



JOURNAL OF THE ASSOCIATION OF PHONETICIANS AND PHONOLOGISTS IN NIGERIA (JAPPIN)

VOLUME 6, 2025

ISSN: 2814-3612

A Special Edition in Honour of
The Late Prof. David Jowitt

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ISSN: 2814-3612

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ISSN 2814-3612
Jappinjournal350@gmail.com

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**JAPPIN: Journal of the Association of Phoneticians
and Phonologists in Nigeria**

Volume 6, 2025

ISSN 2814-3612

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*The Association decided to dedicate this volume
to the Late Prof David Jowitt because he was a
committed member of its Board of Trustees until
his death in 2023.*

*Professor Taiwo Olayemi Soneye
Founding President,
Association of Phoneticians and Phonologists in Nigeria.*

Notes to Contributors

JAPPIN is the Journal of the Association of Phoneticians and Phonologists in Nigeria. It is an outlet for reports of empirical studies and theoretical expositions within the purview of the spoken language, phonetics and phonology, elocution and related areas.

Submissions should comply with the style adopted by the journal. Manuscripts should be original and must not have been previously submitted for publication in any other journal. Manuscript word length **must** not exceed **6000** words (including the Abstract and References. Manuscript should be typed in Times New Roman, Font 12; the transcriptions may appear in Lucida Sans Unicode and the British spelling is preferred.

There should be an abstract of not more than **200** words. The manuscript title should be written in title case and in bold fonts. The major subheadings should also appear in title case and in bold fonts, while other subheadings may be in title case but not in bold fonts. The cover page should include the Paper Title, Names of Author(s) with surname(s) appearing last, the address of the institution and the email address. The number of pages should be below the page in the centre. Introduction, review of literature, aim and objectives, methodology, analysis, findings and conclusion should be succinctly explained and clear. The manuscript should be written in English. And not more than 15 pages. Double line spacing. Accurate translation into the English language of texts in other languages is required. Findings and Discussion Charts and Tables should be carefully labelled and discussions of findings should be clear to readers who are not Phoneticians and /or Phonologists.

The APA style sheet is preferred for the References. In-text citations should be correctly referenced and secondary citations should be avoided. The format of the Journal of the International Phonetics Association is the recommended model. This may be downloaded online. Articles should be submitted to: **jappinjournal350@gmail.com**

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EDITORIAL

Journal of the Association of Phoneticians and Phonologists in Nigeria (JAPPIN) is a blind, peer-reviewed international journal. It is the official journal of the Association of Phoneticians and Phonologists in Nigeria. This is its sixth volume and is dedicated in Honour of the Late Professor DAVID ROGER JOWITT. All thirteen papers that appear in this volume were carefully selected for quality and impact. They attempt to do justice to evolving developments in the areas of phonetics and phonology from diverse perspectives.

The journal publishes well researched original articles that address any issues, topics or phenomena in areas of phonetics and phonology and related sciences. Preference is given to data-driven scholarly articles. Well-written book reviews and review papers may also be considered. Papers submitted for publication must be original and must not have been published before and must not be under active consideration for publication elsewhere. Manuscripts should be typed in Times New Roman 12 points, and all special symbols should be embedded in the Word file. The transcriptions may appear in Lucida Sans Unicode. The British spelling convention is preferred. There should be an abstract of about 200 words, which must be accompanied with not more than 5 keywords. Manuscripts' sections and subsections should be numbered as follows:

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Footnotes, which must be sparingly used only for substantive materials, should also be numbered consecutively. Only materials that are explicitly cited in the work should be listed in the References; and each reference item should include: (a) author(s) surname and initials; (b) the date of publication; (c) for books, place of publication and name of publisher; (d) for articles, volume number for journals and page numbers for both journal articles and papers in collections. The APA style is preferred. Publication is largely funded by the Association.

Editor

A Tribute to DAVID ROGER JOWITT (1941-2023)

Professor David Roger Jowitt, FNAL, was born in London in 1941 but had northern English roots. His father was an electricity company driver and his mother was a seamstress. He grew up in Wood Green, London, with two sisters: Audrey, who survives him, and Mary, who died many years ago.

Despite his working-class background, David excelled academically, attending grammar school and then reading History at Cambridge University in 1960. He passed his first-year examination with a first-class grade and his second-year examination with an upper second class grade. So, naturally, he was hoping to graduate with at least an upper second-class honours degree at the end of the third year. But, alas, to his surprise and disappointment, he ended up with a second-class lower honours degree. Several less well-endowed classmates of his, who were from the right social background, graduated with the much-coveted upper second class. The British social class system was at work! He then tried to get a civil service job but he was only offered a position as a tax officer, which he rejected. He was twenty-three years old and his life was in search of a purpose. The prospects of securing a decent job in Britain were gloomy, so he began to explore options abroad and someone suggested a teaching job in Nigeria. This was 1963, when Nigeria was a young, independent nation.

He was employed by a new community secondary school at Ubulu-Uku in the then newly-created Mid-Western Region and present Delta State. One of his students at that school was Professor Kester Echenim, a Professor of French at the University of Benin, and a past Secretary of NAL. This was the beginning of his love affair with Nigeria, a country which gave his life a purpose. He returned to London after two years but could still not find a decent and permanent job, even after qualifying as a teacher by completing the Postgraduate Certificate in Education course at Cambridge. He therefore applied to return to another teaching job in Nigeria, this time at the Dennis Memorial Grammar School in Onitsha, the oldest Anglican secondary school in the East. He flew back to Nigeria to take up this post in September 1966, when the storm of the Nigerian civil war was already gathering. He had to leave Onitsha back to Britain when the Nigerian civil war broke out in 1967, after barely a year in Onitsha. However, his mind was still in Nigeria even as the civil war was raging, so he applied for a job as a relief

officer under the auspices of the World Council of Churches and was sent to 'Biafra' in 1969. However, his stint there was short-lived as he had to leave on the last flight out of Biafra before the surrender in January 1970. Thereafter, he took up an appointment as an English teacher with an oil company in Libya for two years. As the pay was generous, he was able to save enough money to sponsor himself for a Master's degree in Theoretical Linguistics at the University of Essex.

