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ARTICLE Stress Assignments of Loanwords among Nigerian Speakers of English

Oluwasegun Matthew AMONIYAN^{1*}, Abiola Mary OLADIPO², Odilia Ifeanyichukwu OGUNKA³

1 Department of Linguistics, University of Pittsburgh, United States

2 3 Department of English and Literary Studies, University of Nigeria, Nsukka, Nigeria

ARTICLE INFO ABSTRACT Article history Nigerian English like a variety of world Englishes has received scholarly investigations at the segmental and suprasegmental levels. At the supraseg-Received: 10 September 2022 mental level, studies on the major varieties of Nigerian English have identi-Accepted: 22 November 2022 fied the characteristic nature of stress assignment and interactions, but little Published: 30 November 2022 or no research has explored stress assignment on loanwords in Nigerian English. The study examines the stress placements on loanwords among Keywords: educated Igbo and Yoruba speakers of English. A well-prepared text was read by sixty (60) educated Igbo and Yoruba speakers of English, and Dan-BrE iel Jones' 8th Edition Cambridge English Pronouncing Dictionary served Igbo English as a baseline. The study uses Praat 6.0 to ascertain the degree of promiloanwords nence of each syllable in the tokens among the respondents (dependent and control). The samples are analyzed using the metrical theory of stress for theoretical relevance (Liberman, 1975).^[19] Findings revealed that the stress Praat Yoruba English patterns of educated Igbo and Yoruba speakers of English in loanwords are 65% and 70% (respectively) closer to British English (hence, BrE). The study showed that educated Igbo and Yoruba speakers of English preferably stress the second syllable regardless of what is obtainable among the native

speakers.

1. Introduction

The spread of the English language in Nigeria can be pinned down to the colonization of Africa. The European languages spread their tentacles to the extent that even after the African countries gained their independence, their importance as the only option for a common language of communication could not be ignored. As the English language spread, it was consistently marked by deviations from the norms among standard varieties in the UK mainland. The dialectal differences that characterize geopolitical boundaries contributed to native varieties such as British English, American English, African American (Gooden & Eberhardt, 2007),^[9] Australian English, and New Zealand English, and non-native varieties such as Nigerian English (NE), Indian English, Liberian English, and Singaporean English. The reference made to the dialects of English implies that each of the varieties possesses distinct features at the level of grammar (syntactic categories), vocabulary (lexical categories), and pronunciation (phonological categories). From the foregoing, studies on the English accent have revealed that even within national boundaries, accent variation (e.g., geographically induced variation) is inevitable. In communities where English functions as a second language (L2), differences in accent

*Corresponding Author:

Oluwasegun Matthew AMONIYAN, Department of Linguistics, University of Pittsburgh, United States; Email: oma55@pitt.edu.

are being investigated along the dimension of local language influences (Anyagwa, 2013).^[5]

Furthermore, completely different labels that have recently appeared within the literature on NE suggest the tendency to spot accents of NE from a geo-ethnic perspective. Such labels as Hausa English, Nigerian English, and Yoruba English have become official topics of careful investigations by such scholars as Igboanusi (2001, 2002, & 2006)^[14-16] and Akinjobi (2000, 2006)^{[3][4]} respectively. These studies lend weight to the fact that the Nigerian English accent is a cluster of accents (Anyagwa, 2013).^[5]

Recent studies have ascertained that there is a common similarity among the sub-varieties of the NE as upheld by previous studies. For example, Igbo and Yoruba are tonal and there is a tendency to transfer linguistic features of L1 to the targeted language. Likewise, English became Nigeria's official language in 1960, the language has fully developed over time in Nigeria as a general means of communication, and instruction to mention a few as a linguistic parameter that unites the nation despite her linguistic diversity (with over 522 languages). The effect of that language contact might affect the phonology of indigenous languages in Nigeria whereby the Nigerians will no longer evenly distribute tone to every syllable as a result of language contact. Regardless of the projection, the two factors might make NE similar and differ from the BrE depending on the language proficiency of the respondents. The present study seeks to identify the similarity and differences between NE and BrE in loan words. Because studies that closely investigate how loan words receive prominence among educated Igbo and Yoruba speakers of English have yet to be carried out. It is against this identified backdrop that the current study intends to achieve, with a particular focus on the stress patterns of loanwords among educated Igbo and Yoruba speakers of English. Specifically, the study identifies how stress is assigned to loanwords by educated Igbo and Yoruba speakers of English using metrical phonology and aims to identify the similarities and differences in the stress patterns of loanwords among educated Igbo and educated Yoruba speakers of English.

