A Re-evaluation of the English-French Stress Patterns: A Case for Anglophone Speakers/Learners of French in Nigeria

[1]Paschal Dada Omage, [2]Chinyere Uchegbu-Ekwueme & [3]Patience Ebanehita Olumese
[1&2]Department of English and Linguistics, Federal University Dutse, Jigawa
[3]The Nigeria French Language Village, Badagry

Abstract
One of the universal attributes of human language is that language is not monolithic. This paper re-examines the English stress patterns and how they influence the quality of French spoken by some Anglophone speakers/learners of French, thereby reducing the intonational and rhythmic flow of Standard French. Data were sourced from 50 excited Educated Anglophone Speakers/Learners of French (EASoF) in Nigeria who, through purposive random sampling, were administered 30 words of disyllabic, trisyllabic and polysyllabic nature to produce in a Zoom-HLN audio recorder. Data were first subjected to quantitative analysis, using the SPSS Pearson Chi-Square test and later to qualitative analysis, based on the stress-segment tiers of the Autosegmental Phonology. Although the paper did not justify the 'errors' made, it argues that they are factors that necessitate linguistic variation. The paper concludes by giving a two-dimensional counsel that if English interference is seen as an encroachment on or infiltration into the French prosodic inventory by way of stress patterns, measures to eradicate it and ameliorate the pedagogical methodology ought to be taken. Alternatively, a variationist approach should be considered, seeing that the enhancing factors are available.
Key Words: Stress Patterns, English-French, Re-evaluation, Errors, Variation.

Introduction
In phonology, stress, otherwise called accent refers to the relative emphasis or oral prominence given to a particular syllable in a word and is distinguishable by increased intensity/loudness, vowel length, change in tone and complete realisation of the vowel (This definition is within the scope of this paper, since it is on word stress). Some languages have fixed stress in the sense that the stress on any multisyllabic word falls on a particular syllable, usually the last, the first or the penultimate syllable, while in other languages, stress is free and falls on any syllable, according to the rules of such languages. This phenomenon, thus engenders the influence of L1 on L2 or L2 on L3 as the case may be. Polish, for instance, a language from Central Europe places its stress on the penultimate syllable while Finnish, also in Europe, stresses the first syllable. French, the language under review in this paper, places its stress predictably on the last syllable of the word. French is in fact, described as *une langue qui n'a pas d'accent libre* (a language without a free accent/stress). That is why French is sometimes described by some phonologists such Sébastien-Gallés, Ladefoged, Greenberg etc. as entirely lacking lexical stress. On the contrary, some other languages such as English and Russian have unpredictable lexical stress with more than one level of stress identified. In Nigeria,

English is the official language and occupies the second language position (L2) while French is L3 and was almost going to be a second official language. The contrast in the stress patterns of the two languages gave birth to a research of this nature.

The need for this research was birthed from the fact that a lot of works have been done on English and French stress patterns with little or no attention paid to how English stress patterns have surreptitiously infiltrated the quality of French spoken by some Anglophone speakers/learners of French, thereby reducing the intonational flow and rhythm of the language. This paper is, therefore designed to re-evaluate the trend (for EASoF who may, since French is spoken with an accent (Ade-Ojo, 2008; Omage, 2022), fall victim of French laboratory exercises and oral expressions) in a bid to either justify it by way of Variationist Linguistics or totally abhor it and find pathways of amelioration for better grades and thus maintain the prosodic poise of the Standard French.