By November 1974, David's old love, Nigeria, had beckoned to him again, so he returned to take up an appointment as a Senior Education Officer with the Federal Ministry of Education to teach at the new Federal Advanced Teachers College at Okene. He stayed there until 1981, when he sought and obtained a transfer to the Federal Advanced Teachers College, Pankshin, in Plateau State, where he stayed until 1986, when he moved to Kano State as an inspector of English based at the Kano Educational Resource Centre. I soon snatched him from there to the Department of English at Bayero University, where he was offered a senior lectureship. He worked hard in both teaching and research and was able, within ten years or so, to rise to the professoriate without a doctoral degree on account of the quality of his publications. He stayed at Bayero for 19 years and was snatched by the University of Jos, where he was until his death.

David so genuinely loved Nigeria that he spent 13 years of his life pursuing his application for its citizenship, which he finally achieved in May 2023. He went home to London on leave in June, 2023 and stayed with his sister Audrey in Beckenham. It so happened that I was also in London in the first week of July 2023 and stayed in Woolwich, where my daughter, Dr Ihsan Jibril, lived near the Queen Elizabeth Hospital, where she worked as a Senior Registrar in Dermatology. So, David and I linked up and agreed to have what turned out to be OUR LAST SUPPER at an Italian restaurant that he chose near his sister's home. This was on the 7th of July 2023 and although he was undergoing a series of medical tests to address some issues of concern, he did not appear to be in pain or to be facing imminent death. But the Great Giver of Life decided that the time allocated to him should expire on the 14th of August, and, unfaillingly, it did.

He was a true Nigerian polyglot with admirable fluency in Igbo, Yoruba and Hausa and the ability to exchange greetings and hold short conversations in Igbirra and Birom. He also spoke French, Italian and Libyan Arabic fluently. He had been working on his Autobiography MY

NIGERIAN WORLD for several years and I was lucky to receive from him, at our last supper, one of twenty copies published privately by a cousin of his. A publisher was working on the version that should by now be available to the general public.

David was unmarried, so he devoted all his time to his teaching and research. He was a productive researcher and a prolific writer. He first started writing textbooks, beginning with *Common Errors in English*, which he wrote jointly with his old friend from Dennis Memorial School, Onitsha, Silas Nnamonu, and which Longman published in 1985. Then he also co-authored three books for senior secondary schools, the *Senior English Project* with Neville Grant and Silas Nnamonu, which Longman first published in 1990. He also authored one of his most famous books, *Nigerian English Usage*, which Longman published while he was at Bayero University in 1991.

He also authored *Oral English for Senior Secondary Schools* for Spectrum Books in 1996. He also co-authored *Gateway to English for Junior Secondary Schools* in 2005. He also authored a set of four books, *Concise Grammar*, which was published by Learn Africa in 2013, *Christianity: A Concise History* (Kraft Books, Ibadan 2010), *English Language and Literature in Historical Context* (Spectrum Books, Ibadan 2009) and *Nigerian English* (De Gruyter Moton 2019).

David also co-authored a book on oral English and phonics with me and Sam Ayodele for UBEC: *Manual for the Training of NCE Teachers in Phonics and Oral English* by M Jibril, S Ayodele and D Jowitt, published by Universal Basic Education Commission, Abuja, 2022. David also published numerous articles in high quality journals.

With his passing away, Nigeria has lost one of her finest sons and we have lost a friend and a brother like no other. May his generous soul find peace with His Maker.

Munzali Jibril
Professor Emeritus of English Language and Linguistics,
Bayero University Kano
Past President of NAL and Chairman, Board of Trustees of APPN

**David Jowitt on the Nigerian English Accent (NEA):
A Review of Scholarship**

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Abstract

In the over-50 years he spent teaching English in Nigeria, Prof David Jowitt committed himself to the study, description and analysis of the Nigerian variety of English. This is evident in the many books, journal articles, and other research outputs credited to him on the topic. This article reviews his sustained engagement with a sub-section of Nigerian English studies - the Nigerian English Accent (NEA), drawing on ten of his major works published between 1991 and 2023. Evaluated here are his positions on the segmental features, primary accent, connected speech, and intonation. Also reviewed are his corpus-based study and theoretical reflections within Schneider's Dynamic Model. The study reveals that while Jowitt advocates a Nigerian Received Pronunciation (NRP) - an endonormative standard shaped by Nigerian sociolinguistic realities - in the face of the changing nature of the exonormative Received Pronunciation (RP); he also strongly recognises the existence of geo-ethnic accents - NEA(Hau), NEA(Yor) and NEA(Igb) - and other competing social accents - acrolectal and non-acrolectal - in the Nigerian English Accent Continuum. The review underscores his role in codifying a Nigerian prestige accent and affirming Nigerian English as an endonormatively-stabilised variety.

Keywords: Nigerian English Accent, intonation, Received Pronunciation, David Jowitt, World Englishes

1.0 Introduction

David Jowitt joined the league of Nigerian English scholars in the early 1990s, a period categorised as the Intermediate Spoken Nigerian English (SNE) Era (Anyagwa and Osifeso, 2021). Studies on Nigerian English were, at that time, dominated by works on the description of the variety and its features identification, as against the initial arguments on its status as "errors of usage" (Salami 1968), "bad English" (Vincent, 1974), etc. in the preceding era. Ever since his Nigerian English Usage: An

Introduction (1991), published by Longman, Nigeria, David Jowitt's research efforts on the Nigerian English Accent (NEA hereafter) have been committed to the examination of its segmental patterns, intonation, and emerging norms. This review, intentionally not structured as a conventional book review, focuses on ten such works to show how his scholarship has developed (from descriptive beginnings to theoretical consolidation) while highlighting his contribution to the recognition of a Nigerian prestige accent.