2. Literature Review

Previous studies on Nigerian English encompass a wave of efforts to ascertain the segmental and supra-segmental features of the Nigerian accent in English. This chapter explores such works, including their objectives, methodologies, and the findings of their investigations. This enables the present research work to be situated within the existing body of knowledge as well as clearly show the gap in scholarship that the current study intends to fill. For example, Igboanusi (2006)^[16] compares the pronunciation features of Igbo English (hence, IE) and Yoruba English (hence, YE) speakers. The data for the study was drawn from previous studies, observations made through fieldwork, and daily interactions both as a lecturer and a competent bilingual in Nigerian society. However, the study was restricted to segments, particularly consonant sounds. Hence, some peculiarities associated with the YE speaker of English are identified. Such peculiarities include /v/, which is occasionally realized as [f] because /v/is absent in the phonology of Yoruba, as in 'fegetable' for 'vegetable', 'fanguard' for 'vanguard', etc. From the foregoing, the identified peculiarities underscore the basilectal and mesolectal speakers of YE as catalogued by Udofot (2003),^[23] although they also occur consciously and unconsciously in the pronunciation of some educated YE speakers. On the other hand, the study states the features of the IE that the tendency of the Igbo to imitate other people's way of life including language behaviours can be known as a serious issue that has compelled IE speakers to lose most of their distinctive pronunciation patterns in favour of alternative pronunciation patterns, notably that of YE (see Adegbija, 2004;^[1] Banjo, 1996).^[6] The only surviving accent which is regularly associated with IE speakers is the alternation between l/ and r/. The feature is commonly found among some basilectal speakers of IE, particularly those from the Anambra and Enugu States. For example, ''Lebel' (for rebel), 'sullounded' (for surrounded), 'dangelous' (for dangerous). Igboanusi (ibid) concludes that the gradual loss of most of the features originally associated with the IE accents and the retention of most of the YE accents by the Yoruba speakers of English has one obvious implication, which is that YE pronunciation features are likely to emerge as the standard NE accent. The study fails to investigate the respondents with empirical evidence and it did not focus on the patterns of stress with acoustics, which the current study promises to find out. Sunday and Oyatokun (2016)^[22] analyze stress in educated Nigerian English (ENE) using Optimality Theory to underpin cognition that characterizes patterns of stress in ENE at the word level. Specially prepared normative texts were given to 150 educated Nigerians from the three major language groups (Hausa, Igbo, and Yoruba). The classes of words that formed the data for the study included nouns, verbs, adjectives, adverbs, and the recorded productions were analysed perceptually, theoretically, and acoustically. Unlike in British English (BrE), no syllable was found obscure; they all have the full forms of vowels including unstressed vowel sound (schwa). There was no significant instance of syncope; rather, where such vowel deletion is expected, alternatively, there is an insertion of a vowel, although the inserted vowel depends on the L1 of the speaker. There were hardly any instances of syllabic nasals.

The study mirrors some of the segmental properties of the three indigenous languages. Where syllabic nasals were expected to occur, there was typically an insertion of a vowel. Also, in BrE, stress may be a product of pitch modification, intensity, and duration; however, in NE, the high frequency in pitch is typically comfortable to work out the position of prominence. The high pitch is like the high tone of the indigenous languages of the participants. In other words, the feature of tone, which these three languages have in common, influenced their stress patterns as a result of language contact. Also, it was acknowledged that there is a lack of uniformity amongst NE speakers because of some factors, ranging from some stress patterns that cut across all tribes, age ranges, and educational attainment. The analysis affirms Hyman's (1975)^[13] discovery, which implies that NE speakers have a distinct stress system different from BrE. It was concluded that, unlike BrE, where word stress is generally backward, that is, it tends to fall on syllables closer to the beginning of the word (Hyman 1975: 210),^[13] NE shows a preference for more rightward stress and is sometimes predictable as a stress placement in a word without any specific means to achieve it rather preferring to align stress to either the left or right. Udofot (2003)^[23] in stress and rhythm in the Nigerian Accent of English identifies three varieties of spoken Nigerian English as non-standard, standard, and sophisticated varieties, which by the identity of varieties differ from BrE. The three varieties are characterized by their disposition to stress and speech rhythm. Sixty Nigerians of different educational and ethnolinguistic backgrounds, and a native (British English speaker), made up the participants for the study. Each respondent was asked to read a passage at a normal conversational speed. They were also engaged in conversations on random topics.

The speeches were analysed perceptually, statistically, and acoustically. The acoustic analysis shows that the sixty Nigerian respondents used a long time to produce unstressed syllables and a shorter time to produce stressed syllables than the BrE speaker, resulting in a tendency to have an even duration. The analysis also shows that the stress patterns of the respondents were, in many words, different from those of the BrE speaker, who was used as a control. It was suggested that the variations noticed in the performances of the individuals in the group were not due to chance, but that the varieties of spoken Nigerian English identified existed and differences in their stress patterning. The statistical analysis shows that the varieties have a similar tendency to stress many syllables in an utterance. For example, in the analysis of the spontaneous speeches, there were more stressed syllables than expected in each case. That is, in spoken prose, some syllables are stressed in positions that differ from those of the native speaker. Perceptual analysis of the study corroborates Jowitt (1991),^[17] which notes that in popular Nigerian English, there is a tendency to shift primary accents (stress) to the right from the left hand. This suggests that the rhythmic pattern of spoken Nigerian English cannot be completely homogenous with the BrE which is stresstimed. Despite the significance of the study and its connection with the present study, the study fails to explore patterns of stress in loan words among educated Igbo and Yoruba speakers of English with acoustic evidence.

