Phonetic Realization of English Lexical Stress by Ikwerre L2 Speakers of English

By

Ann Ogechi Emeka-Igbokwe
Department of General Studies
School of Foundation and General Studies
Captain Elechi Amadi Polytechnic, Rumuola Port Harcourt
EMAIL: annwoke20@gmail.com
PHONE: 08034647448

Abstract

This study investigates the phonetic realization of English lexical stress by native Ikwerre speakers of English. The purpose of this work is to examine the proficiency level of Ikwerre speakers of English in the assignment of stress in English words. The objectives of the study include: to determine how well Ikwerre L_2 speakers of English realize English lexical stress and to explain possible deviation patterns in lexical stress placement in the spoken English of native Ikwerre speakers. This is a descriptive study in which data is collected by recording the reading of sentences containing categories of lexical stress patterns read by thirty randomly selected Ikwerre L_2 speakers of English who are HND students of Captain Elechi Amadi Polytechnic Port Harcourt, Rivers State. This paper is anchored on two theoretical frameworks which are the Contrastive Analysis (CA) and the descriptive approach to language analysis. The study finds that Ikwerre is a syllable-timed language in which every syllable receives the same amount of breath energy. It is also found out that Ikwerre L_2 speakers of English assign the same stress to all syllables in a word, which gives their spoken English a flat accentual pattern. Ikwerre L_2 speakers of English therefore a particular exhibit deviation pattern in realizing English lexical stress. This paper recommends that English language teachers in the schools in Ikwerre communities should emphasize correct stress assignment especially in the commonly used English words.

Ikwerre L_2 speakers of English should make deliberate effort to master the RP stress pattern alongside other aspects of English phonology.

Introduction

After the acquisition of a first language (L_1), a normal native speaker appears to have developed a sort of speech network innately wired to support the effortless use of the L_1; this way, acquiring a second language may imply some adjustments in speech habits. This is one of the reasons why the acquisition of a second language (L_2) or foreign language (FL) is often a daunting task indeed. Second language experts claim that L_2 acquisition is prominently characterized by L_1 to L_2 transfer which can impede the attainment of a native-like proficiency in L_2. Every Language has its own phonological structure: features that make it different from any other language. One of such features is prosody – the patterns of stress and intonation (Dilley et al, 2016). Languages have their unique rhythmic patterns. Conlen (2016) avers that languages have their natural rhythm of which some are based on syllable timing, while others are based around stress timing and some others do not consistently fit either of these models.

English is a stressed-timed language; its accented or stressed letters are pronounced almost at regular intervals, and the unstressed syllables are often shortened to fit this rhythm (Conlen, 2016). Richard and Schmidt (2012) affirm that a stressed-timed language like English is a language with a rhythm in which stressed syllables tend to recur at regular intervals of time and the length of an utterance depends on the number of stresses rather than the number of syllables. Ikwerre contrasts with English in this regard; according to Akinkuolie (2019), Ikwerre is syllable-timed language whose syllables take about the same amount of time to pronounce. British Council (2020) posits that English L_2 learner whose first language is syllable-timed often have problems producing the unstressed sounds in a stress-timed language like English. The result of such limitation in the production of unstressed syllables is having a variety that is a far deviation from the RP considering the significance of stress in English phonology.

Stress is a prominent element of English prosody; a fundamental feature that can be used to distinguish the speech of a native speaker from those of an L_2 and FL

users (Roach, 2010). For many English homographic words, stress placement is imperative for determining meaning realization (Small et al, 1988). Akinkuolie (2019) citing Jones (1972) describes stress as the degree of force with which a speaker pronounces a sound or a syllable. Nordquist (2019) sees stress to be the degree of emphasis given to a sound or syllable in speech. The impact of stress cannot be undermined in English L_2 situation. Given that the native Ikwerre speakers comes from a language background where the length of an utterance depends on the number of syllables rather than the number of stresses, the tendency is to realize all syllables in a word in the same rhythm by giving equal breath energy to all syllables.