The reviewed works are: Nigerian English Usage: An Introduction (1991); 'Patterns of Nigerian English Intonation' (2000); 'The Fall-Rise in Nigerian English Intonation' (2007); 'Nigerian Received Pronunciation' (2015); Nigerian English (2019); 'Nigerian English Connected Speech: Further Explorations' (2020); 'Marginal Phonemes in English' (2021a); 'The GOAT Vowel in Nigerian English' (2021b); 'Some Aspects of the Pronunciation of English by Nigerian Students in Plateau State, Nigeria: A Corpus-Based Study' (2023a); and 'Nigerian English and Schneider's Dynamic Model: Further Considerations' (2023b).

2.0 Literature Review

2.1 Entry Point Descriptions

The actual definition of NEA has been a decades-old debate in the Nigerian English studies circle and Jowitt was one of the scholars who had worked extensively on this subject. In his first major intervention, Nigerian English Usage: An Introduction (1991), in addition to providing one of the earliest systematic descriptions of Nigerian English, he makes a case for its pronunciation, not as a flawed imitation of the Received Pronunciation (RP), but rather as a nativised, internally-consistent variety shaped by Nigerian sociolinguistic realities. In his words, "a national variety of English is not to be judged by the standards of native-speaker English, but by its intelligibility, functionality, and acceptability within the speech community" (page 15). In this seminal publication, Jowitt introduces his model of The Nigerian English Continuum (page 47), stating: "...the usage of every Nigerian user is a mixture of Standard forms and Popular Nigerian English (PNE) forms, which are in turn composed of errors and variants".

He goes ahead to analyse the phonology of the Popular Nigerian English (PNE hereafter) forms into three accents along the line of the three dominant indigenous languages in Nigeria, yielding PNE(H), PNE(Y) and PNE(I) for the English accents of Hausa, Yoruba and Igbo speakers,

respectively. Echoing Jibril (1982), he explains that the differences between “PNE(H) and PNE(Y) or PNE(I) are too great to make it realistic or useful to maintain that the sounds produced by Nigerians as sounds of English constitute one system that has merely local variations” (pp 85-86).

Chapter Five of this book, captioned ‘Phonology 1’ (pages 68-87), provides a comprehensive description of twenty-three RP vowels and their PNE realisations; twenty-four RP consonants and their PNE realisations; consonant clusters, MT-influenced features of PNE articulation, and spelling pronunciation. Jowitt highlights the shared cluster simplification strategies as consonant deletion, vowel epenthesis, syncope, and metathesis; while linking such articulation features as nasalisation, gemination and pharyngealisation to PNE(Y), PNE(H) and PNE(I) respectively.

Chapter Six (pp 88-106) – ‘Phonology II’ – describes the suprasegmental features of primary accent, timing, pitch and intonation. Contrary to the ethnicity-based segmental analysis in the previous chapter, this chapter insists that “the accent (or stress) contours and the intonation contours (or tunes) of PNE are characteristic of the undifferentiated majority of Nigerian users of English”. The chapter notes the preference for final-syllable primary accent or ‘forward stress’ in PNE, and an unstable compromise between stress-timing and syllable-timing (with PNE(H) approximating more to stress-timing on account of the presence of both long and short vowel phonemes in Hausa (Jibril, 1982)). On PNE intonation, the author notes a preponderance of the falling tone, the tendency to assign a rising tone to questions generally, and the rarity of complex tones.

2.2 Specialised Studies: Intonation

By 2000, Jowitt had turned his attention to intonation. In ‘Patterns of Nigerian English Intonation’ (2000), published in *English Worldwide*, Volume 21, No. 1, pages 63-80, he examines the forms and frequency of intonation patterns among educated Nigerian speakers of English. The study upholds Jowitt’s (1991) position on the preponderance of the falling tone in statements and commands. As against the blanket use of the rising tone for questions suggested earlier, wh-questions are also found to attract the falling tone, while yes/no questions and tag questions attract the rising tone. The observation on the infrequent use of complex tones is sustained while lexical words are noted to be

intonationally marked by “a core pattern of high pitch followed by a down drift”. Jowitt further adds gender as a basis for variation in Nigerian English intonation, concluding that some of the observed frequently-occurring patterns in NE differ in important respects from native-speaker systems, though lacking stability.

Focusing on a particular intonation pattern, he later published ‘The Fall-Rise in Nigerian English Intonation’ (2007), also in *English Worldwide* (Volume 28, No. 2, pages 173–196). The paper explores perception, interpretation, and production of the fall-rise (FR hereafter) intonation pattern in NE using data obtained from twenty informants. It demonstrates that the Nigerian English FR does not express the local, attitudinal meanings of the FR in native-speaker usage; nor does it have a discursal, referring function. It, however, corroborates Adetugbo (1979) and Jibril’s (1982) position on the fact that syntactic rearrangement, rather than intonation, conveys certain meanings in NE. On the other hand, the submission that the “FR of English intonation is present in the perception and production of Nigerians of various backgrounds and educational accomplishments” contradicts Jowitt (1991) on the absence of complex tones in PNE. The paper hilariously concludes that “FR in British English expresses scorn, self-pity and self-dramatisation.... Nigerian English is perhaps better off without such excessive emotional baggage packed into its intonational forms”.

2.3 Codifying Prestige: Nigerian Received Pronunciation

The idea of a Nigerian prestige accent was birthed in the 2015 publication titled ‘Nigerian Received Pronunciation,’ published in *Research in English and Applied Linguistics (REAL Studies)*, Volume 9, pages 3-13. In the paper, Jowitt argues that British Received Pronunciation (RP) has undergone and is still undergoing changes in its homeland, and is not homogeneous (echoing Awonusi, 2004). Consequently, he proposes a localised RP that reflects Nigerian speech habits while remaining intelligible internationally. This Nigerian RP is designed to recognise such adjustments as:

- the GOAT vowel /əʊ/ realised as a monophthongal [o:] as in *know*
- the FACE vowel /eɪ/ realised as a monophthongal [e] as in *day*, *break*
- the TRAP vowel /æ/ realised as [a] as in *hat*

- triphthongs treated as two vowel phonemes separated by a glide (i.e. [aja] and [awa] in place of /aɪə/ and /aʊə/ respectively).

