she pronounced a completely different word “razzled down” and continued the wrong word “razzled” in sentence four in the place of “brazen”. She equally failed to place the principal stress appropriately on “conjugal” in sentence six and “testify” in sentence seven. Both words have primary stress at word initial positions or first syllables. She scored all the four points in sentence 3 and all the two points in sentence 4. The

candidate lost only one point of stress in the remaining 5 sentences. Next highest score of 26 in stress patterns was achieved by subject D who clinched 26 out of 34 representing 76%. She rendered double primary stress tagged DPS in “insecurity” and “conjugal”. This candidate misplaced primary stress on “volatile” in sentence two, “acrimony” and “testify” in sentence 7. These words have principal stress in the first syllable which is word initial positions. This informant produced “acri'mony” with stress on the second syllable; “testify” with primary stress on the third syllable while “con'jugal” was pronounced with double primary stress –DPS. Subjects A and C scored 25 out of 34 instances of primary stress. Subject A produced “inse'curity” in sentence 1 and in sentence 3 with double primary stress. He articulated “acri'mony” and “con'jugal” with primary stress on the second syllable instead of the first. Similarly, subject C rendered double primary stress on “inse'curity” in sentence 1 and in Sentence 2, “pro'perty” in sentence four, “ines'timable” in sentence three and “blood'letting” in sentence four. For “volatile” and “conjugal” she rendered the primary stress on the second syllable instead of the first syllable.

In this research, we were only interested in falling intonation at the end of sentences. In table 2, all the four informants successfully ended the seven sentences in falling tune. The only additional falling tune was sentence medial or interclausal falling tune in sentence two which was produced by informants B and D. This is why both subjects scored 100% in intonation. (Only falling tune was tested because the informants read 7 declarative sentences that typically carried falling tune). Table 3 indicates that Subjects B,C, D scored 25%, the highest score in rhythm. Subjects B had full score in intonation in sentences 2 and 3 and Subject C had full score in intonation in sentences 4 and 7 while subject D had full score in intonation in sentences 3 and 4. Only subject A scored 12.5 from full points in intonation in sentence 4, the shortest sentence in the passage: “residential structures were razed down”.

The rhythm of the English speech of the participants in this study was abysmal. Subject D read at the slowest speed that it made nonsense of the exercise. She literally counted the words. Her reading robbed her speech of any definite rhythm. Apart from D subject B that repeated “razzle” and stopped to correct herself without success, distorted the flow and rhythm of language. Subject A mispronounced “nature”, “bloodletting”, and “acrimony” and in these cases stopped to correct himself in the process and rendered the rhythm of her speech jerky. Subject C rendered “inestimable” as inevitable, “bigotry” as bigory, after pronouncing boi, two times in self appraisal and self -correcting attempt. She also produced and repeated a new word in the place of “conjugal”. What even surprised me was a repetition of these errors on a second attempt by two of the informants. Our informants did not perform as if they were English students at the postgraduate level. With this performance the rhythm of the English speech of our informants simply did not possess an appreciable contour.

Discussion

Accentuation;

In this research, accentuation is used interchangeably with stress. The articulation of stress patterns here is modeled after native usage. The stress was tested in a connected speech and the

particular stress required is the primary stress also sometimes called principal stress. It is observed that the indigenous languages of the informants that featured in the reading exercise for this study are tonal languages. As L₂ speakers they have to produce stress in English, an intonational language, through a dint of hard work and/or constant practice. The failure of our informants to place primary stress correctly on “Volatile”, “acrimony”, “conjugal” and “testify” can be assumed to be a direct consequence of non-acquaintance with English stress patterns. The misplacement of primary stress shows provinciality of some sort. This error can only be corrected through listening to the production of the words by native speakers. A feature like double primary stress on a word is clearly an influence from L₁. Again, this can be remedied through listening to native speakers of English and constant practice of the L₂ stress patterns. The goal of such a language effort is to achieve a “careful colloquial style” which will yield for communication a minimum general intelligibility which equates with international acceptability according to Gimson(1984) as reported by Okono (2023)a.

Intonation

There are up to five intonational patterns in English. In this research we are interested in only falling tune according to the nature of sentences contained in the passage read by the informants. All the seven sentences required falling tune at the end of each of them. The only added intonation was interclausal falling tune. The informants had very little problem in producing the falling tune. The two informants achieved the interclausal falling tune perhaps out of long practice in English Language as students in masters’ degree programme. If these students were tested in some other tunes like the attitudinal tunes and tune that reflects context or situation of usage, the results would have perhaps been less successful.

Rhythm

Our informants were less successful in rhythm which is regarded as the melody of speech. Of course, rhythm, according to Eka (1996) comprises syllable accentuation, (stress, pitch placement, duration) and intonation.. Consequently, appropriate English rhythm is the most difficult to acquire by L₂ speakers. In this research none of the informants scored above 25% in rhythm. The reading by the informants was full of jerks and repetitions. The speeches did not flow; they were not fluent. Misplacement of the primary stress, placement of double primary stress, mispronunciation of some English words, and stopping to restart a sentence rendered the reading of some informants jerky. An informant that pronounced inevitable for “inestimable”; violet for “volatile” and razzle for “razed” and “brazen” could definitely not achieve the appropriate rhythm for sentences in the passage.

What is suspected to be the cause of the apparent strangeness of English words to Master’s degree students in English is lack of reading that would expose them to the form of English lexis. Secondly, for others finding difficult to pronounce English words fluently, it is suspected that the students don’t use English in their regular conversation. That is to say they are not accustomed to English language usage. The effect of abysmal performance in English prosody is the misunderstanding the L₂ speakers such as our informants would get at international fora where

English is the medium of communication. Our students need to step up efforts at English usage to acquire proficiency and competence in both spoken and written communication in English.

CONCLUSION

It is concluded from this study that a great number of Nigerians as second language users cannot proficiently handle prosodic features of English in their daily communication. In spite of the fact that our informants read a type-written passage of seven sentences, some of them literally chewed at the words. Some were counting the words. A particular informant read too slowly to the extent of making nonsense of the whole exercise. This kind of language behaviour does not show versatility and does not reflect the level of scholarship and the area of specialization. It is also concluded that such a language behaviour is likely to cause failure of communication at fora where English is used as a medium of communication.

RECOMMENDATIONS

It is recommended that Nigerian users of English as L₂ learners should make effort to listen to native speakers speak the language to get it from source. The same opportunity can be accessed through educated or foreign users of the language. Mastery of the speech patterns of native speakers of the language will not avail much except the L₂ speakers form the habit of using English language in informal conversation. This is a veritable method of gaining proficiency in a foreign language. Through this method users of foreign language make mistakes and get corrected as they move along the lanes of life and sound language using habits will come on without notice.

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