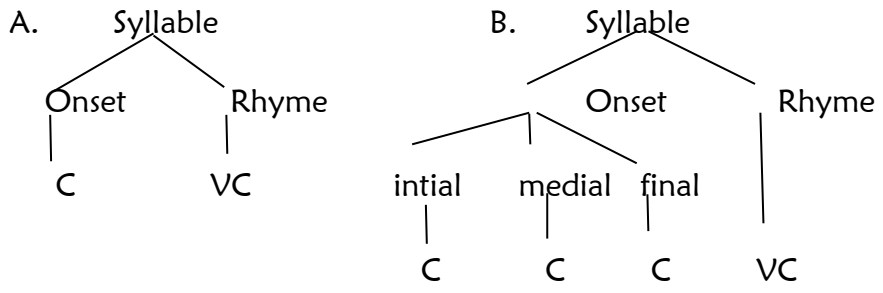
Conceptual Review of Literature

The Syllable

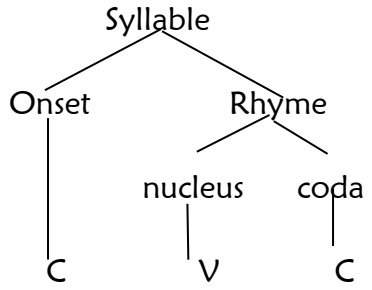
In phonology and studies of languages such as French and English etc., syllables are often considered the 'building blocks' of words and they influence the rhythm of the language, its prosody, poetic metre and stress patterns, which is the crux of this paper. A syllable can, thus be defined as a basic unit of organisation within a sequence of speech sounds (word), typically referred by linguists (Adekeke, 2018; Harmington et al, 2014; Omozuwa et al, 2011; Ladefoged, 2001) as a nucleus (vowel) with optional parts/sounds (consonants) before or after the nucleus. In the International Phonetic Alphabet (IPA), the fullstop (.) marks syllable breaks/divisions such as in 'phonology' /fə.nɒ.lə.dʒi/, meaning that the word has four syllables (a polysyllabic word). The stress mark (ˈ) is placed immediately before a syllable to indicate that that syllable is the stressed syllable in the word, for example, /fə.ˈnɒ.lə.dʒi/.

The Syllable Structure

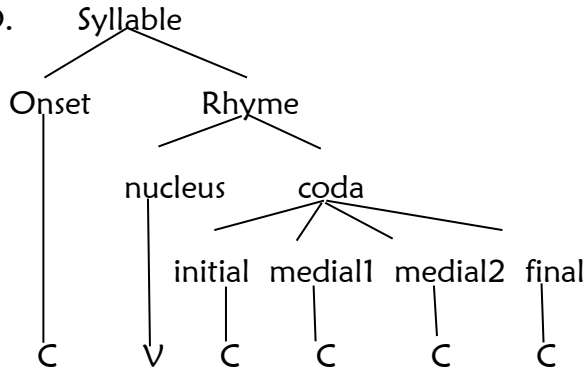
The general structure of a syllable consists of two segments: onset and rhyme, which are further sub-divided into onset, nucleus and coda, as shown in the diagrams below:



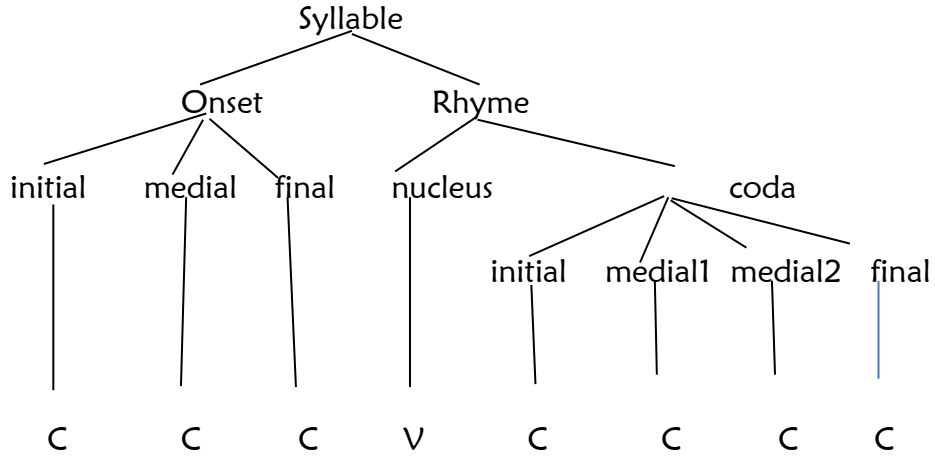
C.



D.



E.



