YORUBA TEACHERS OF ENGLISH LANGUAGE AS MODELS FOR ENGLISH PHRASAL STRESS ASSIGNMENT

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Abstract

This study investigated the (re)assignment of stress on English phrasal structures in the speech of Yoruba teachers of English language (YELTs) to determine their capability to model Standard English accentuation in Nigeria. The theoretical underpinning was Bandura's social cognitive theory and Liberman and Prince's Metrical Phonology. Fifty English language teachers were randomly selected from five Local Government Areas in Ibadan. A Briton served as the native baseline. Data was elicited from participants' production of a prepared text into Speech Filing System (SFS/WASP). Extracted noun phrases were analysed statistically, metrically, and complemented with acoustic analysis. YELTs production revealed 7.5% conformity to the baseline stress patterns and 5.4% assignment of nuclear stress. YELTs shifted stress in 33.3% instances. YELTs' metrical grids revealed preference of stronger than weaker syllables. Predominantly, YELTs did not assign nuclear stress. YELTs' grid placeholders did not reveal expected reassignment of stress necessitated by iambic feet reversal for avoidance of stress clash. YELTs' spectrograms lacked prominence variation between stronger and weaker syllables. Despite their academic competence, Yoruba English language teachers are not acceptable models of spoken English in Nigeria. They are advised to engage in constant speech practice and technology-enhanced learning of English prosody.

Keywords: Yoruba English Language Teachers (YELTs), Modelling, Nigerian English, Standard English Phrasal stress, Nigerian English Phrasal stress, stress-shift

1. Introduction

One of the foremost ideas in the fields of developmental and educational psychology is that most human behaviour is learned observationally through modelling (Bandura, 1977). Individuals that are observed are called models. In every society, children are surrounded by many models within and outside their families. These models - their parents, characters on television, radio or social media, friends within their peer groups, teachers, mass media, celebrity endorsements, among others - influence the children by providing examples of behaviours which they observe (Mcleod, 2016). Behavioural modelling entails attention, retention, reproduction, and reinforcement. An individual (the observer) is attentive to the behaviour being modelled (attention); vividly recollects the behaviour for recreation (retention); recreates the observed action physically (reproduction) and gets a response to the modelled behaviour with either a reward or punishment. In the case of a reward, the observer is likely to continue the behaviour (reinforcement)

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(Bandura, 1977; Grusec, 1992).

Given the L_2 context in which Nigerians learn the rules of English pronunciation, many, including parents and relatives, from whom children may want to learn Standard English pronunciation, have proved to have markedly variant forms from Standard British English (SBE henceforth) at all levels of spoken English analysis. Regarding stress, scholars have established Nigerians' inclination for delayed/forward stress, tone-influenced stress assignment and inability to reduce vowels necessitated by stress shift (Jowitt, 1991; Udofot, 2002; Akinjobi, 2004, 2006, 2009; Sunday, 2008; Akindele, 2011; Ibasanmi, 2013; Sunday and Oyemade, 2021). Like in other linguistic contexts where English is indigenised, these challenges, among other factors, are often attributed to the influences wielded on English pronunciation by its host languages (Willems, 1982; Atoye, 2005; Chien and Fon, 2020). Nonetheless, the need for international intelligibility among world Englishes cannot be overstated (Ufomata, 1990; Akinjobi, 2015). To ensure this intelligibility, there is a high reliance on English language teachers (Gimson, 2008).

The question of who models standard pronunciation in Nigeria, especially with the non-availability of native-speaker teachers, has gained some scholarly attention. Studies in this regard have focused on assessment of professionals who do not use English solely for the purpose of communication as other Nigerians but are also, expectedly, custodians of standard forms in their oral communication genres. Such professionals include reporters, broadcasters, corporate radio and television advertisers, newscasters, teachers of English language, presenters, actors, and actresses. The studies rested on the assumption that the capability of such professionals to influence the spoken English of their audience cannot be overstressed (Ufomata, 1996; Enaibe, 2012; Olajide and Olaniyi, 2013).

While some of the studies have established Nigerian newscasters, corporate radio and television advertisers, and educated Nollywood actors as acceptable models for Standard English pronunciation (Adeniyi, 2016; Sunday and Ayinde, 2020; Akindele,2020), others have shown that postgraduate students of English language, teachers of English language in active service, and teachers-in-training, do not have the capability to be suitable models for Standard pronunciation (Akinjobi, 2011; Akinjobi and Aina, 2014; Aina, 2014, 2018; Agboyinu, 2018). However, the latter studies are limited to intonation tune assignment, word stress, and the application of English phonological rules. Considering that adequate scholarly attention focused on approving or disapproving expected custodians of English, particularly teachers, as models of standard pronunciation should be all-encompassing for a comprehensive conclusion, there is need for an extension of previous studies to other aspects of English pronunciation and geographical regions. The objective of this study, therefore, is to examine the extent to which teachers of English language who are of Yoruba origin approximate to SBE phrasal stress (re)assignment and their capability to serve as models for

English phrasal stress assignment.

The study intends to answer the following questions:

i. Do Yoruba English Language Teachers (YELTs) approximate to SBE in their assignment of stress to noun phrases?
ii. Do YELTs approximate to SBE in their alternation of stressed and unstressed syllables?
iii. Do YELTs reassign stress when words combine to form noun phrases in order to avoid stress clash?