In view of the foregoing, this paper posits that there is a deviation in the patterns of stress realization stress in the speech of Ikwerre L_2 speakers of English. While there exist several researches on the syllabification of different Nigerian languages, to my notice not much has been done in evaluating the phonological impact of the difference in a stress-timed language and a syllable-timed language on Ikwerre-English L_2 speaker. Therefore, the paper seeks to fill this gap.

Statement of the Problem

Deviation in pronunciation is simply a departure from an established or accepted standard of pronunciation. This phenomenon is common place in second language (L_2) situation. One of the major causes of deviations in L_2 pronunciation is interference – the influence a language or dialect exerts on any aspects of another language. After the acquisition of a first language L_1 an individual's linguistic habits are formed, hence upon contact with another language, maybe an L_2 or FL, he/she attempts to circumvent difficulties with unfamiliar sounds, features or processes by transferring L_1 linguistic habits to escape the obstacle being faced.

Like other second language speakers of English, Ikwerre-English L_2 users experience unique difficulties in using the language effectively, especially in the phonology. The English spoken by Ikwerre L_2 users has a unique accent, which alongside other phonological hardships, is influenced by the limitations in the production of English lexical stress. Some researchers have carried out investigations on the problem of mother tongue interference. However, this

research work, seeks to identify the deviation patterns in the production of English lexical stress by Ikwerre speakers of English.

Conceptual Review

Language

Agbedo (2015) describes language as a system of rules and principles of human communication, one which uses 'arbitrary signals such as voice sounds, features or written symbols'. Interestingly, he explaines that these arbitrary signals are meaningful only because a group of people agree to assign to them the linguistic value they express in their unique community. As in the words of Ferdinand de Saussure, language exists by the virtue of a sort of contract signed by the members of a community. In the opinion of Singh (2018), human language is seen as being both a cultural and a systematic phenomenon. Similarly, Essien (1998) considers language to be a system of structured arbitrary words and symbols by means of which human beings make meaning and communicate with each other in a given community. McLaughlin (2006) in Ogundepo and Oladeji (2017) points out that the fundamental/basic "arbitrary signal" of human language are verbal symbols (voiced sound) that speakers put in order according to a conventional code to communicate ideas and feelings and to influence the behaviour of others.

Ogundepo and Oladeji (2017) citing Okeke (2012) posit that language is a compendium of words, phrases, clauses and sentences which a user chooses from and strings together, systematically, to express meaning that are appropriate in a particular context. It is part of natural human inheritance and of course, the major distinguishing attribute of human being from other animals (Fromkin et al 2003, Cook & Newson 2007, Ogundepo, Foyewa & Alabi 2008, Ogundepo & Okedigba 2013). Consequently, considering that we grew up to naturally and effortlessly speak the languages of our immediate environments most times our native languages, it becomes clear that language is a natural part of human existence as well as the speech patterns with which a particular group people communicate. Worthy of mention is the fact that the concept of language has fascinated scholars over the years and as a result many have defined it in different ways. However, regardless of the different views of scholars though, one thing that is common among the varying opinions of scholars is the fact that language is a system of communication and syllable and stress are two main areas of spoken language.