The diagrams (trees) a, b, c, d and e above indicate the different structures of a syllable. A shows that a syllable has two segments: onset (consonant) and rhyme (both vowel and consonant). B shows that onset can be made of up to three consonants (initial, medial and final) in words like 'street' /**str**i:t/ in English and 'stranguler' /**str**ɑ̃gyle/ in French. C indicates that rhyme is composed of nucleus (vowel) and coda (consonant). D shows that coda can be up to four consonants in words like 'sculpts' /skʌ**lpts**/ in English and up to two consonants in French: 'prêtre' /pʁɛ**tʁ**/. Lastly, E shows the full syllable structure with all its components (Osisanwo, 2016; Adeleke, 2018; Omozuwa et al, 2011).

Words and Morphemes

A word is the smallest thing that can be said with meaning. This contrasts with a morpheme which is the smallest unit of meaning but, unlike word, may not stand on its own (John, 2015; Haspelmath, 2011). A word may consist of a single morpheme, such as run, expect etc. or several such as unexpected, unstoppable, undecided etc., whereas a morpheme can only be 'single' within a word. Such morphemes are, from the words above, -un, -ed, -able. This phenomenon does not happen in English alone but in many other languages such as French (*in**dé**cise*, *in**croy**able*, *répon**du*** etc.) where

morphemes can be joined to create other words in a process of morphological derivation. In English, French and many other languages, the morphemes that make up a word generally include at least one root, such as 'expect', and possibly some affixes (prefixes and suffixes). Interestingly, in the two languages under study, it is not impossible for the affixes to carry stress mark, especially in French where the last syllable attracts the tonic accent (Fougeron et al, 1999; Adeleke, 2018).

Review of Related Works

So much research has been carried out as regards stress patterns both in English and in French, but not much has been done in the area of comparison and linguistic variation, especially the English-French comparison. Heselwood (2017) reveals the variant word stress patterns in New Zealand English as opposed to Standard English, Tench (2019) revamps and reiterates the English stress patterns in his work, Giegerich (2018) gave a reassessment of English word stress, touching on areas of its complexity and entanglement, Al Haj (2020) gave a pedagogical approach to teaching English word stress patterns to Saudi Students whose daily medium of exchange is Arabic, Gut (2019) explores stress peculiarities in Nigerian English, exposing its inadequacies as opposed to Standard English. On the flip side, there are also several works in French stress patterns such as Mertens (2004) who gave a quantitative study of rhythm and accentuation (stress) in French, Wlodarczyk (2007) who gave a comparative study of French sentence stress, Encrevé (1997) who presented an instrumental analysis French sentence stress and a host of others. The fact that so much work has been carried out on stress patterns in languages underscores its importance in speech. A language spoken without its natural stress patterns may endanger its intellectual and academic relevance, such as the one this paper addresses.

Methodology

Being a re-evaluation of the impact of English-French stress patterns on an Anglophone speaker/learner of French, this research adopts both primary and secondary sources of data/information on the one hand, and both quantitative and qualitative data analyses, on the other hand. Deploring the tools of participant observation and interview, data were sourced from 50 Educated Anglophone Speakers of French (EASoF) who came from different universities within Nigeria for their yearly French Immersion Programme (FIP) in the Nigeria French Language Village, Badagry, Lagos. The excited participants, through purposive random sampling, were given 30 words of monosyllabic, disyllabic and polysyllabic nature to produce in a Zoom-HLN audio recorder due to its excellent sound quality and ease of use. Data were first subjected to quantitative analysis, using the SPSS Pearson Chi-Square test and later to qualitative analysis, based on the stress-segment tiers of the Autosegmental Phonology.

Theoretical Framework (Autosegmental Phonology, AP)

This paper adopts the AP theory which is a phonological representation propounded by Goldsmith (1976, 1990). It developed a formal account of ideas that had been sketched in earlier works by different linguists, notably Bloch (1948), Hockett (1955) and Firth (1948). Phonological representations consist of more than one linear sequence of segments which constitute a separate tier. In AP, a large part of phonological generalisations can be interpreted as a restructuring of autosegments in a representation. A clear example of the usefulness of autosegments analysis came in from the detailed study of African tonal languages, vowel and nasal harmony systems. Segments are depicted through vertical listings of distinctive features. A segment is identified by a +/- dichotomy of a series of binary features some of which are sub-features of unary features (place of articulation, etc.). AP deals with several distinctive tiers, each of which shows a different language feature. The tiers include segmental tier, timing tier (length of segment), stress tier, tone tier, nasal tier etc (This work basically focuses on the stress tier for theoretical analysis). Distinctive features (DFs) are grouped as major class features, cavity features, tongue body features, tongue root features, laryngeal features, manner features and prosodic features (Chomsky & Halle, 1968; Katambe, 1992; Salawu, 2002; Oyebade, 2012; Sangotade, 2014; Omage, 2022)