Gut and Milde (2002)^[10] analysed the prosody of Nigerian English and compared it with the prosody of British English and three West African Tone Languages (Anyi, Eka and Ibibio). Five Nigerians and three British English speakers with a minimum of a university degree served as participants, and the participants read a story of 268 words as a token for the study. Subsequently, they were asked to retell the story in their own words for naturally occurring data. Two Anyi speakers, two Ega speakers, and one Ibibio speaker were among the participants chosen for the West African tone languages. The data was analysed acoustically. The results show characteristic prosody differences between the varieties of English spoken in Southern Britain and Nigeria. In terms of speech rhythm, Nigerian English is different from both the speech rhythm of the West African tone languages and that of British English. In particular, the percentage of vowel intervals is greater in Nigerian English than in British English, and syllabification is also different in Nigerian English compared to British English. In Nigerian English, a higher percentage of CV syllabic structure occurs, and the ratio of open and closed syllables is different from British English. Inter-individual differences between Nigerian English speakers were also prominent. In terms of tone, contour tones on syllables are very rare in Nigerian English and only occur in very restricted environments, mainly on pre-pausal syllables. A tendency to produce stressed syllables with a high tone and unstressed ones with a low tone was not found. Rather, words of particular grammatical categories seem to be associated with specific tones. It was concluded that Nigerian English prosody is thus closer to the tone languages that have tones associated with grammatical rather than lexically contrastive functions, than to the use of tone in intonation languages. In addition to that, Akindele (2015)^[2] examines stressed and unstressed syllable alternation and duration of rhythmic units in a connected speech to account for the description of svllable-timed or stressed-timed in educated Edo English (EEE) speakers, and the implications for Nigerian English rhythm description. The study explores the metrical theory of stress, which explains the alternation of strong and weak constituents in BrE rhythmic units. The purposive sampling technique was used to select 150 (75 males and 75 females) EEE undergraduates from the University of Benin and Ambrose Ali University as respondents. Two BrE speakers served as the controls for the study. The data consisted of 35 rhythm units with an anacrusis, 40 rhythm units, and 10 English words with syllabic consonants. The analysis shows that the participants rarely produce the unstressed syllable appropriately. All stressed and unstressed syllables of English words with syllabic consonants were produced with the same prominence. The participants' inability to appropriately alternate stressed and unstressed syllables in the English rhythm groups is considered to be due to the absence of a phonological feature in the Edo language and their lack of intuition in the alternation of stressed and unstressed syllables in the connected speech of BrE. It was also observed that the marked difference in the educational measures of English rhythm groups in connected speech, of Educated Edo English speakers (EEES), compared to the BrE form could as well be a result of the linguistic background of the informants. Stressed and unstressed syllable alternation and duration of rhythm units in the connected speech of educated Edo English speakers do not conform to BrE pattern. This implies that Nigerian English rhythm tilts more towards syllable-timing than stress timing. Hamad (2013)^[12] attempts to investigate the role of suffixes in determining the place of stress within words in English and Kurdish. By comparing the suffix-derived word stress between English and Kurdish, it is observed that suffixes in English are mainly divided into two types: stress neutral (that is, most inflectional suffixes) and those that affect stress (derivational suffixes). However, in Kurdish, suffixes in general affect stress placement. Suffixes in Kurdish attract stress on the syllable that is attached as a suffix to the end of the root. The paper concludes that certain derivational and inflectional suffixes do not change stress in English and Kurdish. In English, inflectional suffixes are stress-neutral, whereas, in Kurdish some inflectional ones also affect the place of stress. For example, certain suffixes move stress onto the syllable before the suffix in English, while in Kurdish most of the suffixes are auto-stressed. Also, suffixes being auto-stressed in the Kurdish language is considered the main difference between English and Kurdish.

In summary, the review of the existing literature so far on the suprasegmental features in different varieties of English has not been able to investigate and take into cognisance the peculiarities and similarities in the stress patterns of educated Igbo and educated Yoruba speakers of English in loanwords and metrical stress theory is used to account for them while optimality theory is employed to underpin cognitive processes that characterise stress assignment.

3. Materials and Methods

The study comprised a total sample of sixty educated Nigerian speakers of English (NSE) who have Igbo and Yoruba (respectively) as L1, and English as L1 or L2 as well. The L1 Yoruba respondents were sampled from the University of Lagos, southwest region where Yoruba is spoken as L1 (dominantly), while the Igbo respondents were drawn from the University of Nigeria, Nsukka. Thirty (30) respondents were selected from each tribe. That is, out of the three major ethnic groups that make up Nigeria as a country, two were selected for the study. The participants were chosen because education has been strongly recommended as the primary factor in defining and disseminating the standard variation of English. The selection conformed to Udofot's (2003)^[23] classification of an educated variety of Nigerian English (NE), which included penultimate, final year, and postgraduate students who have English as their medium of instruction and communication. Their variant stress patterns were cross-checked against the BrE pronunciation patterns as contained in Daniel (2006)^{7]} Cambridge English Pronouncing Dictionary (18th Edition), which served as a control for the study. A well-prepared, sectionalized text was given to the respondents. The Part A section required each of the respondents to give brief bio-data such as linguistic backgrounds (to validate respondents' L1 and L2 accordingly), age brackets, sex, and educational qualification. The Part B section contained twenty English loanwords of variant syllabic constructions. The respondents read aloud the tokens for voice recording after giving consent. The tokens were Chauffeur, Nonchalant, Limousine, Adult, Debris, Sachet, Chalet, Elongate, Vaccine, Fiancée, Address, Cigarette, Magazine, Pulsate, Locate, Donate, Dictate, Chiffon, Demonstrate, and Matinee. The tokens read by the respondents were recorded through a sound recorder for perceptual, statistical, and acoustic interpretation using Praat (6.0 version) and metrical phonology. The study discovered that duration and intensity were not accurate cues to study stress placement in NE, but pitch height.

Table 3.1:	Online	Etymolog	v Dictionary	(Source)
				· /

Tokens	Origin
Chauffeur	French
Nonchalant	French
Limousine	French
Adult	Latin
Debris	French
Sachet	French
Elongate	Latin
Vaccine	Latin
Fiancée	Latin
Address	French
Cigarette	French
Magazine	French
Pulsate	Latin
Locate	Latin
Donate	French
Dictate	Latin
Chiffon	French
Demonstrate	Latin
Matinee	French

The study explored R packages for inferential statistics to identify if there was no significant relationship within the group (Igbo English or Yoruba English) and between the groups (Igbo English and Yoruba English) in stress patterns of loanwords. The alpha level was set at ≤ 0.01 and the null hypothesis stated that there was no significant relationship between Igbo English and Yoruba English.