2. Phrasal Stress in SBE and Nigerian English

Connected speech (a continuous sequence of spoken language) has been attested in the literature to behave like polysyllabic words. That is because, just as some sounds within a syllable enjoy more prominence than others and some syllables are more prominent than others within a word, there are more prominent and less prominent words within an utterance. A linguistic unit is prosodically prominent when it stands out from its environment by reason of its prosodic characteristics (Terkens and Hermes 2000; Roach, 2013). The structure, use, and realisation of prominence vary from language to language. While, for instance, prominent syllables mark the right edge of a phrase in French, the prominence a syllable receives relative to others in a lexical or phrasal unit in English stems from the interplay of stress (Ladd, 2008; Smith, Ericson and Savariaux, 2019). The stress carried by a word within an utterance is referred to as sentence stress (Roach, 2000; Mcmahon, 2002; Skandera and Burleigh, 2005; Gimson, 2008). When English words occur as part of a sentence, the stress assigned to them becomes gradable (Akinjobi, 2004). Governed by speakers' intentions, stress in connected speech plays semantic and pragmatic roles and is critical to intelligibility (Gimson, 2008; Levis and Silpachai, 2018; Cole et al., 2019; Smith and Rathcke, 2020). Consequently, some words which are stressed in isolation may become unstressed, while others which have primary stress may have their stress shifted or converted to secondary or tertiary stress.

Although stress patterns in connected speech are freer than those in words, some words are predisposed to receive and retain their stress as in their isolated form. These are called lexical words. Such word classes are said to be open, since the number of words they contain is unlimited and because new words are continually added to them. They include nouns, adjectives, verbs, and adverbs. On the other hand, are grammatical/function words. These words have little or no lexical content. They comprise determiners, pronouns, prepositions, conjunctions, and auxiliary verbs. These classes of words are closed. That is to say, the number of words they contain is limited and largely fixed (Segalowitz and Lane, 2000; Roach, 2000, 2013; Mcmahon, 2002; Skandera and Burleigh, 2005; Gimson, 2008).

Sentence stress in Nigerian English is markedly different from SBE pattern. The isochronicity of stress displayed in stretches of utterances in Standard English (Crystal, 2008) is the converse of what obtains in Nigerian

English. Nigerian English tends towards syllable-timing as each syllable in an utterance receives equivalent prominence (Ufomata, 1990; Eka, 1993; Udofot, 2000, 2011; Akinjobi, 2004; 2006, 2009; Akindele, 2011). The emphatic/contrastive use of stress has also not found adequate deployment in Nigerian English, to the extent that, in Nigerian pronunciation, there is hardly any difference between *he bought a black CAR* (not any other item) and *HE bought a black car* (not she).

3. Modelling studies on spoken Nigerian English

To assist Nigerian students to overcome the challenges they encounter in mastering Standard English pronunciation, scholars have expressed the need for suitable models (Ufomata, 1996, Enaibe, 2012; Olajide and Olaniyi, 2013). The question of the suitability of existing supposed models of standard spoken English brought to the fore modelling studies on spoken Nigerian English. Studies in this regard was pioneered by Akinjobi (2011). Admitting that the Chomskyan linguistic competence is only attainable by native speakers and hypothetically considering a bachelor's degree or higher degree(s) as proof of academic competence, Akinjobi (2011) correlates the academic competence and the linguistic performance of some L_2 speakers of English. She hypothesises a reflection of academic competence in the linguistic performance of her participants, given their basic knowledge of English phonetics, phonology, and spoken English. The study established that academic competence is not a guarantee for a higher level of linguistic performance in an L_2 setting like Nigeria.

Following Akinjobi (2011), several studies which assess the modelling capabilities of professionals in various fields of oral communication genres have emerged. Respectively, Adeniyi (2016) and Sunday and Ayinde (2020) established educated Nollywood actors and corporate radio/television advertisers as acceptable models for English pronunciation. Modelling studies which particularly assessed teachers of English language have established that they cannot be attested to as acceptable models of appropriate pronunciation in some aspects of English segmentals, suprasegmentals and the interphase levels (Aina, 2014, 2018; Akinjobi and Aina, 2014, Agboyinu 2018). Since there are still only a few studies in this area, the need to avoid hasty generalisation cannot be over-emphasised. Also, in the area of stress assignment, studies in this regard have been limited to word stress.

4. Methodology

Random sampling technique was used for this study. The target population consisted of English language teachers who are of Yoruba ethnic background in Ibadan. Of the thirty-three Local Government Areas (LGAs) in Oyo State, eleven are situated in Ibadan, the state capital. Five LGAs were randomly selected out of the eleven. Ten teachers who possessed a minimum of a bachelor's degree, drawn randomly from public and private secondary schools in each of the five selected LGAs, constituted a total of fifty participants for the study. A questionnaire was administered on the teachers to establish their

academic competence and to remove any extraneous factors that may interfere with data analysis and invalidate the findings of the research. A native Briton with a distinctive British accent who was, at the time of the research, in Nigeria for a field study in pursuance of her PhD, served as the native baseline. To gather data for the research, participants were made to read a prepared text embedded with the investigated features into Speech Filing System (SFS/ WASP). Data were analysed using statistical, metrical, and acoustic methods. The statistical analysis was done by counting tokens of standard and non-standard forms and converting them to simple percentages. Metrical analysis was done using grid formalism to show strong/weak relationships between or among syllables. For acoustic analysis, spectrograph readings of selected utterances produced by YELTs were compared with those of the baseline. Spectrograms are presented and analysed for observable differences.

5. Data analysis

5.1 Statistical Analysis

In this section, tokens of approximate and non-approximate patterns to the native baseline production were counted and converted to simple percentages. The analysis is presented and discussed.

5.1.1 YELTs' assignment of nuclear stress to English noun phrases

Research question 1: Do Yoruba English Language Teachers (YELTs) approximate to SBE in their assignment of stress to noun phrases?