Data Presentation

The data for this research are given in the Table below, containing ten disyllabic, trisyllabic and polysyllabic words each:

French	Transcription, Syllabification and Stress Placement	English	Transcription, Syllabification and Stress Placement
1. Bébé	/be.ˈbe/	Baby	/ˈbei.bi/
2. Écoute	/e.ˈkut/	Listen	/ˈlis.ən/
3. Maison	/mɛ.ˈzɔ̃/	Mansion	/ˈmæn.ʃən/
4. Saleté	/sal.ˈte/	Dirty	/ˈdɜː.ti/
5. Manger	/mɑ̃.ˈʒe/	Manger	/ˈmein.dʒə/
6. Pirogue	/pi.ˈʁɔg/	Canoe	/kə.ˈnuː/
7. Fenêtre	/fə.ˈnɛtʁ/	Window	/ˈwin.dəu/
8. Portable	/pɔʁ.ˈtabl/	Portable	/ˈpɔː.tə.bəl/
9. Immeuble	/i.ˈmœbl/	Building	/ˈbil.diŋ/
10. Coupant	/ku.ˈpɑ̃/	Cutting	/ˈkʌ.tiŋ/
11. Professeur	/pʁɔ.fɛ.ˈsœʁ/	Professor	/prə.ˈfɛ.sə/
12. Animal	/a.ni.ˈmal/	Animal	/ˈæ.ni.məl/
13. Marchandise	/maʁ.ʃɑ̃.ˈdiz/	Merchandise	/ˈmɜː.tʃən.dais/
14. Chocolat	/ʃɔ.kɔ.ˈla/	Chocolate	/ˈtʃɔ.k(ə).lət/

15. Avocat	/a.vɔ.ˈka/	Advocate	/ˈæd.və.kət/
16. Canapé	/ka.na.ˈpe/	Canopy	/ˈkæ.nə.pi/
17.Linguistique	/lɛ̃.gwis.ˈtik/	Linguistics	/liŋ.ˈgwis.tiks/
18. Amitié	/a.mi.ˈtje/	Amicable	/ˈæ.mi.kə.bəl/
19. Musicien	/my.zi.ˈsjɛ̃/	Musician	/mju.ˈzi.ʃən/
20. Univers	/y.ni.ˈvɛʁ/	Universe	/ˈju.ni.vɜ:s/
21. Université	/y.ni.vɛʁ.si.ˈté/	University	/ju.ni.ˈvɜ:.sə.ti/
22. Télévision	/te.le.vi.ˈsjɔ̃/	Television	/tɛ.li.ˈvi.ʒən/
23. Caratéristique	/ka.ʁak.te.ʁis.ˈtik/	Characteristics	/kæ.rək.tə.ˈris.tiks
24. Responsabilité	/ʁɛs.pɔ̃.sa.bi.li.ˈte/	Responsibility	/ris.pɒn.sə.ˈbi.li.ti/
25. International	/ɛ̃.tɛʁ.na.sjɔ.ˈnal/	International	/in.tə.ˈnæ.ʃə.nəl/
26. Traditionnaliste	/tʁa.di.sjɔ.na.ˈlist/	Traditionalist	/trə.ˈdi.ʃnə.list/
27. Nationalisme	/na.sjɔ.na.ˈlism/	Nationalism	/ˈnæ.ʃə.nə.li.zəm/
28. Information	/ɛ̃.fɔʁ.ma.ˈsjɔ̃/	Information	/in.fə.ˈmei.ʃən/
29. Obligatoire	/ɔb.li.ga.ˈtwaʁ/	Obligatory	/ə.ˈbli.gə.tri/
30. Intermédiaire	/ɛ̃.tɛʁ.me.ˈdjɛʁ/	Intermediary	/in.tə.ˈmi:.diə.ri/

In the Table above, the words are syllabified with the use of a dot (.) while the stressed syllable is indicated with the use of the stress mark (ˈ).