4. Theoretical Framework

Metrical phonology is a phonological theory concerned with stess phenomena in natural language. It was first mentioned by Liberman (1975)^[19] in his doctoral dissertation then, it was further elaborated by Liberman and Prince (1977),^[18] Halle & Vergnaud (1978)^[11] and Selkirk (1980).^[21] As a theory of stress or linguistic prominence, it is used to categorize stress and stress rules. That is, it is a theory concerned with the organization of segments into groups of relative prominence and the parameters that determine the position of stressed and unstressed syllables in words. It posits a hierarchical structure to represent stress patterns in the minds of speakers. Hence, segments are organized into syllables, syllables into metrical feet, metrical feet into phonological words and words into larger units. The organization is represented formally by metrical trees and grids.

In the metrical tree, stress is represented as a hierarchy of binary branching structures, it is either strong-weak (SW) or weak-strong (WS). However, in the English Language, there is a tendency for the first syllable of words to be strong and for words not to have adjacent strong syllables. For example, words like 'Lantern' (S W) and 'Halogen' (S W W) are far more common than 'Arise' (W S) and 'Apex' (S S).



S and W indicate relative stress at the word and foot level. While S indicates stronger prominence, W indicates weaker prominence. Hence, in a metrical tree, S and W are used to show the relative prominence of each constituent (see Ugochukwu, 2016).^[24]

A metrical grid is another way of representing the internal metrical structure of words, phrases and sentences hierarchically. In a metrical grid, all the words in a phrase are arranged along the bottom, and the rows of the grid indicate different levels of prominence. The most prominent syllable in a phrase is the one that does not have any node above it. This syllable is called the Designated Terminal Element. Metrical grids were originally developed to handle a phenomenon that appears in some languages including English, where stress shifts resolve stress clashes. A stress clash can occur when two stressed syllables are too close to each other without intervening unstressed syllables between two stressed syllables. For example, the word, 'Sixteen' spoken in isolation has stressed the second syllable. But when placed before 'Men', the stress on 'Sixteen' shifts to the first syllable.

		х
	x	x
х	x	х
six	Teen	men

Two syllables exhibit stress clash if there are two successive rows on the grid in which their columns are adjacent. So, in the diagram above, the columns for 'teen' and 'men' are adjacent in the first and second rows, indicating a stress clash. However, 'stress clashes can be resolved by the rhythm rule which reverses the S-W elation for some pair of sister nodes, as long as such a reversal does not put a Designated Terminal Element of a phrase under any W node and does not put a [-stress] syllable under an S node.' (Ugochukwu, 2016).^[24] This means the W and S nodes over 'six' and '-teen' can be reversed resulting in a non-clashing grid.

		х	
х		х	
х	х	х	
six	teen	men	

4.1 Results and Discussions

 Table 4.1: Occurrence of Stress Placement on

 Loanwords in Igbo English and Yoruba English

Tokens	Igbo English (%)	Yoruba English (%)
CHAUF-feur	43.33	60.0
Chauf-FEUR	56.67	40.0
NON-cha-lant	56.67	50.0
non-CHA-lant	26.66	30.0
non-cha-LANT	16.67	20.0
LI-mou-sine	33.33	26.67
li-MOU-sine	30.0	20.0
li-mou-SINE	36.67	50.0
A-dult	53.3	56.67
a-DULT	46.67	43.3
DE-bris	63.33	53.33
de-BRIS	36.67	46.67
CHA-let	66.67	56.67
cha-LET	33.33	43.33
E-lon-gate	26.67	36.67
e-LON-gate	40.0	60.0
e-lon-GATE	33.33	56.67
VAC-cine	36.67	33.33
va-CINE	63.33	66.66
MAG-a-zine	30.0	36.67
mag-A-zine	10.0	13.33
mag-a-ZINE	60.0	50.0

In Fig 4.1 and 4.2, the results showed the relationship between the Igbo and Yoruba English as r=-0.24 and -0.08, that is, within the group of either Igbo or Yoruba, the correlation was not strong unlike between the groups (Igbo and Yoruba English), because there was a high positive correlation as r=0.75 showing there was a significant relationship between the stress assignments to loanwords in Igbo English and Yoruba English. Therefore, the null hypothesis was rejected because there was a significant difference between the Igbo English and Yoruba English in reference to stress patterns of loan words.

Stress Patterns in Loanwords by Igbo and Yoruba



Figure 4.1: Scatter Plot for Stress Patterns



Figure 4.2: Regression between Igbo and Yoruba English

The stress patterns obtained from the educated Igbo and Yoruba speakers of English were represented using the metrical tree. The frequency tables of the stress patterns obtained among the respondents were also shown in this section. The metrical grid was used (only) in the case of stress clash; and the stress patterns obtained from the native speakers were represented using only the metrical tree, and the acoustic pictures were also shown.

Stress Patterns for Chauffeur

The word *Chauffeur* has prominence on the first syllable according to BrE but among the respondents for the study, it received varied stress patterns among the respondents showing that there was no common stress pattern for *chauffeur*.

Table 4.2: Stres	s Patterns fo	or Chauffeur	among the
Educate	d Igbo and Y	/oruba Speal	kers

	Igbo English		Yoruba English	
	Frequency	Percent (%)	Frequency	Percent (%)
CHAUF-feur	13	43.33	18	60.0
Chauf-FEUR	17	56.67	12	40.0
Total	30	100.0	30	100

Table 4.2 showed that a total of thirteen (43.33%) respondents correctly stressed the first syllable as obtainable among the native speakers while seventeen respondents (56.67%) stressed the second syllable. Among the thirty Yoruba respondents, a total of eighteen (60.0%) respondents correctly stressed the first syllable while twelve (40.0%) respondents stressed the second. The study revealed that Igbo English was closer to BrE for *chauffer*, while only 40% of the educated Yoruba speakers were closer to BrE. The statistical analysis can be represented on the metrical tree as seen in Figure 1 (below).