Table 1: YELTs' Assignment of Nuclear Stress to noun phrases

Utterances	**Potential appropriate stress assignment**	**Assignment of nuclear stress**	**Non-assignment of nuclear stress**
French explorer [ˌfrentʃ ɪkˈsplɔ:rə]	50	0 (0)	50 (100)
Christmas present [ˌkrɪsməs ˈprezn̩t]	50	0 (0)	50 (100)
Compact disc [ˌkɒmpækt ˈdisk]	50	9 (18)	41 (82)
Astonishing beauty [əsˌtɒnɪʃɪŋ ˈbju:tɪ]	50	0 (0)	50 (100)
Melancholic mood [meləŋˌkɒlɪkˈmu:d]	50	0 (0)	50 (100)
Christmas pudding [ˌkrisməs ˈpʊdiŋ]	50	0 (0)	50 (100)
Fresh tomatoes [ˌfreʃ təˈma:təʊz]	50	18 (36)	32 (64)
No-frills services [ˌnəʊfril ˈsɜ:vɪsɪz]	50	0 (0)	50 (100)

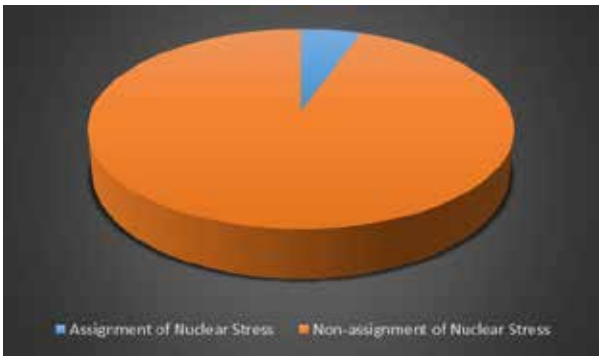
Sound of the shell [ˌsaund əv ðə ˈʃel]	50	0 (0)	50 (100)
Western Nigeria [ˌwestən naɪˈʤɪərɪə]	50	0 (0)	50 (100)
Total	**500**	**27 (5.4)**	**473 (94.6)**

*Percentage in parenthesis

The result of YELTs' assignment of nuclear stress to noun phrases is presented in Table 1. For most of the phrases- French *explorer, Christmas present, astonishing beauty, melancholic mood, Christmas pudding, no-frills services, sound of the shell,* and *Western Nigeria*- YELTs did not assign nuclear stress. Only 9 tokens representing 18% nuclear stress assignment were realised in the production of the YELTs for *compact disk*. For *fresh tomatoes,* 18 tokens which represent 36% of nuclear stress were assigned by YELTs. In total, only 5.4% of the expected nuclear stress assignment was realised in the speech of the participants. Figure 1 below summarises the performance of the YELTs for nuclear stress assignment.

Figure 1: YELTs' assignment and non-assignment of nuclear stress

Figure 1. shows YELTs' performance for nuclear stress assignment. The orange portion of the pie chart shows the percentage of nuclear stress that were not



assigned, while the blue portion reveals the YELTs' negligible percentage of appropriately assigned stress. Overall, YELTs could not approximate to SBE nuclear stress assignment.

5.1.2 YELTs' alternation of stressed and unstressed syllables

Research question 2: Do YELTs approximate to SBE in their alternation of stressed and unstressed syllables?

Table 2: YELTs' alternation of stressed and unstressed syllables

Noun Phrase	**Tokens and percentage of stress alternation in YELTs' production**	**Tokens and percentage of stress clash in YELTs' production**
French explorer [ˌfrenʧ ɪkˈsplɔ:rə]	0 (0)	50 (100)
Christmas present [ˌkrɪsməs ˈprezn̩t]	0 (0)	50 (100)
Compact disc [ˌkɒmpækt ˈdisk]	9 (18)	41 (82)
Astonishing beauty [əsˌtɒnɪʃɪŋ ˈbju:tɪ]	2 (4)	48 (96)
Melancholic mood [melənˌkɒlɪkˈmu:d]	0 (0)	50 (100)
Christmas pudding [ˌkrisməs ˈpʊdɪŋ]	0 (0)	50 (100)
Fresh tomatoes [ˌfreʃ təˈma:təʊz]	0 (0)	50 (100)
No-frills services [ˌnəʊfril ˈsɜ:vɪsɪz]	2 (4)	48 (96)
Sound of the shell [ˌsaund əv ðə ˈʃel]	5 (10)	45 (90)
Western Nigeria [ˌwestən naɪˈʤɪərɪə]	3 (6)	47 (94)

*Percentage in parenthesis

For each of the phrases in Table 2, the native baseline (NB) stressed only two syllables, alternating them with weak ones. Generally, the table shows that the YELTs predominantly stressed more syllables than necessary. In the production of *French explorer,* none of the YELTs alternated stressed syllables with unstressed ones as done by the NB. YELTs' productions of *Christmas present* were remarkably different from those of the NB production. No alternation was realised in the production of the YELTs. Rather, they rendered all the four syllables in their strong forms as [krɪs], [mæs], [pre] and [zent] (or [sent] in some cases). Only a few produced [zn̩t] in *present* in its weak form like the NB. However, their production did not reflect the expected alternation. The YELTs' production of *compact disc* also revealed a contrast with that of the NB where com [kɒm] and disc [disk] received a higher degree of stress than [pækt], which intervened between both former syllables. Only 18% of the total YELTs alternated the stronger syllables with the weaker one. The remaining 82% assigned prominence to all the three syllables of the phrase. While 96% of the participants stressed,

at least, four of the six syllables in *astonishing beauty*, only 4% stressed two syllables- [tɒ] and [bju:] as done by the NB. Hence, only 4% alternation was realised in the speech of the YELTs' production of the phrase. For *melancholic mood, Christmas pudding* and *Fresh tomatoes*, no alternation was realised in the YELTs' production. Only 4% of their production revealed the expected alternation in *no-frills services*. In *sound of the shell*, the NB stressed only the lexical words- *sound* [saund] and *shell* [ʃel]. A weakening of the grammatical words- *of* [əv] and *the* [ðə]- intervened between both stressed syllables. However, only 10% of the YELTs had the same pattern as the NB. The NB production of *Western Nigeria* [ˌwestən naɪˈʤɪərɪə] featured only two stressed syllables, *west-* [west] and *-ge* - [ʤiə]. However, only 6% of the YELTs produced the same pattern. The remaining 94% rendered all the syllables strong.