Quantitative Data Analysis (Descriptive Statistics, SPSS)

Thirty words of disyllabic, trisyllabic and polysyllabic nature were administered to 50 participants and the following results ensued according to Pearson Chi-Square Test:

‖ Syllable Stress ‖ Frequency ‖ Percent ‖
‖ Incorrect ‖ 13 ‖ 26% ‖

Chi-Square Test Results
‖ Value ‖ df ‖ Sig. (2-sided) ‖
‖ Pearson Chi-Square ‖ 23.456 ‖ 1 ‖ .000 ‖

Interpretation of Results

Thirty-seven participants (74%) produced the words with correct syllable stress, while 13 participants (26%) did not. The chi-square test results show a significant difference between the proportion of correct and incorrect syllable stress ($p < .001$), indicating that the observed difference is unlikely to be due to chance.

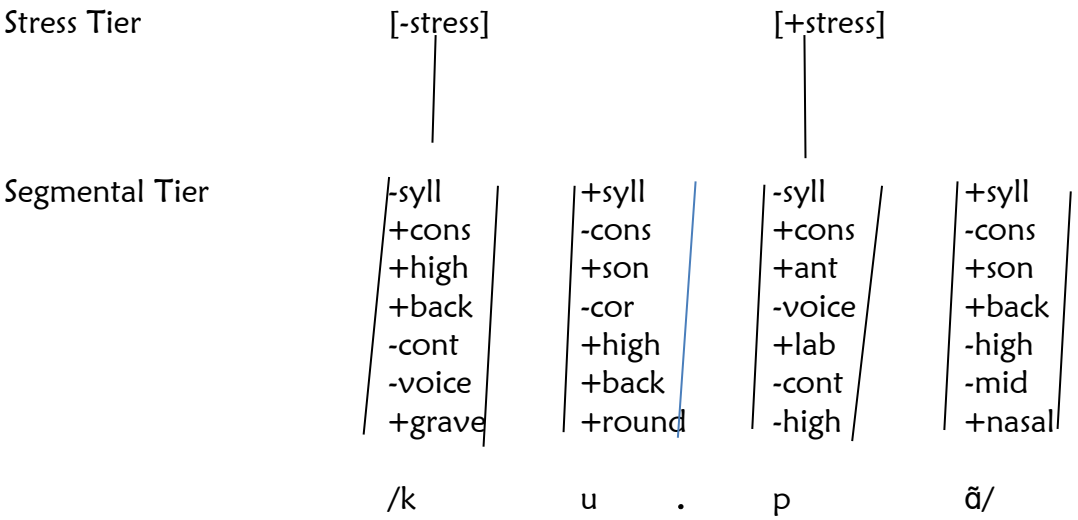
Qualitative Data Analysis (Autosegmental Phonology)

As previously mentioned, the Autosegmental Phonology will be used and employed in this qualitative analysis of data. The stress tier contains the features that show the distribution of stress in the phonological representation. The features in the stress tier

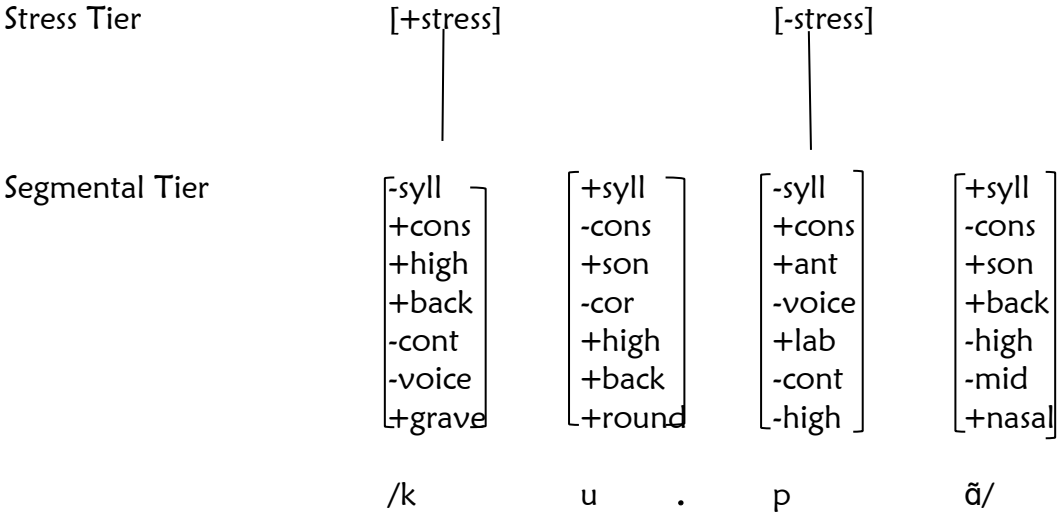
are [+/- stress] and [+/- main] and they are assigned to the stress-bearing units of the language, syllables or moras.