Figure 4.3: Metrical Tree for Chauffeur among Igbo and Yoruba Speakers

Figure 4.3 attested that though educated Igbo and Yoruba speakers of English belong to the same country, however, the two tribes had similarities as well as differences in stress patterns for *chauffeur*. Therefore, the stress placement on the token is unstable. The tonal background of the respondents might have necessitated the similarity while their varied linguistic competence and performance might differ from one individual to another.

Stress Pattern for Nonchalant

The word *nonchalant* has prominence assigned to the first syllable in BrE and this could also be obtained among the respondents for the study. The token had three syllables and three realizations. The varied stress patterns showed that the longer the syllables, the more variant realizations were identified in the study.

Table 4.3 shows, that a total of seventeen (56.67%) people correctly stressed the first syllable as obtainable among the native speakers; eight (26.66%) respondents stressed the second syllable, while five (16.67%) stressed the third syllable. Among the Yoruba respondents, a total of fifteen (50.0%) people correctly stressed the first syllable, nine (30.0%) people stressed the second, and six

(20.0%) stressed the last syllable. The statistical analysis was represented on the metrical tree as seen in Figure 4.3 (below).

Table 4.3: Frequency table for Nonchalant among the
Educated Igbo and Yoruba Speakers

	Igbo English		Yoruba English	
	Frequency	Percent (%)	Frequency	Percent (%)
NON-cha-lant	17	56.67	15	50.0
non-CHA-lant	8	26.66	9	30.0
non-cha-LANT	5	16.67	6	20.0
Total	30	100.0	30	100.0



Figure 4.3: Metrical Tree for *Nonchalant* among Igbo and Yoruba Speakers

Figure 4.3 identified varied stress patterns that occurred among the educated Igbo and Yoruba speakers of English. It showed that the Igbo and Yoruba speakers of English did not have 100% homogeneity in the stress pattern of *nonchalant*.



Figure 4.4: Representation of *Nonchalant* among the Igbo and Yoruba Speakers

Figure 4.4 described that educated Igbo and Yoruba speakers shifted the stress to the left as *non* in *nonchalant* had 104Hz, *cha* in *nonchalant* was 91Hz and *lant* in *nonchalant* had 79Hz pitch tracks. It implied that *non* had the highest pitch value among other syllables in the word (*nonchalant*).

Stress Pattern of Limousine

The word Limousine has prominence on the third sylla-

ble according to BrE and this was also obtainable among the respondents.

Table 4.4: Stress Pattern for Limousine among theIgbo and Yoruba Speakers

	Igbo English		Yoruba Eng	glish	
	Frequency	Percent (%)	Frequency	Percent (%)	
LI-mou-sine	10	33.33	8	26.67	
li-MOU-sine	9	30.0	6	20.0	
li-mou-SINE	11	36.67	15	50.0	
Total	30	100.0	30	100.0	

Table 4.4 explained that ten (33.33%) Igbo participants stressed the first syllable, nine (30.0%) stressed the second, while eleven (36.67%) correctly stressed the third syllable. Among the Yoruba respondents, eight (26.66%) stressed the first syllable, six (20.0%) stressed the second syllable, and fifteen (50.0%) correctly stressed the third syllable as obtainable among the native speakers. The statistical analysis was represented on the metrical tree as seen in Figure 4.5 (below).



Figure 4.5: Metrical Tree for *limousine* among Igbo and Yoruba Speakers Respectively

Stress Pattern of Adult

The word *Adult* has prominence on the first syllable according to BrE and it was obtainable among the respondents for the study.

 Table 4.5: Stress Pattern for Adult among the Igbo and

 Yoruba Speakers

	Igbo English		Yoruba English	
	Frequency	Percent (%)	Frequency	Percent (%)
A-dult	16	53.33	17	56.67
a-DULT	14	46.67	13	43.33
Total	30	100.0	30	100

Table 4.5 showed that sixteen (53.33%) Igbo respondents correctly stressed the first syllable as obtained among the native speakers, while fourteen (46.67%) stressed the second syllable. Seventeen (56.67%) Yoruba respondents and thirteen (43.33%) respondents stressed the second (see Figure 4.6).



Figure 4.6: Metrical Tree for *Adult* among Igbo and Yoruba Speakers Respectively



Figure 4.7: Representative Praat Picture for *Adult* among Igbo and Yoruba Speakers

Figure 4.7 further revealed stress placement with acoustic cues. The representative picture described that the respondents assigned prominence to the syllable towards the left.

Stress Pattern for Debris

According to BrE, the word "debris" has prominence in the first syllable, and it also was realized among the respondents. This agreed with Banjo's (1996)^[6] position that educated speakers of English in Nigeria were similar to BrE. It explained that the respondents were familiar with the stress pattern of the French word (debris).

Table 4.6: Stress Pattern for Debris among the Igboand Yoruba Speakers

	Igbo Englis	Igbo English		uba English	
	Frequency	Percent (%)	Frequency	Percent (%)	
DE-bris	19	63.33	16	53.33	
de-BRIS	11	36.67	14	46.67	
Total	30	100.0	30	100.0	

Table 4.6 showed that nineteen (63.33%) and sixteen (53.33%) Igbo and Yoruba respondents stressed the first syllable as obtained among the native speakers, while eleven (36.67%) and fourteen (46.67%) stressed the second syllables accordingly. The stress patterns preferred to assign prominence to DE in debris.