Figure 2: Approximation and non-approximation of YELTs' stress pattern of noun phrases to SBE pattern

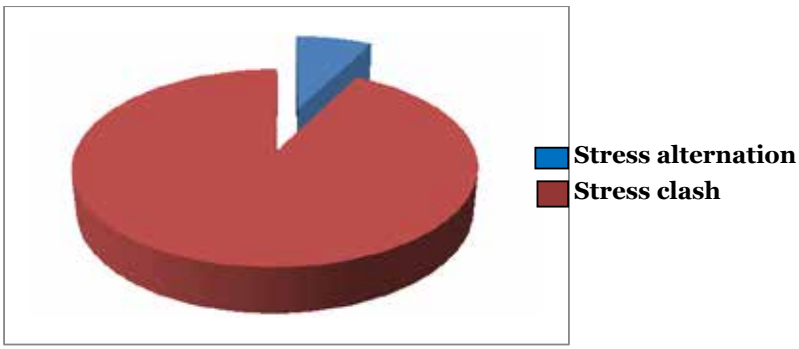


Figure 2 summarises the overall performance of YELTs regarding their ability to approximate to Standard English stress pattern. Evidently, from the graph, YELTs performance revealed that they could not approximate the baseline's pattern.

5.1.3 YELTs' Stress Reassignment in English Noun Phrases

Research question 3: Do YELTs reassign stress when words combine to form noun phrases in order to avoid stress clash?

Table 3: Stress Reassignment in Noun Phrases

Noun Phrase	**Stress shift realisation (Native baseline)**	**Stress shift realisation (YELTs)**	**Number and percentage of YELTs' Appropriate stress shift**
Compact disk /kəmˌpækt ˈdɪsk/ (WSS) → compact disc /ˌkɒmpækt ˈdɪsk (SWS)/	2nd – 1st	2nd – 1st	50 (100)
The nineteenth seat /ðə naɪnˌtiːnθ ˈsiːt/ (WWSS) → The nineteenth seat /ðə ˌnaɪntiːθ ˈsiːt/ (WSWS)	3rd – 2nd	-	0 (0)
Downstream settlement / daunˌstriːm ˈsetl̩mənt/ (WSSWW) → downstream settlement /ˌdaunstriːm ˈsetl̩mənt/ (SWSWW)	2nd – 1st	-	0 (0)

*Percentage in parenthesis

Table 3 reveals the level of YELTs' awareness of the stress shift phenomenon. From the table, it is clear that, of the three noun phrases, all the YELTs were able to reassign stress in *compact disc,* while there is a 0% realisation of appropriate stress reassignment on *the nineteenth seat* and *downstream settlement*. Overall, of the 150 instances of expected stress shift, only 50, which translate to 33.3%, was realised in the YELTs production, thereby leaving the remaining 100, amounting to 66.7%, unrealised. This means that the teachers can be said to have no good knowledge of the fact that stress assignment is altered according to context. Below is a diagrammatic representation of their performance in Figure 3.

Figure 3: Stress Reassignment in Noun Phrases

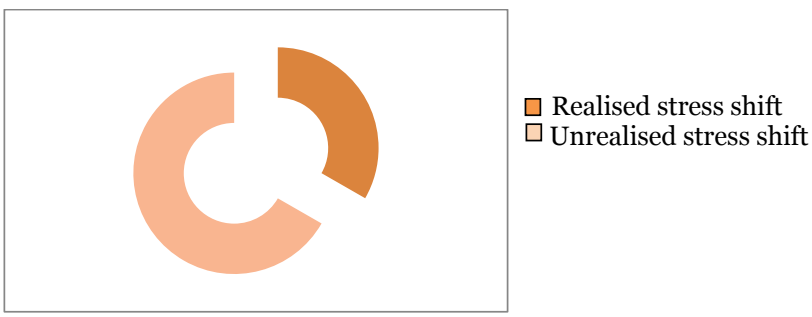


Figure 3 is a diagrammatic representation of YELTs' ability to shift stress as necessitated by the need to resolve stress clash in the produced noun phrases. The chart shows that YELTs did not demonstrate adequate knowledge of the stress shift phenomenon.

5.2 Metrical and acoustic analyses

The metrical theoretical and acoustic analyses of selected items are presented in this section.

5.2.1 Metrical analysis of YELTs' stress pattern

The metrical stress theory shows the underlying structure in which S (**S**tronger than adjacent W) and W (**W**eaker than adjacent S) alternate. Using metrical grid, a representation of the stress patterns of five representative productions of the YELTs and the baseline productions in each selected utterance were compared for observable differences or similarities. For the acoustic analysis, acoustic readings of the regular patterns realised in YELTs' production was done to show the pitch prominence and duration of strong syllables relative to those of the weak ones in selected noun phrases. Below, a representative spectrogram of the YELTs is compared with the baseline's spectrogram for observable differences. The analyses are then presented:

Representative metrical grid for *French explorer*

Native baseline

```
        *
    *   *
*   *   *   *
Christmas present
[ˌkrɪsməs ˈprezn̩t]
```

YELT 3

```
*   *   *   *
*   *   *   *
*   *   *   *
Christmas present
[krɪsmæs prezent]
```

YELT 15

```
*   *   *
*   *   *
*   *   *   *
Christmas present
[krɪsmæs prezn̩t]
```

YELT 24

```
*   *   *   *
*   *   *   *
*   *   *   *
Christmas present
[krɪsmæs prezent]
```

YELT 33

```
*   *   *
*   *   *
*   *   *   *
Christmas present
[krɪsmæs prezn̩t]
```

YELT 45

```
*   *   *   *
*   *   *   *
*   *   *   *
Christmas present
[krɪsmæs prezent]
```

As shown on the grids above, all the teachers assigned prominence to all the syllables of *French explorer*. This is not to say that there was absolutely no instance of un-stressing on weak syllable(s), but the instances available are too few to be a representative sample. Contrary to the baseline's initial assignment of stress to all strong syllables and subsequent nuclear stress assignment on the rightmost stressed syllable, the YELTs' productions were characterised by unresolved metrical clash, since all the syllables were produced with prominence. The spectrogram of *French explorer* as produced by the NB and YELT 3 are presented below:

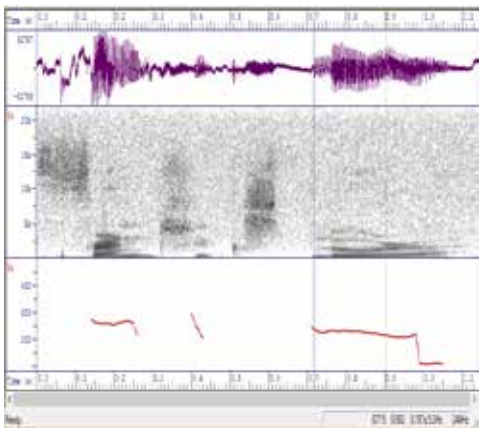


Figure 4: Native baseline spectrogram for French explorer

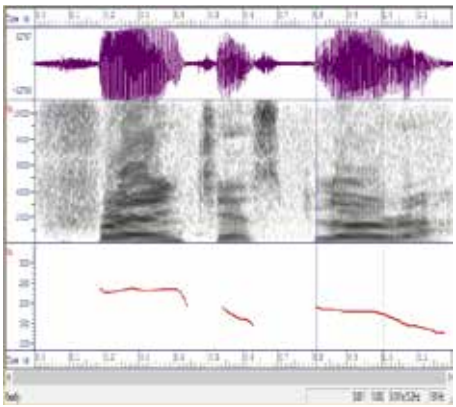


Figure 5: Spectrogram for French explorer as produced by YELT 3

The spectrograms above show the productions of the native baseline and YELT 3 for *French explorer*. While the native baseline produced *-plo-* at 240Hz and in 187ms against the 238Hz and 119ms of *French,* thereby producing *-plo-* with higher pitch and longer duration than any other syllable in the noun phrase and marking it for nuclear stress, YELT 3 produced *-plo-* at a pitch of 191Hz and with a duration of 191ms against the 243Hz and 249ms of *French*, thereby making *French* more prominent and longer than -plo-, the nuclear syllable in the NB production. The unstressed syllables, *ex-* and *-rer,* which were produced by the NB in 44ms and 106ms, respectively were produced by the YELT in 90ms and 177ms respectively.

Metrical grid for *Christmas present*

Native baseline

*	*
*	*
*	* * *
fresh	tomatoes
[ˌfreʃ	təˈmaːtəʊz]

YELT 1

*	* * *
*	* * *
*	* * *
fresh	tomatoes
[freʃ	təʊmaːtəʊz]

YELT 5

*	*
*	*
*	* * *
fresh	tomatoes
[ˌfreʃ	təˈmaːtəʊz]

YELT 24

*	*
*	*
*	* * *
fresh	tomatoes
[ˌfreʃ	təˈmaːtəʊz]

YELT 36

*	* *
*	* *
*	* * *
fresh	tomatoes
[freʃ	təʊmaːtəʊz]

YELT 45

*	* * *
*	* * *
*	* * *
fresh	tomatoes
[freʃ	təʊmaːtəʊz]

Deduced from the grid representation above, the productions of the YELTs were remarkably different from that of the native baseline. At the second level of relative prominence assignment, the NB stressed only two syllables, [kris] and [pre], rendering the other two alternating syllables weak. The latter syllable, [pre], is however produced with more prominence, thus assigning it the nuclear stress of the whole phrase. Majority of the YELTs, however, produced all the syllables in their strong forms. The NB production of [məs] was realised as [mæs]. While some of the YELTs produced [znṭ] as the NB, majority of their productions yielded [zent] or [sent]. None of the participants assigned the nuclear stress to the phrase. The waveform and pitch contour of YELT 9, compared with the native baseline production below, attests to this.

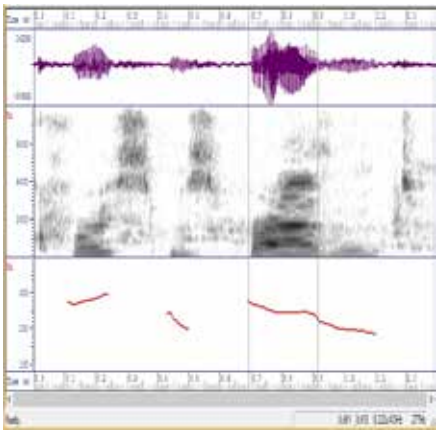


Figure 6: Native baseline spectrogram for Christmas present

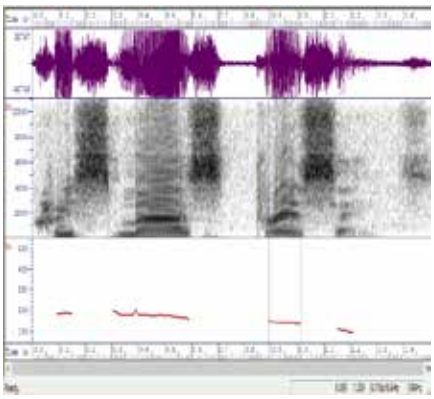


Figure 7: Spectrogram for Christmas present as produced by YELT 9

The native baseline and YELT 9 spectrograms for *Christmas present* are displayed above. Figures 6 shows the respective pitch and duration readings of 270Hz/129ms and 277Hz/222ms for *Christ-* and *pre-* in the native baseline production. YELT 9's production, however, shows a reading of 181Hz/56ms for *Christ-* and 149Hz/118ms for *pre-*. Although pre- was expectedly produced with a longer duration than *Christ-,* the pitch reading for *Christ-* was higher than that of *pre-*. The weaker syllables in the native baseline spectrogram, *-mas* and *-sent*, produced with lower pitch and duration (240Hz/66ms and 221Hz/181ms respectively) thereby showing alternation between the stronger and weaker syllables, were mainly strengthened by the representative YELT with respective pitch and duration readings of 201Hz/288ms and 115Hz/61ms. By these readings, the representative YELT did not only strengthen all syllables in the noun phrase, the nuclear stress also was not assigned.