The French disyllabic word 'coupant' /ku.ˈpɑ̃/ is generally stressed in the second (which is the last) syllable while the English counterpart 'cutting' /ˈkʌ.tiŋ/ is stressed in the first syllable. As a result, some Anglophone speakers/learners of French (as revealed in the quantitative analysis) tend to place the stress on the first syllable of the French word, thus producing [ˈku.pɑ̃], instead of /ku.ˈpɑ̃/, which eventually distorts the natural intonation of the language. The Autosegmental representation is given in Figures 1a and b below:

1a.

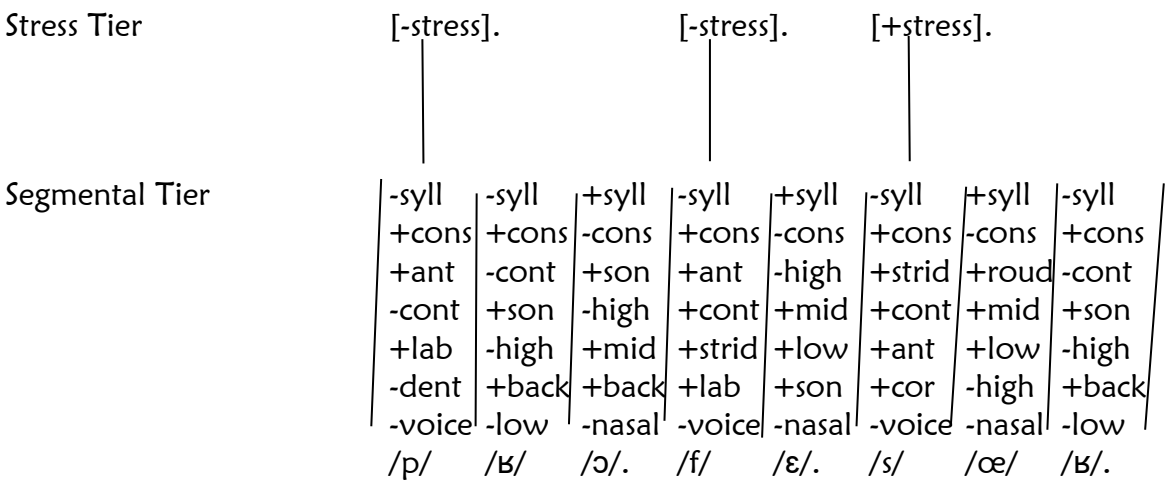


1b.