This argument is further developed in *Nigerian English* (2019) published by De Gruyter Mouton, Boston/Berlin, in which chapter two (pages 37-73) was dedicated to phonetics and phonology. In this publication, for the very first time, Jowitt adopts the term NEA (after Awonusi, 2004 and Anyagwa, 2015). He explains:

‘NEA’ can be understood in both a wide sense and a narrow sense. In the wide sense, it refers to all the commonly occurring phonological forms used by Nigerians in speaking English, and therefore including all the RP forms, since all of this feature in the speech of some Nigerians. In the narrow sense, primarily used here, it means Nigerian forms that differ from RP forms (p. 43).

Additionally, in this publication, he uses NEA (Hau), NEA (Yor), and NEA (Igb) to “refer to the distinctive English phonology of each of the three main ethnic groups (Hausa, Yoruba, Igbo)” (page 43), replacing PNE(H), PNE(Y) and PNE(I) as adopted in Jowitt (1991). He goes ahead to present a detailed review of NEA segmental sounds vis-à-vis their realisations across the three main ethnic groups, exploring Wells’ (1982) concept of the Standard Lexical Set in identifying the twenty-two vowels listed. The absence of a monolithic NEA is amplified on page 51, where, in place of an NEA vowel chart, Jowitt presents three, showing that while NEA (Yor) and NEA (Igb) are similar on this count, NEA (Hau) is different. However, they are all united at the level of diphthongs as shown below:

- NEA (Igb) and NEA (Yor) monophthongs (7) – [i, e, ε, a, ɔ, o, u]
- NEA (Hau) monophthongs (10) – [a(:), e(:), i(:), o(:), u(:)]
- NEA diphthongs (6) – [ia, ua, ea, ai, au, ɔi]

Table 1 below summarises Jowitt’s account of RP monophthongs, which are not attested in any of the accents, and their realisation.

Table 1: Unattested RP vowels and their NEA Realisations

RP	PNE(H)	PNE(Y)	PNE(I)
/ɪ/	[i]	[i]	[i]~[i]- pharyngealised
/æ/	[a]	[a]	[a]
/ʌ/	[a]~[ʊ]	[a]~[ɔ]	[a]~[ɔ]
/ɒ/	[ə]~[a]~[o]	[ɔ]	[ɔ]
/ʊ/	[u]	[u]	[u]~[ʊ]
/u:/	[u]	[u]	[u]
/ɜ:/	[a:]	[ɔ]~[a]~[ɛ]	[ɔ]~[a]~[ɛ]

Although his review of NEA segmental sounds includes the POWER [aʊə] or [aʊə] and FIRE [aɪə] triphthongs, Jowitt intentionally does not include them in the final list, noting that the second element is often ‘consonantised,’ producing [awa] or [awə] for POWER, and [aja] or [ajə] for FIRE. His submissions on the consonantal segments are summarised in Table 2 below, where only divergences are listed:

Table 2: Divergences in PNE Consonants

Natural Class	RP	PNE(H)	PNE(Y)	PNE(I)
Stops	/t/	[t]	[t]	[t̚]
	/p/	[f]~[ɸ]	[kp]	[p]
	/k/	[kʷ]	[k]	[k]
	/g/	[gʷ]	[g]	[g]
Affricates	/tʃ/	[tʃ]	[tʃ]	[tʃ]
Fricatives	/f/	[p]	[f]	[f]
	/v/	[b]	[f]	/v/
	/θ/	[s]	[t]	[t]
	/ð/	[z]	[d]	[d]
	/z/	[z]	[s]	[z]
	/ʃ/	[ʃ]	[ʃ]~[s]	[ʃ]
	/ʒ/	[z]~[ʃ]~[s]	[z]~[ʃ]~[s]	[z]~[ʃ]~[s]
Nasals	/n/	[n]	[n]~[ɲ]	[n]
	/ŋ/	[ŋ]	[n]~[ŋ̃]	[ŋg]~[n]

He further draws a distinction between (+) acrolectal forms, on the one hand, and (-) non-acrolectal forms, which include mesolectal and

basilectal forms. This 2019 publication sustains Jowitt's (1991) position on the preference for forward stress in simple words, with the caveat:

A convincing explanation of the reasons for it has yet to be offered. It is also difficult to see how the tendency might be related to the hypothesis, outlined above, that Nigerians at a certain level of learning treat English as a tonal language (p. 62).

Also upheld are his earlier positions on the preference for strong forms, relative absence of emphatic and contrastive stresses and cluster resolution through insertion, deletion, and substitution. This book-length publication is more or less an updated version of Jowitt (1991), with the findings of his research between the two publications well-documented and other scholars' contributions on the subject extensively acknowledged and evaluated.

2.4 On Connected Speech and Phonemes

Despite his detailed attention to the subject of connected speech in section 2.3.2.2 (pages 63-69) of his 2019 Nigerian English, Jowitt goes ahead to delve more deeply into the topic in 'Further Explorations of Connected Speech in Nigerian English' (2020), published in *World Englishes*, volume 42, no. 4, pages 596-605. This paper explores the differences between native-speaker accents and PNE, observing the contending forces in operation, i.e. the exonormative standard and the PNE patterns. He notes that in NEA, preposition-complementing personal pronouns are stressed while elision, assimilation, and weak forms are often under-realised, leading to a spelling-pronunciation effect. He also notes that in final pronouns, phrases, compounds and sentences, NEA prefers end-stress. The study also upholds his position in Jowitt (1991) that in NEA, 'syllable-timing' and 'stress-timing' are not binary opposites but form a continuum. It also pronounces deletion as the handiest cluster resolution process in NEA.