Metrical grid for *fresh tomatoes*

Native baseline

		*
	*	*
*	*	* * *
fresh	tomatoes	
[ˌfreʃ	təˈmaːtəʊz]	

YELT 1

	*	* * *
	*	* * *
*	*	* * *
fresh	tomatoes	
[freʃ	təʊmaːtəʊz]	

YELT 5

		*
	*	*
*	*	* * *
fresh	tomatoes	
[ˌfreʃ	təˈmaːtəʊz]	

YELT 24

		*
	*	*
*	*	* * *
fresh	tomatoes	
[ˌfreʃ	təˈmaːtəʊz]	

YELT 36

		* *
	*	* *
*	*	* * *
fresh	tomatoes	
[freʃ	təʊmaːtəʊz]	

YELT 45

	*	* * *
	*	* * *
*	*	* * *
fresh	tomatoes	
[freʃ	təʊmaːtəʊz]	

In their pronunciation of *fresh tomatoes,* a reasonable number of the English language teachers stressed the appropriate syllables, just like the native baseline. However, most of them produced all the syllables in their strong forms, even in positions where doing so was unnecessary. This resulted in the strings of stressed syllables. In most of the productions represented in the grids above, most of the YELTs did not assign nuclear stress to the most stressed syllable of the utterance. Below is the spectrogram of YELT 36 juxtaposed with the native baseline image for *fresh tomatoes*.

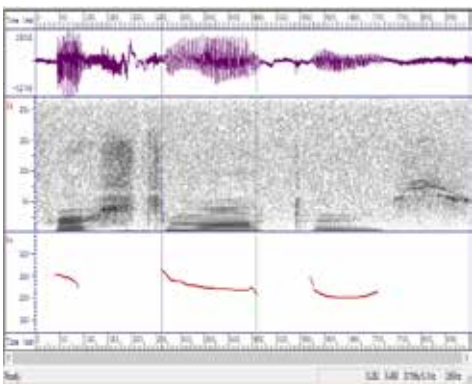


Figure 8: Native baseline spectrogram for fresh tomatoes

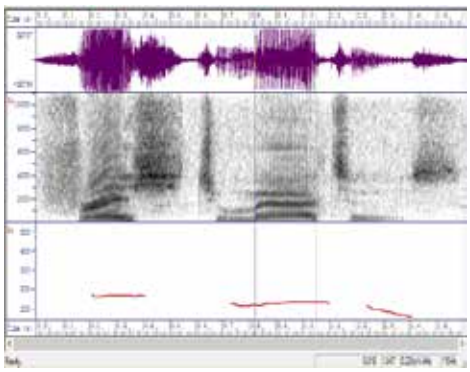
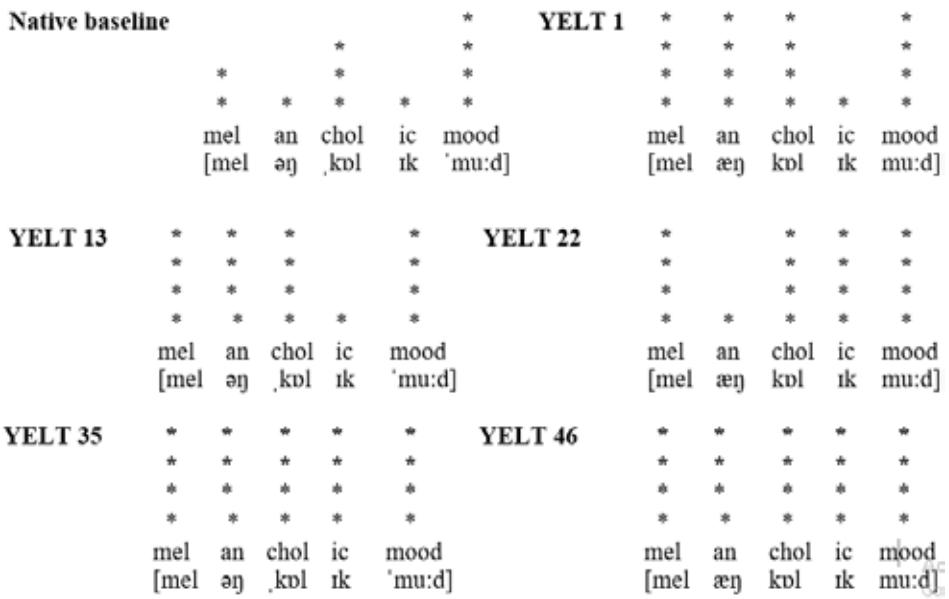


Figure 9: Spectrogram for fresh tomatoes as produced by YELT 36

The spectrograms above show the productions of the native baseline and YELT 36 for *fresh tomatoes*. While the native baseline produced *-ma-*, the nuclear syllable, in 265Hz and 196ms against the 251Hz and 91ms of *fresh,* thereby producing *-ma-* with higher pitch and longer duration than any other

syllable in the phrase, the representative YELT produced *-ma-* at a pitch of 115Hz and duration of 228ms against the 172Hz and 197ms of *fresh*. These readings show that the pitch of *-ma-,* which is the most prominent syllable in the NB production, is lower than the pitch of *fresh,* another stressed syllable in the phrase. Just as in the NB production, the duration of *-ma-* is longer than that of any other syllable in the phrase. However, while the NB produced the weak syllables, *to-* and *-toes*, in 200Hz/73ms and 213Hz/123ms respectively, YELT 36 produced them in 125Hz/135ms and 114Hz/231ms. The distinction between strong and weak syllables reflected in the NB spectrogram is not a feature of the YELT's production.