Stress Pattern of Sachet

For example, the word "sachet" has prominence on the first syllable according to BrE and this aligned with the pattern of stress among the respondents. For example, 60% and 53.33% of the educated Igbo and Yoruba speakers of English agreed with the BrE accordingly. For example, eighteen (60.0%) Igbo respondents stressed the first syllable as obtained among the native speakers, while twelve (40.0%) respondents stressed the second. Sixteen (53.33%) Yoruba respondents stressed the first syllable, while fourteen (46.67%) stressed the second. The results pictured the syllable that received preference among the participants. It connoted that 56.66% of the educated Igbo and Yoruba speakers of English assigned prominence to the syllable that aligned with the BrE.

Stress Pattern of Chalet

The word *Chalet* has prominence on the first syllable according to BrE and the results supported the stress pattern in IE and YE.

 Table 4.7: Stress Patterns for Chalet among the Igbo

 and Yoruba Speakers

	Igbo English		Yoruba English	
	Frequency	Percent (%)	Frequency	Percent (%)
CHA-let	20	66.67	17	56.67
cha-LET	10	33.33	13	43.33
Total	30	100.0	30	100.0

Table 4.7 explained that twenty (66.67%) Igbo respondents stressed the first syllable as obtained among the native speakers while ten (33.33%) respondents stressed the second. Seventeen (56.67%) Yoruba respondents stressed the first syllable while thirteen (43.33%) stressed the second.

Stress Pattern of *Elongate*

The word *Elongate* has prominence on the first syllable according to BrE. The educated Igbo speakers stressed the second syllable while Yoruba speakers stressed the first syllable. The juxtaposition identified that the second syllable was preferred as a primary stress among Igbo speakers.

In Table 4.8, Igbo speakers, eight (26.67%) stressed the first syllable, twelve (40.0%) stressed the second syllable and ten (33.33%) stressed the third syllable. Among the Yoruba respondents, eleven (36.67%) speakers stressed

the first syllable, two (6.0%) speakers stressed the second syllable, and seventeen (56.67%) stressed the third syllable. The statistical analysis was theoretically represented on the metrical tree as seen in Figure 4.8.

 Table 4.8: Stress Pattern for *Elongate* among the Igbo

 and Yoruba Speakers

	Igbo English		Yoruba English	
	Frequency	Percent (%)	Frequency	Percent (%)
E-lon-gate	8	26.67	11	36.67
e-LON-gate	12	40.0		6.0
e-lon-GATE	10	33.33	17	56.67
Total	30	100.0	30	100.0



Figure 4.8: Metrical tree for *Elongate* among Igbo and Yoruba speakers respectively

Stress Pattern of Vaccine

The word "vaccine" has prominence in the first syllable according to BrE, but among the respondents for the study, the second syllable was stressed. This stress pattern that favoured the second syllable was also obtainable in American English (AmE). It could be concluded that the pronunciation of *vaccine* among the educated Igbo and Yoruba speakers was closer to AmE than BrE.

 Table 4.9: Stress Pattern for Vaccine among the Igbo

 and Yoruba Speakers

	Igbo English		Yoruba English	
	Frequency	Per cent (%)	Frequency	Per cent (%)
VAC-cine	11	36.67	10	33.33
va-CINE	19	63.33	20	66.66
Total	30	100.0	30	100.0

Table 4.9 displayed that eleven (36.67%) Igbo respondents stressed the first syllable as obtained by the native speakers of BrE, while nineteen (63.33%) that stressed the second syllable were closer to AmE than to BrE. Ten (33.33%) Yoruba respondents stressed the first syllable while twenty (66.67%) speakers stressed the second. The summary further revealed that 65% of the IE and YE respondents were closer to the AmE stress pattern for *vaccine* than to BrE.



Figure 4.9: Metrical tree for *Vaccine* among Igbo and Yoruba Speakers

In Figure 4.9, stress patterns for *vaccine* were rather at the right hand than at the left. It means that educated Igbo and Yoruba speakers of English prefer to assign prominence to *ccine* in *vaccine*.

Stress Pattern of Fiancé

The word "fiancé" has prominence on the second syllable according to BrE but among the respondents for the study, it received varied stress patterns, showing that there was no common stress pattern for fiancé in IE and YE. Stress patterns showed that of the Igbo respondents, 23.33% stressed the first syllable, 26.67% stressed the second syllable, and 43.33% stressed the third syllable. Among the Yoruba respondents, 46.67% stressed the first syllable, 26.67% stressed the second syllable and 30.0% stressed the third syllable. The second syllable was stressed by the native speakers. The metrical representation was presented in Figure 9.



Figure 4.10: Metrical Tree for *Fiancé* among Igbo and Yoruba Speakers

Figure 4.10 showed that the word fiancé had varied stress patterns, for example, Igbo participants stressed the last syllable; while Yoruba participants stressed the first syllable. This means that Igbo and Yoruba speakers did not have a common stress pattern in the fiancé.

Stress Pattern of Address

The word "address" has prominence in the second syllable according to BrE, and the results in the study were similar though not without any difference. This supported that the second syllable was preferred for primary stress not only among educated Igbo speakers but also among educated Yoruba speakers. Twelve (40.0%) Igbo respondents stressed the first syllable, while eighteen (60.0%) stressed the second syllable. Ten (33.33%) Yoruba respondents stressed the first syllable while twenty (66.67%) stressed the second syllable. The results showed that the majority of the educated Igbo and Yoruba speakers of English as respondents for the study assigned prominence to the second syllable for address, realizing the ad as an unstressed syllable.

Stress Pattern of Cigarette

The word *Cigarette* has prominence on the third syllable according to BrE but among the respondents for the study, it was stressed on the second syllable. It was glaring that there was no observation of weak syllables in IE and YE. There was an easy replacement of the schwa sound / ρ / for /æ/ and /D/ respectively. Evidence revealed that seven (23.33%) Igbo respondents stressed the first syllable, seventeen (56.67%) stressed the second and six (20.0%) stressed the third syllable. Among the Yoruba speakers, five (16.66%) stressed the first syllable, fourteen (46.67%) stressed the second syllable; eleven (36.67%) stressed the last syllable (see Figure 10a and 10b)



Figure 4.11a: Metrical Tree for *Cigarette* among Igbo and Yoruba Speakers

Below is the metrical tree for *Cigarette* as obtained among the native speakers:



Figure 4.11b: Metrical Tree for Cigarette in BrE.