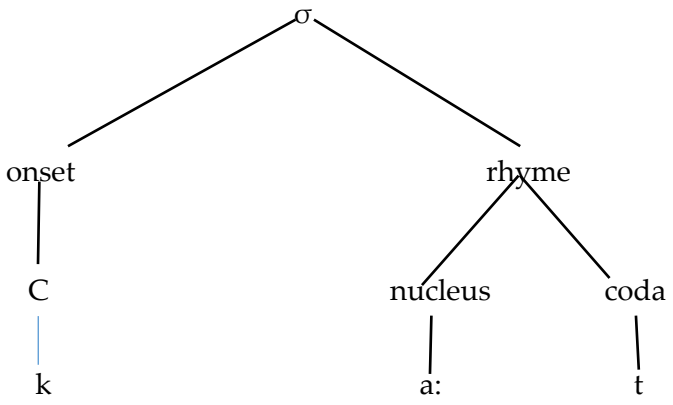
Syllable

Syllable is the most frequently recognizable suprasegmental in English in particular. Hymes (1975) observes that "the most widely discussed phonological segment is the syllable". While many scholars have tried to define it, there seem to be no single definition that encompasses the entire subject matter. Corroborating this point, Umera-Okeke (2011, p.102) affirms that "Many attempts have been made at defining a syllable but there is yet to be an acceptable definition". In similar vein, Ngulube (2015, p.38) states that "providing a precise definition of the syllable is not an easy task". However, the most intriguing side to the concept of syllable is in the observation of Roach (2009, p.56) that "most people seem to believe that even if they cannot define what a syllable is, they can count how many syllables there are in a given word or sentence". Syllable apparently, is a very important aspect of pronunciation given that words are structured in pronounceable unit(s). Richard and Schmidt (2012) defines it as a unit of speech consisting minimally of one vowel and maximally of a vowel preceded by a consonant or consonant cluster and followed by a consonant or consonant cluster. While Fromkin et al (2011, P. 257) defines it as a "phonological unit composed of one or more phonemes", Denham and Lobeck (2013) see it as a basic unit of speech generally containing only one vowel sound (*nucleus*) and also possibly an onset and a coda (called the *rhyme*). While some words are made up of units of pronunciation; some others are made up of only one unit (monosyllabic words). E.g. "class" /kla:s/ "bed" /bed / . Some examples of words with multiple units (disyllabic or polysyllabic words) include: "tailor" /ˈtei. lə(r) / - [ˈtei] [lə(r)] – two syllables, "po.pu.pla.tion" /pʌ.pju.lei ʃn / - [pʌ.pju.lei ʃn] – four syllables.

Every syllable has a core, a base; a sound which anchors the syllable (often a vowel or other syllabic sound such as liquids and nasals) which Fromkin et al (2011) referred to as the syllable nucleus and further explains thus:

> "Every syllable has a nucleus which is usually a vowel (but which may be a syllabic liquid or nasal). The nucleus may be preceded and or followed by one or more phonemes called the syllable onset a coda".

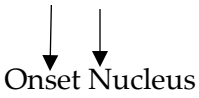
Denham & Lobeck (2013, p.123); Fromkin et al (2011, p. 257) illustrate the syllable structure in the following way:



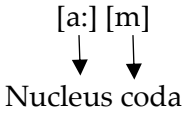
Roach (2009:56) explains the syllable structure as follows:

- Minimum syllable equals a single vowel in isolation e.g. the words 'or'- /ɔ: /, 'are' - /a: /, 'err' - /3:/. These words are preceded and followed by silence.

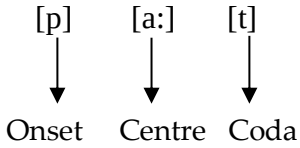
- Onset – some syllables have a consonant instead of silence preceding the set for example. 'see' - /si:/ - [s] [i:]



- Coda – consist of a centre with one or more consonants following it e.g. 'arm' - /a:m/ -