In 'Marginal Phonemes in English' (2021a) published in the *Journal of the Association of Phoneticians and Phonologists in Nigeria (JAPPIN)*, volume 2, pages 9-23, Jowitt defines a marginal phoneme as 'one which is at present excluded from the canon (but perhaps ought not to be), or one which is at present included in it (but shows signs of attrition)'. Focusing on triphthongs, certain diphthongs, the consonants /hw/ and

/ɜ/, and the nasal vowel /ã/, he makes the following observations specifically in relation to NE phonology:

- i. Phonemes such as /ɔə/ seem never to have been present in PNE.
- ii. /eə/ is pronounced [ɛ] in [mɛri] Mary, at least by PNE or non-acrolectal speakers.
- iii. /eə/ is conflated with /ɪə/ as [ia] in chair~cheer, bare~beer, stair~steer, tear ('rend') ~tear ('water from the eye') with all becoming homophonous pairs.
- iv. /ʊə/ is pronounced [ua] in open syllables as in pure [pjua] and tour [tua]; it is, however, pronounced [u] in closed syllables, as in rural (-) i.e. among non-acrolectal speakers.
- v. /ɜ/ and /ð/ remain unstable for many Nigerian speakers, with substitutions being common.

He also notes that the main tendency is to adopt a spelling pronunciation for most of the borrowed French words containing the nasal vowel /ã/ so that restaurant has a final [..nt]; en masse is often [en mas], and impasse has a nasal [ɛ] as the original vowel of its first syllable pronounced [a] or [ɪ]. He concludes with a rhetorical question on whether or not Nigeria should automatically reproduce the inevitable changes in British RP, which have prevailed even in its homeland, Britain.

In 'The GOAT Vowel in Nigerian English' (2021b), published in Daramola, Anyagwa and Adepoju (eds.) *Functional Approaches to Language and Literary Studies*, pages 225-234, Jowitt experiments with his proposal on small-scale studies of NEA. The paper explores the realisation of the rising diphthong /əʊ/ across speaker-groups. He observes that while PNE - basilectal and mesolectal varieties - realise it as [o], acrolectal speakers realise RP-type [əʊ] or American English [ou] / [ɔʊ]. Exemplifying the distinctness of the Hausa accent of English from both Igbo and Yoruba accents, he emphasises that PNE(H) realises [əʊ] as [ɔ] as in hope. He, however, notes a strong preference for [o] in place of the GOAT vowel in NE, which is probably spelling-induced. This study reverts to the pre-2019 labels for ethnic varieties (PNE (H, Y, I)) and social varieties (acrolect, mesolect, and basilect). The observed shift towards a monophthongal [o:] in the realisation of the GOAT vowel in NEA strengthens the case for vowel restructuring, made in Jowitt (2020 and 2021a).

3.0 Corpus Approaches and Theoretical Consolidation

In 'Some Aspects of the Pronunciation of English by Nigerian Students in Plateau State, Nigeria: A Corpus-Based Study' (2023a), co-authored with Andrew Onoja and Priscilla Kparevzua, and published in Unuabonah, F. O., Oladipupo, O.O. and Daniel, F.O. (eds.), *Readings in Corpus Linguistics: A Teaching and Research Guide for Scholars in Nigeria and Beyond*, Jowitt turns to corpus-based methods. The study confirms, with empirical data drawn from the Spoken Nigerian English Corpus (SNEP), certain aspects of PNE phonology. The authors define PNE phonology as:

... the English sound system as it tends to be realised by all Nigerians except those who, fairly consciously, seek to adopt a 'Received Pronunciation' (RP) or some other 'non-Nigerian' accent.

In this study, Jowitt et al. explain that the terms 'acrolectal' and 'educated' are not co-referential in the Nigerian context. They particularly note the frequency in NE of [a]-like vowel sounds. The STRUT vowel, for instance, is observed to be realised as [a] in PNE (H) and [ɔ] in the South, emphasising the North versus South difference. The findings of the study corroborate earlier studies on NEA, hence the conclusion:

The way Plateau State students speak English is just like that of other Nigerian students. This is notably true of their realisation of the GOAT vowel; of the TRAP and the BATH vowels; of the schwa vowel. It is true also of their intonation patterns: they showed a general preference for the falling tone, although they invariably used a rising tone for a tag question. They did not make any use of emphatic or contrastive stress.

Meanwhile, in 'Nigerian English and Schneider's Dynamic Model: Further Considerations' (2023b), published in the *Journal of English Scholars Association of Nigeria (JESAN)*, Volume 25, No.2, pages 1-10, Jowitt revisits Edgar Schneider's (2007) *Postcolonial English: Varieties around the World* from the standpoint of Nigerian English. Although the paper is not strictly on NEA, it presents a picture of the current position of NE on the proposed 5-phase model, suggesting that the evolution of the accent is ongoing. Jowitt introduces the term 'distinctively Nigerian forms' (DNFs) which, like PNE, contain both 'errors' and (legitimate)

'variants'. He argues that while Phase 3 (nativisation) of Schneider's model is applicable to NE, Phase 2 (exonormative stabilisation) is not. Contrary to Ugorji (2015) and Ugwuanyi (2022), Jowitt insists that Nigerian English has not yet moved to Phases 4 (endonormative stabilisation) and 5 (differentiation) and emphasises that this is not in any way to belittle the vigorous and truly dynamic Nigerian English whose distinctive accentual features now carry both internal prestige and external legitimacy.

4.0 Conclusion

This review reveals a steady progression in David Jowitt's works, from descriptive studies to a theoretical codification of a Nigerian prestige accent. With the strength of his publications mainly lying in their empirical and highly analytical style, Jowitt is able to demonstrate that no variety of NE is acceptable as a standard of pronunciation, at least at the segmental level. This explains his sustained use of PNE/NEA (Hausa), PNE/NEA (Yoruba) and PNE/NEA (Igbo) - geo-ethnic accents - in his description of its segmental phonology. The united front presented at the level of the suprasegmental features of intonation, rhythm and stress provides a stronger basis for his proposal on a Nigerian Received Pronunciation (NRP). The additional consideration for social accents: acrolectal (+), and non-acrolectal (-) justifies Jowitt's studies as encompassing ethnicity, education, age and English proficiency as salient factors that unite to define an internationally-intelligible NEA.