Figure 4.11a and 4.11b represented that educated Igbo and Yoruba speakers of English did not have a common stress pattern with BrE for *Cigarette*.

Stress Pattern of Magazine

The word *Magazine* has prominence on the third syllable according to BrE. In Table 9 (below), it expressed that 30.0% Igbo speakers stressed the first syllable, 10.0% stressed the second syllable and 60.0% stressed the third syllable; but among the Yoruba respondents, 36.67% stressed the first syllable, 13.33% stressed the second syllable, and 50.0% stressed the third syllable.

Table 4.10: Stress Pattern for Magazine among the)
Igbo and Yoruba Speakers	

	Igbo English		Yoruba English	
	Frequency	Percent (%)	Frequency	Percent (%)
MAG-a-zine	9	30.0	11	36.67
mag-A-zine	3	10.0	4	13.33
mag-a-ZINE	18	60.0	15	50.0
Total	30	100.0	30	100.0

Stress Pattern of Pulsate

The word "pulsate" has prominence in the second syllable according to BrE, and this was also obtainable among the respondents as well. This further affirmed that educated Igbo and Yoruba speakers preferably stress the second syllable in loanwords. A simple percentage revealed that the Igbo respondents, fourteen (46.66%), stressed the first syllable, while sixteen (53.33%) stressed the second syllable. In contrast, eighteen (60.0%) Yoruba respondents stressed the first syllable, while twelve (40.0%) stressed the second as obtainable among the native speakers. The results were similar in the stress patterns for Locate. For example, six (20.0%) Igbo respondents stressed the first syllable, and eighty-four (80.0%) stressed the second syllable. Ten (33.33%) Yoruba respondents stressed the first syllable, while twenty (66.67%) stressed the second syllable. The same stress pattern that applied to the greater percentage of the respondents was similar to the native speakers.

In addition, the word "donate" has prominence on the second syllable in BrE that served control and more than 50% of the respondents articulated stress pattern that was similar to BrE. For example, twelve (40.0%) Igbo respondents stressed the first syllable, while eighteen (60.0%) stressed the second syllable. In contrast, fourteen (46.67%) Yoruba respondents stressed the first syllable, and sixteen (53.33%) stressed the second. The results explained that the respondents of IE and YE preferred to assign prominence to the second syllable than the first. Similarly, the stress patterns for Dictate indicated that ten (33.33%) Igbo respondents stressed the first syllable while twenty (66.67%) stressed the second syllable as obtainable among the native speakers. Thirteen (43.33%) Yoruba respondents stressed the first syllable, while seventeen (56.67%) stressed the second syllable.

Stress Pattern of Chiffon

The word *chiffon* has prominence on the first syllable according to BrE but among the respondents for the study,

the only Igbo speakers stressed the first syllable while the Yoruba speakers had no definite stress pattern (that is, the syllables were stressed equally). Stress patterns identified that Nineteen (63.33%) Igbo respondents stressed the first syllable while eleven (36.67%) stressed the second. Among the Yoruba respondents, fifteen (50.0%) stressed the first and the second syllables. Findings revealed that when 63.33% of the educated Igbo assigned prominence to the first syllable, 50% of the educated Yoruba stressed the first syllable in consonance with the educated Igbo speakers while 50% of the educated Yoruba assigned prominence to the second syllable. It implied that educated Igbo speakers were closer to the BrE than educated Yoruba speakers.

The word 'demonstrate' has prominence on the first syllable according to BrE but among the respondents for the study, it received stress on the third syllable. Eight (26.67%) Igbo respondents stressed the first syllable, six (20.0%) stressed the second syllable and sixteen (53.33%) stressed the third syllable. Eleven (66.67%) Yoruba respondents stressed the first syllable, seven (23.33%) stressed the second syllable; twelve (40.0%) stressed the third syllable. Likewise, the word Matinee has prominence on the first syllable according to BrE but among the respondents for the study, it received stress on the second syllable. Statistics showed that, among the Igbo speakers, three (10.0%) stressed the first syllable, fifteen (50.0%)stressed the second syllable; twelve (40.0%) stressed the third syllable. Among the Yoruba speakers, seven (23.33%) stressed the first syllable, sixteen (53.33%) stressed the second syllable, and seven (23.33%) stressed the third syllable. The statistical analysis was represented on the metrical tree as seen in Figure 11.



Fig. 4.12: The Metrical Tree for Matinee as Obtained among the Native Speakers as Shown Below:



Hence, to resolve the stress clash, we have:

x x x x x x x x Ma ti nee

From the analysis, results underscored that educated Igbo and Yoruba preferred to stress the second syllable as opposed to the first and third which was obtainable among the native speakers as stress was not predictable in Nigerian English. It implied that the preference for the second syllable could be considered as typically Nigerian in stress patterns of loanwords. In all, fourteen (14) words (46.67%) were correctly stressed by Yoruba speakers while only thirteen (13) words (43.33%) were correctly stressed by the Igbo speakers respectively. That is, for stress patterns in loanwords, educated Yoruba speakers were closer to the BrE form than educated Igbo speakers. Six (6) words (20.0%) were not properly stressed by both speakers. Another similarity was that there was no observation of weak syllables. The schwa sound /ə/ was readily replaced with / α and β . This could also be considered as typically Nigerian. Also, the stress patterns of educated Igbo English speakers in loanwords could tentatively be said to be 65% closer to BrE, while the educated Yoruba speakers were 70% closer to BrE.