Metrical grid for *melancholic mood*



The metrical grids above show the dominant stress patterns of the English language teachers for *melancholic mood*. Overall, the performance of the teachers is another evidence of stress clash. This tends to further establish that the English language teachers are more comfortable with the use of strong syllables than weak ones. While the native baseline applied the LCPR to assign stress to only three syllables, /mel/, /kɒl/ and /mu:d/, the participants either assigned prominence to all the syllables or rendered only one syllable weak. The waveform and pitch contour of YELT 22 exemplifies the stress pattern of the English language teachers.

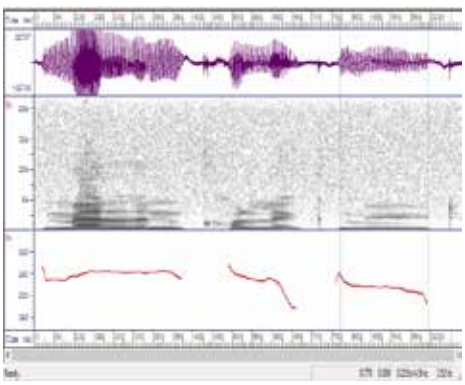


Figure 10: Native baseline spectrogram for melancholic mood

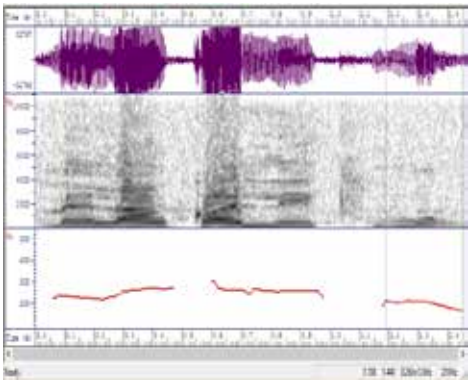
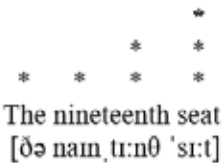
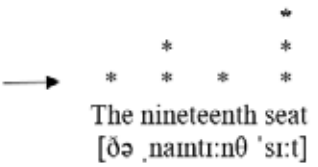
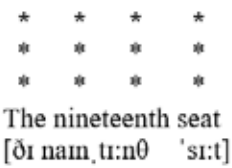
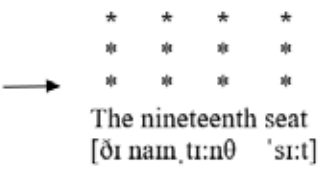
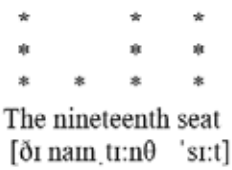
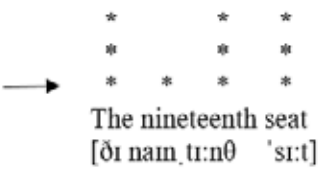
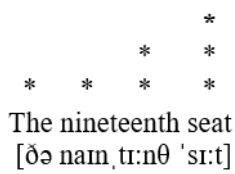
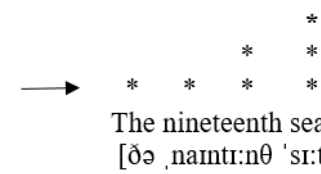
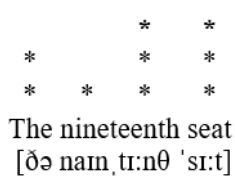
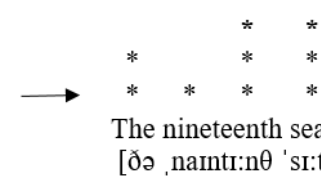
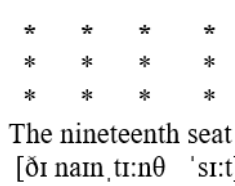
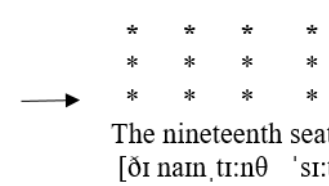


Figure 11: Spectrogram for melancholic mood as produced by YELT 22

Figures 10 and 11 show the respective spectrograms of *melancholic mood* as produced by the native baseline and YELT 22 respectively. The three stressed syllables in the phrase- *mel, chol* and *mood-* were produced by the NB in 249Hz/193ms, 248Hz/155ms and 252Hz/220ms respectively. Hence, *mood* was the most prominent in the structure. The readings for the weak syllables (*-an-* and *-lic*) which alternated with the stressed syllables are lower than those of the strong ones (240Hz/148ms and 133Hz/77ms respectively). In the YELT's spectrogram, the readings for *mel, chol* and *mood* are 225Hz/190ms, 301Hz/180ms and 210Hz/260ms respectively, while those of *-an-* and *-lic* are 271Hz/222ms and 264Hz/272ms respectively. By this reading, the YELT did not assign nuclear stress to *mood* as done by the native baseline since its pitch is lower than the pitch of the other syllables in the phrase and its duration is lower than that of *-lic*, an unstressed syllable which the NB produced in 77ms.

5.2.2 Metrical and acoustic analyses of YELTs' stress shift in noun phrases

It has been widely claimed that English language tends towards a regular alternation between stronger and weaker syllables and adjusts stress levels to ensure this (Roach, 2000; McMahon, 2002; Gimson, 2008). In cases of adjacent stressed syllables, as in *thir'teen 'men* (WSS), the clash is resolved by the application of Iambic Reversal Rule, which moves the first stressed syllable leftward such that *thir'teen 'men* (WSS) yields *'thirteen 'men* (SWS) (Liberman and Prince 1977). This rule application retains the stress-timing notion in the English language as it allows the metrical grid to space stress out. The result of this is called stress shift. To establish the English language teachers' re-assignment of phrasal stress, a noun phrase whose first stressable element is an iamb, *the nineteenth seat,* was extracted from the text for metrical and acoustic analyses. The productions of the representative YELTs are juxtaposed with those of the native baseline below.