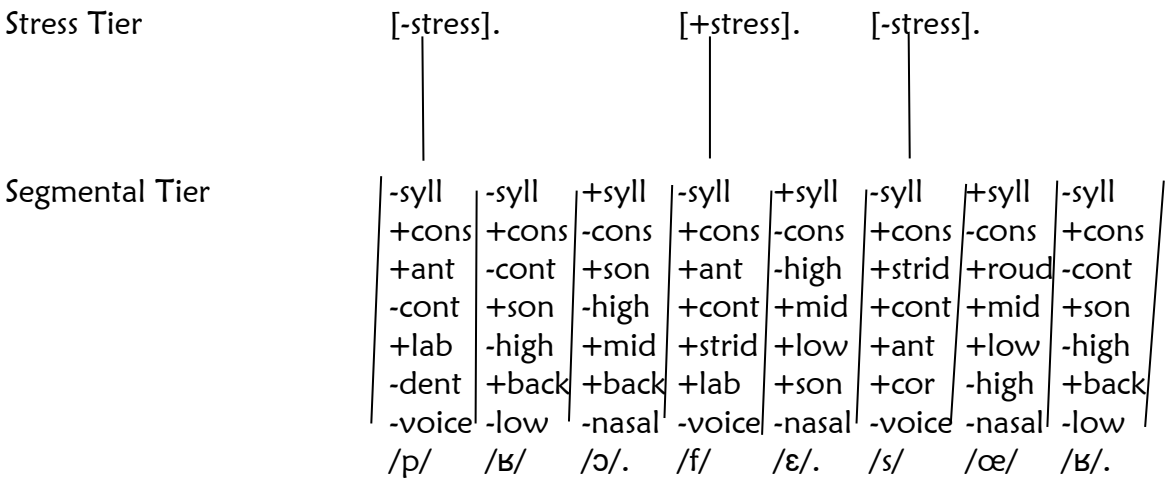


From the Figures 1a and 1b above, the stress tier is naturally assigned to the second syllable in 1a, while in 1b, the stress is assigned to the first syllable of 1b, which is typical of some Anglophone speakers/learners of French. The next analysis is experimented with a trisyllabic word 'professeur' /pʁɔ.fɛ.sœʁ/ (teacher), whose first syllable gets stressed by Anglophone French speakers, instead of the last one.

2a.

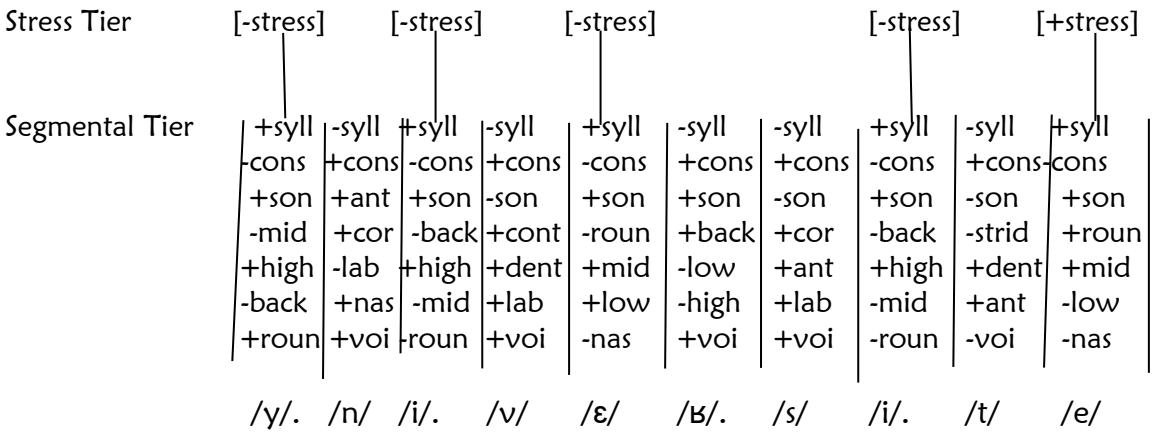


2b.