- Some syllables have both onset and coda e.g. 'part' /pa:t/



Stress

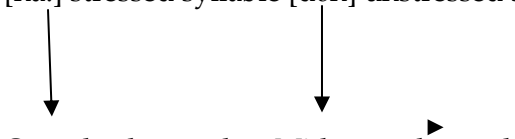
In English, stress is a crucial element in speech or pronunciation. Roach (2009) posits that stress is a property of the syllable. It is realized in a syllable, making the syllable the domain of its application. Fromkin, Rodman and Hymes (2011) and Umera- Okeke, (2011) are of the same view that English is a stressed-timed language. This means that its rhythm is based on stress timing. In a similar view, Guessenhover and Jacobs (2011) state that English is a language that makes a very clear distinction between stressed and unstressed syllables. The point in Guessenhover and Jacobs opinion lies in the fact that the pronunciation of English stressed syllables is pitched higher and it is more audible to the listener compared to the unstressed syllable. Hymes (1975) explains that for stressed-timed language like English, stress plays a culminative function in that "there is a culmination of prominence on one syllable, and only one syllable per word (or stress unit) can receive prominence". For Nwala (2015, p.74) stress is defined as the "relative degree or force used in the production of a syllable. According to him, some syllables are noted or receive more breath energy than others, and such syllables are described as stressed. Fromkin et al (2011) points out that a stressed syllable is perceived as more prominent than an unstressed syllable. Roach (2009) corroborates this fact by stating that prominence is what distinguishes a stressed syllable. The implication is that a syllable is recognized as stressed because its production is often louder, longer, high-pitched and contains a vowel of different quality from the neighbouring vowel (i.e. the one in the other syllable or syllables).

E.g. TAI*lor* /tei.lə(r) / -
['tei] stressed syllable [lə(r)] unstressed syllable



Closing diphthong Mid central vowel

HARden /ha:dən / - [ha:] stressed syllable [dən] unstressed syllable



Open back vowel Mid central vowel

English words have strong and or weak syllables. This is mainly a function of stress; many strong syllables in English are the stressed syllables, while the unstressed ones are considered to be weak because they often contain the weak form of vowel (the schwa/ə/). It is however important to note that some words contain unstressed syllables with strong form instead of the schwa. For example, "lifestyle" /ˈlaif.stail / - [ˈlaif] stressed syllable [stail] unstressed syllable however, the /ai/ is not reduced to weak form /ə/

Stress is important in the pronunciation of stressed based language because it is one of the prosodic features that can affect intelligibility. In this regard, Fromkin et al opine that stress can be contrastive in English, in which case it distinguishes between nouns and verbs. For example, CONvict – the convict is jailed (intelligible). conVICT – a judge convicts the guilty (intelligible). The conVICT is jailed (Unintelligible). A judge CONvicts the guilty (Unintellgible).

According to Umera-Okeke (2011, p.140) the following are the three types of stress in English: primary stress (ˈ) the stress placed on the prominent syllable; secondary stress (ˌ) the stress placed on the syllable next to prominence and tertiary stress (ˌ) the stress placed on the third loudest syllable.

Primary Stress (ˈ)

A primary stress is the main stress in a word as opposed to any other subsidiary or secondary stress, it is the syllable with the greatest prominence (Matthews, 2007; Richard & Schmidt, 2012). The Accent Channel (2019) explains that in English, the syllable with the Primary Stress is loudest and longest one. In their opinion, such a syllable has a very noticeable change in pitch on the vowel. E.g. in a word like *diagnosis* the primary stress is on *-no-;* there is also a secondary stress on *dia-;* in the phonetic notation of ([daɪəgˈnəʊ.sɪs]). In the case of a single syllable word, that one syllable gets the primary stress. E.g. a word like "blue" will be pronounced "BLUUU -/blu:/.

***Secondary Stress* (ˌ)**

Matthews (2007) defines a secondary stress as a distinguishable level of stress on a syllable other than the one which carries a primary stress. E.g. *examination* has a secondary stress on the second syllable from the left [ɪgzamɪˈneɪn], while *characteristic,* also with five syllables and primary stress on the fourth, has a secondary stress on the first ([karəktəˈrɪstɪk]).