Participant	Pre-stress-shift metrical grid	Post-stress-shift metrical grid
Native baseline		
YELT 9		
YELT 20		
YELT 28		
YELT 36		
YELT 45		

YELTs' Representative metrical grid for *the nineteenth seat*

The analysis above indicates the baseline's thorough application of the Iambic Reversal Rule (IRR). By so doing, the stress on the penultimate syllable of *the nineteenth seat* was reassigned to the syllable before it (*nine-)* in order to key into the stress-timing notion in English language. Hence, while her pre-stress-shift metrical grid showed a WWSS pattern, her post-stress-shift metrical grid showed a WSWS pattern. None of the YELTs demonstrated any knowledge of the stress shift phenomenon in their productions.

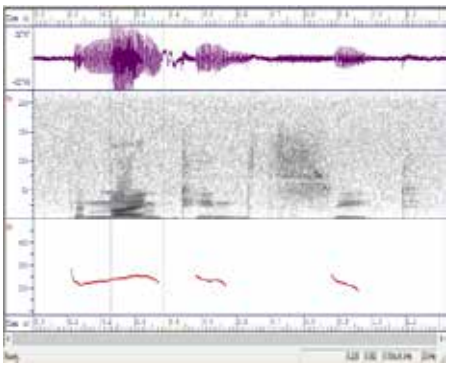


Figure 12: Native baseline spectrogram for the nineteenth seat

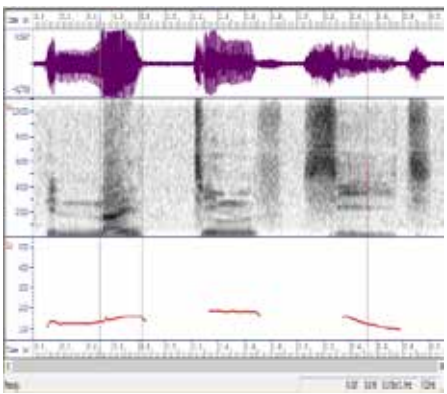


Figure 13: Spectrogram for the nineteenth seat as produced by YELT 9

The production of *the nineteenth seat* as done by YELT 9 compared with the native baseline production is displayed in Figures 12 and 13. The head of the phrase (*seat*) is modified by *nineteenth*, a word with the WS structure. Hence, the structure of the phrases is WSS. The native baseline, in order to avoid stress clash, shifted stress from *-teenth* (235Hz/154ms) to *nine-* (229Hz/140ms). The YELT, on the other hand, retained the prominence on *-teenth,* produced at 187Hz and 484ms, against 132Hz and 335ms at which *nine-* was produced.

6. Findings

The statistical analysis revealed only 7.5% YELTs' conformity to the native baseline stress pattern and 5.4% nuclear stress assignment. The YELTs shifted stress in only 33.3% instances in order to avoid stress clash. This points to their inadequate knowledge of contextual alteration of stress. The metrical grids of the YELTs revealed preference for stronger syllables over weaker ones, contrary to the baseline pattern. In most cases, nuclear stress was not assigned by the YELTs. Unlike the baseline production, YELTs' grid placeholders did not reveal the expected reassignment of stress necessitated by iambic feet reversal for avoidance of stress clash. The acoustic representation of the YELTs' stress patterns validates the findings of the metrical and statistical analyses. While the waveforms and pitch contours

of the native baseline revealed a variation in the prominence assigned to the syllables of each utterance, hence the alternation between stronger and weaker syllables, those of the YELTs show high pitch and long duration, even on syllables unstressed by the native baseline. No remarkable difference was observed in their production of stressed and unstressed syllables in each of the utterances.

7. Conclusion

The extent to which English language teachers who are of Yoruba ethnicity are able to model English phrasal stress assignment to their students and/or the general users of English was investigated in this study. Based on the findings of the study, the teachers do not possess the capability to serve as models for Standard English phrasal stress assignment. This finding is in consonance with the findings of Aina (2014, 2018), Akinjobi and Aina (2014), Adesanya (2014, 2020) and Agboyinu (2018). The stress pattern of the teachers did not distinguish them from other Nigerian speakers of English, despite their academic competence, thereby confirming Akinjobi's (2011) assertion that academic competence is not necessarily a guarantee for better linguistic performance.

8. Recommendations

This study recognises that Nigerian English language teachers are L_2 users of English who do not possess native competence in the language. However, a degree of approximation to standard form is expected by reason of social consideration of the teachers, in addition to their academic training, as supposed models/professionals who owe their learners the responsibility of assisting them as well as the general public to identify and use a form of English which ensures them maximum international intelligibility. The teachers' performance in this study lacks such approximation. This may adversely affect the English pronunciation of their young learners for whom, according to Gimson (2008), ability to mimic the teachers (rather than the teachers' explanation) is sufficient. In other words, learners are often inclined to patterning their spoken English after their teachers'. The pronunciation abilities of the general users of English, who consider and trust the teachers as professionals worthy of emulation, may also be affected. Also, as Nigeria is yet to have a standard national variety of (spoken) English which could be used for pedagogical purposes, the Received Pronunciation remains the model on which teaching, learning and assessment of English is based. The teachers' performance in this study will only translate to poor students' performance in spoken English aspects of Senior Secondary Certificate and (post) Unified Tertiary Examinations.

Teachers of English language are, therefore, encouraged to realise the responsibilities attached to their position in the society and make deliberate efforts such as constant oral practices to improve their spoken English. Also, Information and Communications Technology has drawn native and non-native speakers of English closer. English language teachers are advised to

exploit technological means (such as electronic media sources, audio aids of Standard English dictionaries, internet sites with speech drills etc.) through which, even in their L2 setting, they can access native English. These utilities termed non-enculturation sources of native English by Akinjobi (2015) have been confirmed veritable means of enhancing English pronunciation ability by Adesanya (2020) and Aiyeola (2020).

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