4.2 IE and YE: a Clue to African English (AfriE)

Nigeria is one of the largest countries in Africa and the world with over 522 languages and some languages are yet to be classified into a language family. Studies have revealed that languages in Nigeria belong to three different language families. The linguistic diversity of Nigeria enhanced the acceptance of English as an official language. Scholars have classified the NE into educated and uneducated using the intelligibility approach. The present study focused on the educated variety with particular attention to loanwords, however, the result provided insights into stress placement on loan words in African Englishes. The results served as a description of sub-varieties of African Englishes stress placement.

The study discovered that Yoruba respondents were closer to the BrE than the Igbo respondents. Though previous studies have commented that NE did not have regularly fixed stress patterns in utterances, for example, Melefa and Amoniyan (2019)^[20] discovered that while Yoruba often aligned stress to the left (LHR), Igbo often assigned stress that satisfied the right (RHR) for nouns, phrases and compounds in isolated utterances. Despite language myths that explained the relationship that Igbo and Yoruba

shared, the present study has attested that there is a significant difference between stress patterns in Igbo and Yoruba (particularly, in *loanwords*), though not without similarity. The difference explained that Igbo and Yoruba as southern languages in Nigeria did not share absolute similarities. The reasons might not be farfetched from the perspective of Udofot (2003)^[23] who believed that the level of education contributed towards the stress correlates and speech rate of the Nigerians. Since the present study attested that Yoruba is closer to BrE than Igbo for stress placement in loanwords among the educated speakers of Nigerian languages, it implied that Yorubas are more fluent in English (for stress in loan words) than the Igbo. Since Yoruba is one of the most widely spoken languages in Africa and globally, it might suggest that the stress characteristic features in Yoruba might project stress patterns of loanwords in African English as Niger-Congo family (Sunday & Oyatokun, 2016;^[22] Gut & Milde, 2002).^[10]

Also, there had been several assumptions that Yoruba people often have some passion for education than other tribes in Nigeria. Presently, out of over 45 million speakers of Yoruba, over 300,000 Yoruba speakers are in the United States of America and the UK studying, researching and teaching, and the language has received scholarly investigations at home and abroad. Albeit, it is significant to mention that their linguistic closeness to the BrE in stress patterns of loan words might have been a result of devotedness to education and positive language contact. To this effect, it might suggest that Yoruba tend to learn English faster than other tribes in Nigeria and by extension, Africa. The findings suggested that sociolinguistic factors (more exposure to the BrE variety) contributed to YE pronunciation proximity to BrE.

The significance of the present study added to the ongoing documentation of varieties of African Englishes as it provided insights into how loan words received prominence in Igbo and Yoruba English as a projection of stress patterns of loan words in African Englishes. The study has reiterated the effect of education on language learning and performance and the regression analysis showed that there was not much difference within the group (Igbo or Yoruba), but there was a huge difference between Igbo and Yoruba English (r=0.75). It further explained that it is either the L1 of the Yoruba speakers who favoured the stress placement of loan words or a result of their craving for education. However, statistical reports showed higher similarity within the speakers of YE than in IE and it showed that Yoruba and Igbo speakers shared similarities though not without differences. The similarity among the respondents attested to the previous study by Fournier (2018)^[8] that stress placement in loanwords varied among the second language users because of the effect of L1 (in spelling and speech), less familiarity with the loanwords and the linguistic transfers tend to generalize especially if the L1 of the speakers varied from the loanwords. If the targeted language has a similar stress placement with the speakers' L1, the level of similarity varied when compared to when they differed.

5. Conclusion

The study identified and discovered how Igbo English and Yoruba English speakers assigned stress to loanwords. Since most loanwords usually remain relatively faithful to the phonology of the source language and many non-native speakers might not be aware of the intricacies of stress assignment to loan words, there was a corresponding impulse for the non-native speaker to attempt pronunciation with familiar sounds in his or her mother tongue. Albeit, a previous study on the prosody of Nigerian English has reiterated that the effect of inconsistency in stress patterns might often affect second language users. No doubt, the present study has established that there are inconsistencies in stress patterns among Nigerians. If Nigerian English is characterized by inconsistency in stress patterns, it may provide us with insights that African Englishes (AfriE) may tend to have similar features because of the presence of L1. Popular loanwords were said to spread in speech communication, while learned loanwords were first used in written language, often for scholarly, scientific, or literary purposes. This showed that loanwords could be useful in deducing intelligibility problems in the language interactions of non-native speakers of English, especially in their stress patterns.

So far, the study revealed that there was a great degree of similarity between Igbo English and Yoruba English speakers. There was no observation whatsoever of weak syllables. The schwa sound /ə/ was readily replaced with /æ/ and /ɔ/. Individual accent markers were made prominent in the pronunciation of unpopular loanwords (that is, loan words that were hardly used in daily language interactions in Nigeria). For instance, in the word, Chauffeur, only thirteen Igbo respondents correctly pronounced the first syllable as /ʃ/ while seventeen others pronounced the first syllable as /tʃ/. However, Igbo and Yoruba English speakers could conclusively be said to prefer the second syllable as opposed to what was obtained among the native speakers. In all, thirteen (13) words (65.0%) were correctly stressed by both respondents, while seven words (35.0%) were not properly stressed. Amongst the thirteen words, eleven (11) were popular loanwords that could be found in daily language interactions in Nigeria. The present study has reaffirmed that the stress patterns in Igbo and Yoruba English were fixed and had similarities with and differed from the BrE. However, as revealed in the study, the percentage of similarities was higher than the differences.

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