Unstressed Syllable

The Accent Channel (2019) explains that the third level is the completely unstressed syllable which has no stress at all so its pronunciation is rushed through and shortened so much that the vowel in the syllable is almost completely gone. E.g. "prepare" = /pruh-**PAIR**/ - /prɪˈpeə / (the unstressed syllable is underlined)

Word Stress Rules

According to Essberger (2020), in English there are two basic rules applicable in lexical stress:

- *A word has only one primary stress*. One word cannot have more than one primary stress. Two stresses mean two words. A word may have a secondary stress alongside a primary stress. However, a secondary stress is much smaller than the primary (main) stress, and it is often used in long words.
- *Only vowels are stressed*

English syllable contains only one vowel which is the nucleus of the syllable. In disyllabic or polysyllabic words, only one syllable is given the primary prominence in pronunciation; that is to say that the vowels in the other syllables are reduced to a weak form, hence their pronunciations are rushed through. Essberger (2020), illustrates the following stress patterns:

A. Stress on first syllable:

Rule	Examples
Most 2-syllable nouns	CONtent LONdon IMport
Most 2-syllable adjectives	CLEver ANger SLENder

B. Stress on last syllable

Rules	examples
Most 2-syllable verbs	BeGIN ConTENT deCIDE

C. Stress on penultimate syllable (second syllable from the end)

Rule	Examples
Words ending in -ic	eLECtric photoGRAPHic bioLOGic

Words ending in –sion and -tion	TransporTAtion conCLUsion

D. Stress on ante-penultimate syllable (third syllable from the end)

Rule	Example
Words ending in –cy, -ty, -phy and –gy	Philosophy capaBIlity auTOGraphy biology
Words ending in –al	PRAtical Geological

E. Compound Words (words with two parts)

Rule	Examples
In case of compound nouns, the stress is on the first part	HEADteacher BLACKboard
In case of compound adjectives, the stress is on the second part	ill-MANner gold-PLATE
In case of compound verbs, the stress is on the second part	WithDRAW overCROWD

Worthy of emphasis is the point that stress is a property of the syllable rather than a segment. In an attempt to produce a stressed syllable, it is imperative to change

the pitch (usually by raising it) to make the stressed syllable louder, or even longer (Fromkin et al 2011).

The Ikwerre Language

The Ikwerre language is a type of Igboid language spoken primarily by the Ikwerre people, who inhabit certain areas of Rivers State (Wkikipedia). Speakers of the Ikwerre language refer to both their language and themselves as Ikwerre (Alerechi 2020, p.108). As explained by Alerechi, the Ikwerre language is one of the major languages spoken in Rivers State and natives of Ikwerre occupy four out of the twenty-three Local Government Areas in the state – Emohua, Ikwerre, Obio/Akpor and Port Harcourt. Ndimele and Williamson (2002) as cited in Owhoeli (2011) observe that there are varieties of Ikwerre and these dialects appear to be mutually intelligible; these dialects include Elele, Isiokpo, Omuagwa, Iguruta, Aluu, Obele/Ibaa, Odeghua, Rumuekpe, Rundele, Ogbakiri, Emohua, Egbeda, Omudioga, Omerelu, Akpani, Ubima, Ipo, Ozuaha, Omademe, Omuanwa, Akpabo, and Ubimini.

Akinkuolie (2019) opines that there is a variety of Nigerian (NE) which can be referred to as Ikwerre English (IE). In his opinion, this IE is a sub-variety of a variety of English known as NE. Akinkuolie explains that Ikwerre English is the variety of Nigerian English which is spoken by a the Ikwerre educated class; and like any other NE sub-variety, the educated Ikwerre English is influenced by mother tongue (MT) – the Ikwerre language. According to Adetugbo (1977) the varieties of the Nigerian English have their uniqueness because there exists a significant difference in the phonemic system and prosodic features of languages and English. Bamgbose (1982) as cited in Akinkuolie (2019) described Nigerian English (NE) as syllable-timed because of the influence of syllable timing of Nigerian languages. Akinkuolie points out that Ikwerre is a syllable-timed language and as such the Ikwerre users of English exhibit limited proficiency in English stress placement as they tend to depend on their MT model for rhythmic organization. Being a stress language implies that the syllable in a word take the same amount of time to pronounce; hence all syllables receive the same amount of breath energy and the words have flat rhythm.