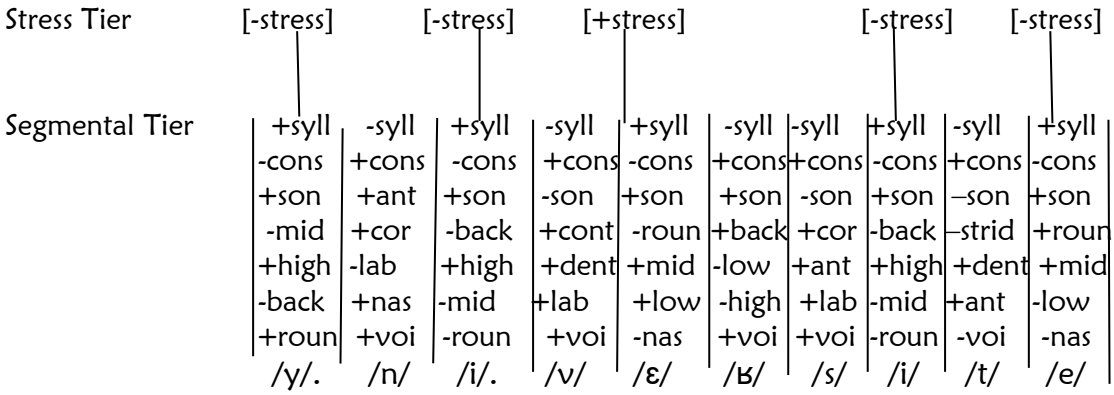


Figures 2a and 2b above show a typical trisyllabic word 'professeur' (professor) and its autosegmental representation. In English, the second syllable attracts the stress as shown in the data presentation while in French, the stress, as usual, falls on the last syllable which is the third. An Anglophone French speaker/learner may be tempted to place the stress on the second syllable of 'professeur', thereby, altering the natural accent of the French language. The next analysis showcases a polysyllabic word 'université' /y.ni.vɛʁ.si.te/ (university):

3a.



3b.



Figures 3a and 3b clearly show the autosegmental representations of a polysyllabic (five syllables) word. Generically, polysyllabic words in English carry their stress depending on the nature of the words but in this particular word (university) above, the stress is on the third syllable due to its 'ty' ending, arising from the English rule that any poly word ending in 'ty' carries its stress on the third syllable from the right. In French, on the other hand, the stress naturally falls on the last syllable of any kind of word. As represented above, 3a shows the natural disposition of the word (université) with the stress [+stress] on the last syllable, whereas 3b indicates the English-influenced production, having the stress shifted to the third syllable from the right.

Discussion

The result of the quantitative analysis clearly indicates that the observed significant difference between the proportion of correct and incorrect syllable stress ($p < .001$) is unlikely to be due to chance. In other words, it is a clear case of the strong influence of English on the spoken French of some of the participants (26%). In the same vein, the qualitative analysis indicates a shift in the stress tier ([+stress]) from the last syllable of a

French word, whether disyllabic, trisyllabic or polysyllabic, to any other one, depending on the English or Anglicized pattern.

The fact that words of a language have certain prosodic structures is a long-standing phonological base in many researches particularly those pursued within the premise of prosodic frameworks (Oyinloye, 2024). The two instances of stress [±stress] in this paper can be deemed valid only if it is assumed that staying faithful to the English stress patterns by Anglophone French speakers and not preserving the language's ultimate-syllable structure are just by-products of the influence of English on French. One of the universal attributes of human language acknowledged by linguists all over the world is that language is not monolithic (Oyebade, 1995; Sangotade, 2014). With time and space through geographical spread, two or more peoples who initially spoke the same language will begin to experience divergences in their speech patterns (Fadoro, 2011) which often leads to gradual change to dialects, hence, there are American English, Canadian English, Nigerian English etc. The situation is similar in the learning and speaking of a second language like French in Nigeria, an Anglophone country colonized by Britain with her highly stringent linguistic rules. Here thus, lies the justification for this work: should there now be a push for a gradual change to dialects of French in Anglophone countries such that there will be American French, British French, Nigerian French, Ghanaian French etc. just like its English counterpart?

At the initial stage, it may be considered as linguistic interference but as it spreads, variation may be noticed. Therefore, it can be posited that through interference theory, errors, whether substitution, insertion, deletion or shift (as in this work), are major contributing factors to variation in language. In this paper, Interference theory is inferred alongside Autosegmental theory which is paramount and largely the analytical base. Interference theory justifies the basis for contrastive studies by bringing out typology of errors from the psycholinguistic point of view, not to justify them but to emphasise that they are factors that can necessitate linguistic variation (Sangotade, 2014). Besides, in previous works on variationist studies (Herbonne, et al, 2009), Variationist Linguistics is considered as a sub-field which occupies a modest place in Linguistics.

Conclusion

This paper has taken no sides at all in the divide but has definitely proposed options for an objective pick. If the English interference is seen as an encroachment on or infiltration into the French prosodic inventory by way of stress patterns, then measures to eradicate it and ameliorate the pedagogical methodology at classes ought to be taken. Otherwise, a variationist approach should be considered, seeing that the enhancing factors are available.

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