Another strength of Jowitt's research on NEA is his inclusive reference to the contributions of other scholars to the field. His second book-length publication, *Nigerian English*, in particular, is evident of his attention to both the divergences and convergences that exist between his studies and those of other scholars on the topic. An obvious point of divergence, however, is his preference for linguistic models as opposed to phonological theories in all his works. Phonological research, in contemporary times, emphasises theoretical leanings. For instance, Ugorji (2010), which is well-cited in Jowitt (2019), clearly explores the Optimality Theory as a basis for his pronouncements on NEA. Jowitt seems to have a bias for models, having explored Cruttenden's model of English intonation (2000), O'Connor and Arnold's models of British English intonation (2000), and Schneider's Dynamic model (2023).

The silence on phonological theories and their application to the data on NEA notwithstanding, however, there is no doubt that Jowitt, by combining descriptive insights with corpus-based analysis and theoretical framing, has provided one of the most comprehensive accounts of how the Nigerian English Accent functions as both a marker of identity and a recognised voice within World Englishes in all the works reviewed.

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An Explication of Prosodic Phonology

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Abstract

One of the theories that have contributed immensely to the understanding of African languages' phonologies is Prosodic Phonology (PP), which provides a principled account of how prosodic constituents, namely: mora, syllable, foot, prosodic word, and prosodic phrase, are systematically organised in individual grammars in accordance with universal well-formedness conditions. In this paper, an effort is made to give a step-by-step guide on how PP works, ranging from its principles and application to three Nigerian languages, to its specific areas of strength and weakness. Given the observation that it is almost impossible not to assume some of the tenets of the prosodic theory while working within any framework associated with the foot, syllable and mora phenomena, it is argued that PP is a force to be reckoned with among the extant phonological theories. In particular, it is a theory which subsumes several other theories of prosodic phenomena: Metrical Phonology, CV Phonology, and Moraic Phonology. Therefore, phonologists working on Nigerian languages, including Nigerian English, are encouraged to deploy the tenets of PP in their future work, as such an effort could help to provide solutions to lingering empirical issues in those languages and, more crucially, provoke revision of some of the theory's crucial aspects, such as the prosodic licensing principle and minimal word condition.

Keywords: Mora, Syllable, Foot, Prosodic Word, Prosodic Phonology.

1.0 Introduction

Over the years, African languages have contributed immensely to the evolution and development of phonological theories, and the latter have also constantly assisted analysts in providing rigorous and more convincing explanations of some thorny issues in the phonologies of the former, such as tone, nasality, vowel harmony, and other prosodic or suprasegmental notions. A theory is a coherent framework that is built around/on a set of principles or tenets which guide the analysis of a given phenomenon in a particular discipline. In other words, a theory is simply an analytical approach which a researcher adopts while giving an account of a specific phenomenon. Thus, the same phenomenon may be analysed using different approaches, that is, within the ambit of different

theories. In language study, every aspect has its peculiar theories and we have a number of well-known ones proposed several decades ago but which are still contemporarily relevant. A few of them include the Gricean Cooperative Principle, Hallidayan Systemic Functional Grammar, and Chomskyan Transformational Generative Grammar. In general, linguistic theories fundamentally help us to explain why languages behave the way they do across all grammatical levels. Just as in other sub-fields of linguistics, there are many theories of phonology which usually allow writers to present principled, robust, convincing, rigorous and sound argumentation in their analysis of phonological issues. Some of these theories include Taxonomic Phonemic Theory, Generative Phonology, Auto-segmental Phonology, Grounded Phonology, Metrical Phonology, Lexical Phonology, Prosodic Phonology, and Optimality Theory. In this paper, our sole concern is Prosodic Phonology.

Historically speaking, the idea of “Prosodic Phonology” in the context of phonological theorising was first mooted by John Rupert Firth. The Firthian theory of prosodic phonology was originally designed to provide a formal recognition and a principled account of prosodic or suprasegmental features of speech, such as syllable, tone, stress, rhythm and intonation. Thus, the Firthian model may be viewed as a theoretical approach to suprasegmental phonology. However, what is known today as “Prosodic Phonology”, particularly after the emergence of “Auto-segmental Phonology” in the 1970s, has a strikingly different theoretical basis and construct from the perspective of the Firthian prosodic framework. In the modern approach to Prosodic Phonology, emphasis is laid on the hierarchical organisation of prosodic constituents – mora, syllable, foot and prosodic word, as well as their empirical implications for the operation of segmental processes, on the one hand, and the manifestation of suprasegmental features – tone, stress, intonation, etc., on the other hand. As a matter of fact, the scope and the analytical depth of contemporary Prosodic Phonology are broader and stronger than those of the Firthian model. Therefore, in this paper, we focus strictly on the contemporary Prosodic Phonology (PP henceforth) developed in Hyman (1985), McCarthy and Prince (1986, 1990), Hayes (1989), Archangeli (1991), Akinlabi (1995), Akinlabi and Urua (2002), and Kager (1999), among others. Our discussion covers four crucial areas: (i)

its principles; (ii) its application to Nigerian language data; (iii) its strengths; and (iv) its weaknesses.

2. Prosodic Phonology: Informal Definition

As its name suggests, PP is basically a theory of prosodic constituents, units or categories. The term 'prosodic' in this particular context should not be confused with the widely known prosodic (or suprasegmental) features of speech: stress, tone, intonation, etc. Rather, it specifically refers to the phonological constituents known as mora, syllable, and foot which are hierarchically organised in language to form words (i.e., prosodic words), phrases (i.e., prosodic phrases) and sentences (i.e., intonational phrases). Fundamentally, moras are organised into syllables; syllables into feet; feet into prosodic words; prosodic words into prosodic phrases; and prosodic phrases into intonational phrases. Most crucially, PP concerns itself not only with how these various constituents are systematically organised in individual grammars in accordance with universal well-formedness conditions, but also with the various contextual implications that such organisation has on diverse linguistic operations (e.g., phonological and morphological processes). For a crucial understanding of how PP works, some key concepts need to be discussed. We take them up in sections 2.1 through 2.5.