Subject

Thirty Ikwerre-English L2 speakers who are HND students of Captain Elechi Amadi Polytechnic, Rumuola Port Harcourt were randomly selected. They were given a list of twenty sentences contains disyllabic words and polysyllabic words to read and their readings were recorded using a recording device. The data collected was analyzed in comparison with RP, using the audio pronouncing dictionary.

Data

Set 1: **disyllabic words**.

London is good.
Ada is a slender girl.
The content is rich.
It is good to be content.
Don't compare kids.

Set 2: Stress on penultimate syllable (second syllable from the end)

I fear electric.
That's the conclusion.
One shouldn't be egocentric.
We the condition of living is fair.
The house has single partition.

Set 3: Stress on ante-penultimate syllable (third syllable from the end)

Be practical.
I want to see your capability.
What is your philosophy about life?
Biology is worth studying.
An autograph is a unique write up.

Set 4: Compound Words (words with two parts)

She is my head-teacher.
The greenhouse is saturated.
It's a gold-plated watch.
I meet a short-tempered man today.
They will *overcrowd* the arena.

Analysis

The percentage scores for the questions will be computed by multiplying the number of correct answers by hundred and then dividing the sum with the summation of frequency of the total number of respondents in each section. Furthermore, the percentage of deviant response will be derived using the: $\frac{T}{FR} x \frac{100}{1}$

T =Total number of correct lexical stress assignment.

FR = Frequency of the total number of respondents in a particular section. ***T/FRx100/1***

Table 1: Frequency and percentage rating of participants' performance in assignment of stress on disyllabic words.

S/N	Item	No. of participants	Stress placement	FR	Percentage
a	London – LONdon	30	Correct	7	23.3%
			Deviant	23	76.7%
			Total	30	100%
b	Compare - comPARE	30	Correct	9	30%
			Deviant	21	70%
			Total	30	100%
c	Slender- SLENder	30	Correct	19	63.3%
			Deviant	11	36.7%
			Total	30	100%
d	Content (noun) – CONTent	30	Correct	13	43.3%
			Deviant	17	36.7%
			Total	30	100%
e	Content (verb) – contENT	30	Correct	10	33%
			Deviant	20	67%
			Total	30	100%

The table 1 above reveals the performance of randomly selected Ikwerre speakers of English in the placement of stress in disyllabic English words. Considering the result presented, it can be said that Ikwerre L2 speakers of English inappropriately assign stress to English disyllabic words. The table shows that the total percentage of correct stress assignment in entries a-e of table 1 is 36.7% while the total percentage of wrong stress placement here is 61.3%. 36.7% which is below a pass mark.

Table 2: Frequency and percentage rating of participants' performance in assignment of stress on penultimate syllable (second syllable from the end)

S/N	Item	No. of participants	Stress placement	FR	Percentage
	Electric - eLECtric	30	Correct Deviant	10 20	33.3% 66.7%
			Total	30	100%
	Conclusion – conCLUsion	30	Correct Deviant Total	12 18 30	40% 70% 100%
	Egocentric - egoCENtric	30	Correct Deviant Total	12 18 30	40% 60%% 100%
	Condition - conDItion	30	Correct Deviant Total	15 15 30	50% 50% 100%
	Partition - parTItion	30	Correct Deviant Total	16 14 30	53.3% 46.7% 100%

The table 2 above reveals the performance of randomly selected Ikwerre speakers of English in the placement of stress in penultimate syllables (second syllable from the end) in English words. The result presented, shows that Ikwerre L2 speakers of English appropriation of stress in English penultimate syllable is averagely correct. The table shows that the total percentage of correct stress assignment in entries a-e of table is 43.3% while the total percentage of wrong stress place here is 56.7%. 43.3% is generally a pass mark, which is why it can be safely said that Ikwerre L2 speakers of English correctly appropriate stress in English penultimate syllables.