2.1 The Prosodic Hierarchy

Following McCarthy and Prince (1990, p. 209), the fundamental proposal of prosodic theory is that "templates are defined in terms of authentic units of prosody: mora (μ), syllable (σ), Foot (F), prosodic word (W), and so on". Within the ambit of the prosodic theory, it is assumed that phonological segments (i.e., consonants and vowels) are systematically grouped into these higher levels known as prosodic constituents or units, which in turn interact within an enclosed system in a hierarchical manner. In short, PP assumes a universal hierarchy of these prosodic constituents. In the literature, two inventories can be identified:

(A) Prosodic Hierarchy (Basic Version)

Phonological/Prosodic Word	PWd/PrWd	
↑		
Foot	Ft	
↑		
Syllable	σ	
↑		
Mora	μ	(McCarthy & Prince, 1986, 1990, etc.)

(B) Prosodic Hierarchy (Exhaustive/Expansive Version)

Intonational Phrase	ι -phrase (corresponds roughly to a clause)	
↑		
Prosodic Phrase	Φ -phrase (corresponds roughly to a syntactic phrase)	
↑		
Prosodic Word	ω -word (corresponds roughly to a grammatical word)	
↑		
Foot	F (metrical unit: trochee, iamb...)	
↑		
Syllable	σ (strings of segments: CV, CVC, ...)	

(Adapted from Rialland, Traoré & Féry 2021, p. 173)

2.2 Defining each Prosodic Unit in the Prosodic Hierarchy

An intonational phrase is compositional a combination of two or more prosodic phrases; a prosodic phrase is made up of two or more prosodic words; a prosodic word is a word that has at least one foot; a foot typically contains two moras or syllables; a syllable is fundamentally made up of a nucleus which is optionally surrounded by an onset and a coda; and a mora is a unit used for distinguishing between a light and a heavy syllable. I use the following Yorùbá sentence as an illustration:

(1) *Ìyá Bólá sáré jẹun* 'Bólá's mother ate quickly'

<i>ìyá Bólá sáré jẹun</i>	=	Intonational Phrase
<i>ìyá Bólá</i>	=	Prosodic Phrase1
<i>sáré jẹun</i>	=	Prosodic Phrase2
<i>ìyá/Bólá/sáré/jẹun</i>	=	Prosodic word
<i>ìyá, etc.</i>	=	Foot (made up of two syllables, and each syllable is defined by one mora that is linked to the nuclear vowel contained in each syllable)

In the context of the individual constituents making up the hierarchy shown above, several modules of PP have been hitherto proposed: Moraic Phonology (Hyman, 1985; Hayes, 1989, etc.), Syllable Theory (Itô, 1986, etc.), and the theory of Prosodic Minimality (Kager, 1999, etc.). Much of our discussion in this paper is couched on the moraic module due to its encompassing nature.

2.3 Syllable Weight Distinction

The weight of a syllable is generally determined by the number of moras it is made up of. For this reason, the mora is often defined as a prosodic unit that is used for measuring the weight of a syllable. In PP, a basic distinction is often made between a light syllable and a heavy syllable. A light syllable has one mora (hence, monomoraic) while a heavy syllable has two (hence, bimoraic) (Hyman, 1985; Hayes, 1989). Cross-linguistically, the CV syllable is light (monomoraic) since it has a short vowel, whereas the CVV syllable is heavy (bimoraic) based on the fact that it accommodates either a long vowel or a diphthong. Consider the illustration below:

(2) Light Syllable (monomoraic) = V or CV

- | | |
|----------------------------------|--|
| (i) apart /ə.'pa:t/ | (first syllable) |
| (ii) report /'ri.pɔ:t/ | (first syllable) |
| (iii) A /a/ 'we' | (Yorùbá) |
| (iv) kú /kú/ 'die' | (Yorùbá) |
| (v) pẹ̀lẹ̀bẹ̀ /kpɛ.lɛ.bɛ/ 'flat' | (each of the three syllables) (Yorùbá) |

As shown in (2), a syllable having a short vowel with or without an onset corresponds to a light syllable. Note that the mora is affiliated to the vocalic nucleus; an onset does not bear mora.

(3) Heavy Syllable (bimoraic) = VV or CVV

- (i) I /aɪ/
- (ii) are /a: /
- (iii) row /rəʊ/
- (iv) key /ki: /
- (v) dǎ: /dǎ: / 'father' (Mwaghavul)

Whenever a syllable has a long vowel or a diphthong, as demonstrated in data (3), it is interpreted as a heavy syllable because the long vowel presents a picture of "a sequence of two identical vowels", whereas the diphthong can be decomposed into "a sequence of two dissimilar vowels". Since one short vowel usually bears one mora, the two vowels in each case are linked to two moras; hence, the syllables in which they occur are analysed as heavy or bimoraic.

Meanwhile, according to Kager (1999, p. 147), "The weight of a CVC syllable depends on whether or not its coda consonant is moraic." This implies that languages could treat CVC either as a light syllable (i.e., monomoraic) or a heavy syllable (i.e., bimoraic) depending on the prosodic structure of the language. For example, whereas the CVC syllable counts as heavy in Latin, it counts as light in Lardil, implying that the coda is non-moraic in the latter (Hayes, 1989). Also, the phonetic properties of the coda may determine its moraic status in some languages. For example, in Lithuanian, sonorant codas can be moraic but obstruents cannot. What can be deduced from the foregoing typological generalisation is that the moraic structure of languages varies.

Overall, within the confines of the prosodic or moraic theory, the principle which determines whether or not the coda contributes to the weight of the syllable is known as 'weight-by-position' which stipulates that coda consonants could be moraic (that is, weight-bearing) in languages where closed syllables count as heavy (Hayes, 1989; Akinlabi, 1995; Kager, 1999). Following Hayes, diagnostics for the moraic status of coda consonants include compensatory lengthening, a weight-sensitive stress system, and tonal contrasts. See examples of CVC heavy syllables below:

(4) Heavy Syllable (bimoraic) = CVC

- (i) pan /pæn/
- (ii) leg /lɛg/
- (iii) shit /ʃɪt/ 'grass' (Mwaghavul)
- (iv) dép /dép/ 'buy' (Ibibio)
- (v) dóm /dóm/ 'bite' (Ibibio)

All five monosyllables in (4) are bimoraic – they have two moras each, one borne by the vowel nucleus, the other by the coda.