Table 3: Frequency and percentage rating of participants' performance in assignment of stress on ante-penultimate syllable (third syllable from the end)

S/N	Item	No. of participants	Stress placement	FR	Percentage
	Practical - PRAtical	30	Correct Deviant	10 20	33.3% 66.7%
			Total	30	100%
	Capability - capaBILity	30	Correct Deviant Total	7 23 30	23% 77% 100%
	Philosophy - phiLOsophy	30	Correct Deviant Total	12 18 30	40% 60%% 100%
	Biology - biOlogy	30	Correct Deviant Total	7 23 30	23% 77% 100%
	Autograph - auTOgraph	30	Correct Deviant Total	10 20 30	33.3% 66.7% 100%

The table 3 above reveals the performance of randomly selected Ikwerre speakers of English in the placement of stress in ante-penultimate syllables (third syllable from the end) in English words. The result presented, shows that Ikwerre L2 speakers of English assign stress in English ante-penultimate syllable incorrectly. The table shows that the total percentage of correct stress assignment in entries a-e of table is 30.6% while the total percentage of wrong stress place here is 69.4%. The percentage difference reveals that more than 60% of stress realization in ante-penultimate syllable is wrongly produced by Ikwerre L2speakers of English.

Table 4: Frequency and percentage rating of participants' performance in assignment of stress on Compound Words (words with two parts

S/N	Item	No. of participants	Stress placement	FR	Percentage
	Head teacher – HEAD-TEAcher	30	Correct Deviant	4 26	13.3% 86.7%
			Total	30	100%
	Greenhouse - GREENhouse	30	Correct Deviant Total	7 23 30	23% 77% 100%
	Gold-plated - gold-PLATEd	30	Correct Deviant Total	12 18 30	40% 60%% 100%
	Short-tempered – short-TEMpered	30	Correct Deviant Total	5 23 30	17% 83% 100%
	Overcrowd - overCROWED	30	Correct Deviant Total	5 2 30	17% 83% 100%

The table 4 above shows the performance of randomly selected Ikwerre speakers of English in the placement of stress in English compound words. The result presented, reveals that Ikwerre L2 speakers of English assign stress in English compound words incorrectly. The table shows that the total percentage of correct stress assignment in entries a-e of table is 23.3% while the total percentage of wrong stress place here is 76.7%. The difference in the percentage of correct and deviant stress production reveals that more than 70% of stress realization in English compound words is wrongly produced by Ikwerre L2 speakers of English. Given that 23.3% is generally a failure rating, it can be said that Ikwerre L2 speakers of English wrongly assign stress to English compound words.

Conclusion

From the study it can be seen that Ikwerre L_2 speakers of English exhibit deviations in the phonetic realization of English lexical stress. The frequency and percentage rating of the participants' performances in the pronunciation of some carefully selected English word reveals that Ikwerre L_2 speakers of English do not pay attention to the accentual pattern of English even though they learn the language. This partly results from the nature of their L_1, which is a syllable-timed language where every syllable receives the same amount of breath energy. This same L_1 habits is transferred to their spoken English. Consequently, their spoken English tend to have a "flat" accentual pattern, which is a far cry from the RP.

From the analysis, IKwerre L_2 speakers of English are best at assigning stress to ante-penultimate syllable more than any other categories examined. Also, the general performance of the participants in assigning stress to disyllabic words and penultimate syllables is fair. However, their worse deviation manifests in appropriating stress to English compound words. This accentual deviation contributes in distinguishing a sub-variety of NE which could be termed as "Ikwerre English."

References

Adesanya, F. (2002). *Introducing language*. Serived Venture

Akinkuolie, V.O. (2019). Educated Ikwerre English speakers' stress assignment in English disyllabic and polysyllabic words. ichekejournal.com

Aleruchi, R. I. (2020). Syllable structure of Ikwerre. *Erudite Journal of Linguistics and Language. 2.1.* globalacademicstar.com

Anyanwa, O. & Ndimele, O-M. (2001). Linguistics as a scientific inquiry. In Ndimele, O-M (ed), *Readings on language*. M & J Grand Orbit Communication Ltd.

Bamgbose, A. (1971). The English language in Nigeria. In Spencer, j. (Ed). *The English language in West Africa.* Longman Group Ltd.

Buhari, A. H. (2011). A comparative analysis of word formation processes in English and Hausa. An unpublished M. A. Thesis. Ahmadu Bello University Zaria.

Conlen, M. M. (2016). A linguistic comparison: stress-timed and syllable-timed languages and their impact on second language acquisition. digitalcommons.wayne.edu.

Cook, V. J. and Newson, M. (2007). *Chomsky's Universal Grammars: An introduction*. Blackwell Publishing.

Denham, K.E. & Lobeck, A.C. (2013). Linguistics for Everyone: An Introduction. Wadsworth Cengage.

Enwere, K. I. (2021). *Regional varieties of English*. Akanistic Ventures.

Essien, O. (1998). Language as tool for national development. A lead paper presented at the lot national conference FCF Obudu, June 29-July2nd.

Fromkin, et al (2011). *An Introduction to Language* (9th ed.). Wadsworth Cengage

Gussenhoven, C. & Jacobs, H. (2011). *Understanding Phonology*. Hodder Education.

Hyman, L. M. (1975). *Phonology Theory and Analysis*. Holt, Reinehart and Winston.

Jowitt, D. (1991). *Nigerian English Usage*. Longman.

Matthews, P.H. (2007). *Concise Dictionary of Linguistics*. Oxford University Press.

Mclaughlin, S. (2006). *Introduction to language development (2nd ed.).* Thomson Delmar Learning, University Press.

Ndimele, O. &Williamson, k. (2002). "Language". *The land and people of Rivers State: Eastern Niger Delta*. (Eds) Alagoa, J. E. & Derefaka, A. A. Onyeoma Research Publishers

Ngulube, I. E. (2015). Phonology. In I. Kamalu, & I. Tamunobelema, (Eds*). Issues in the Study of Language and Literature: Theory and Practice*, 3-60. Ibadan: kraft Books.

Nordquist, R. (2019). Linguistic variation. ThoughtCo

Nwala, M. A. (2015*). Introduction to linguistics: A first course*. Obisco Nig. Enterprises.

Ogundepo, A. O. & Oladeji, K. O. (2017). Language. Communication and National Security. *International Journal of Advanced Academic Research/ Arts, Humanities &Education*

Olaniyi, O. K. & Josiah. U. E. (2013). Nigerian accents of English in the context of world Englishes. In *World Journal of English Language*. researchgate.net/publication/276226113

Owhoeli, U. (2011). The impact of the mother tongue on second d language learning and proficiency: Ikwerre native speakers' experience. Master's thesis. University of Nigeria Nsukka.

Richard, J. C & Schmidt, R, (2012). *Longman Dictionary of Language and Applied Linguistics.* Pearson Educational Limited.

Roach, P. (2009). *English Phonetics and Phonology*: A Practical Course. Cambridge University Press.

Singh, S. (2018). *English Language and Linguistics*. Replika Press Pvt. Ltd.

Small et al, (1985). Lexical stress and lexical access: homograph versus non homographs. link.springer.com

Tamunobelema, I. (2011). *Sociolinguistics: varieties of English*. Pearl Publishers International Ltd.

The Accent Channel (2019). 3 levels of syllable stress in English. theaccentchannel.com

Umera-Okeke, N. (2011). *English Pronunciation Basic: Segmental, Suprasegmentals and Tips for Better Spoken English*. Mount Carmel Printers and Publishers.

Umera-Okeke, N. (2016). The English language: origin, history and variety. Fab educational books.