Although syllable weight is traditionally viewed in terms of binary opposition as to whether a syllable is monomoraic or bimoraic, there have been proposals over the years on the existence of trimoraic syllables. For example, Hayes (1989, p. 292) made a case for the recognition of trimoraic syllables in Persian, drawing inference from the language's quantitative metrics characterised as CVVC and CVCC, as well as CVVCC. The author describes CVVC and CVCC as “superheavy” and CVVCC as “ultraheavy”. Furthermore, Urua (1999) argues for the presence of trimoraic syllables in Ibibio, which are instantiated by CVVC words, such as wààk ‘tear’ and déép ‘scratch’ (Akinlabi & Urua 2002, p. 121). Similarly, Oyinloye and Fwangwar (in press) mention, in passing, the possibility of treating CVVC words in Mwaghavul, such as mu:t ‘death’ and ha:l ‘sheet of paper’, as trimoraic. However, what is less common, at least as much as I know, is a syllable having four moras! More crucially, the three aforementioned independent cases – Persian, Ibibio and Mwaghavul – point to the relativity of the basic, binary opposition in syllable weight, that is, light vs heavy. By implication, a syllable may not just be heavy, but “superheavy” or “ultraheavy” (Hayes, 1989).

Uncontroversially, however, the mora is fundamentally associated with the vocalic nucleus of the syllable, and, very rarely, the coda of a closed syllable. The former is usually called nuclear mora, while the latter is known as non-nuclear mora. It should be pointed out that, even though onset consonants are universally unmarked, they do not contribute to the quantity or weight of a syllable; hence, they are non-moraic, at least in consonance with the tenets of the moraic theory.

2.4 Foot Structure: Universal Inventory

Within the theoretical framework of PP, a foot structure has three universal templates from which languages draw to set up their specific prosodic templates. The inventory is provided in (5).

(5) Universal Inventory of Foot Structure

- (a) Syllabic trochee (quantity-insensitive): [$\sigma \sigma$]
- (b) Moraic trochee/bimoraic foot (quantity-sensitive): [$\mu \mu$]
- (c) Iambic foot (quantity-sensitive): [$\sigma\mu \sigma\mu\mu$]

(Adapted from Akinlabi 1995, p. 76; Kager 1999, p. 147)

The first foot structure in (5) is strictly based on syllable count. Being a trochee, it basically consists of a stressed syllable (which is the head of the foot), followed by an unstressed one. The second foot structure, which is also trochaic in nature, comprises two moras, the first of which is more prominent, hence, the head of the foot. Being an iamb, the third foot template contains two syllables in which the first is usually monomoraic and unstressed, and the second is bimoraic and stressed. Observe that while (5a) does not make reference to the quantity of the syllable which is defined by the weight-bearing units (i.e., moras) it is comprised of, (5b) and (5c) are quantity-sensitive in that their individual structure is defined by the number of moras implemented in each of them.

2.5 Word Minimum

The principle of word minimum or minimal word condition is integral to the modus operandi of PP. Word minimum is defined as “the requirement that a word have minimally two moras or syllables” (Kager, 1999, p. 166). In essence, a minimal word must be at least disyllabic or bimoraic in its phonological shape. Similarly, McCarthy (2006, p. 183) opines that the combined operation of the prosodic hierarchy and foot binarity, defined in (C) below, gives rise to the key notion of minimal word.

(C) Foot Binarity

A foot must be binary at either the syllabic or moraic level.

(Orie & Pulleyblank, 2002, p. 106)

Therefore, a minimal word must contain at least one foot, which is made up of two syllables or moras.

Of course, the minimum word condition is violated in many languages. For example, Mwaghavul has many functional categories (clitics, particles, pronouns, etc.) exhibiting the CV structure (Oyinloye & Fwangwar, in press; O & F hereafter); whereas in Yorùbá, the principle “is violated by weak pronouns (e.g., Mo ‘I’ and A ‘we’), simple verbs (e.g., kú ‘die’ and rà ‘buy’), simple prepositions (e.g., sí ‘to’ and ní ‘at/in’), complementisers (e.g., tí ‘that/who/whom/which/whose’ and pé ‘that’) and some other particles such as the focus marker *ni* and the perfective or possessive marker *ti*” (Oyinloye, 2024, p. 62). Notwithstanding, this principle has a strong effect in some languages to the extent that if any word would violate it, such languages would resort to syllable augmentation which they usually enforce through diverse processes including insertion, e.g., Levantine Arabic (Kager, 1999) and Zezuru (Mudzingwa, 2014); vowel doubling, e.g., Yorùbá (Oyinloye, 2024), as well as reduplication and affixation. These empirical instances clearly show that word minimum can be a driving force for the operation of certain phonological and/or morphological processes.

2.6 Principles of Prosodic Phonology

There are two fundamental insights which ultimately guide the modus operandi of PP: (i) prosodic constituents are systematically arranged into a matrix known as the Prosodic Hierarchy. For example, moras are organised into syllables; syllables into feet; feet into prosodic words, etc., and (ii) the phonological system of every language is governed by “minimal template requirements”, and these templates constitute the basis or domain for the operation of certain phonological and morphological processes. Beyond this, the theory is premised upon three (3) basic principles, which are summarised below:

- i. **Prosodic Licensing:** All phonological units must be prosodically licensed.
- ii. **Locality:** Well-formedness of a prosodic structure is determined locally.
- iii. **Directionality:** Phonological mapping proceeds directionally: either from left to right, or right to left. See Itô (1986) for a

detailed exposition and various exemplifications of these principles.

2.7 Fundamentals of Prosodic Phonology

It is a long-standing fact in phonology that languages inherently subscribe to certain template requirements along various dimensions, including the syllable, foot and prosodic word. The theory which formally captures the “minimal template requirements” characterising the phonological systems of individual languages is PP. For example, Akinlabi and Urua (2002) argue that the foot template of suffixed verbs in Ibibio takes one of two shapes: a heavy-light trochee, or a light-light trochee; O & F also posit that Mwaghavul subscribes to the moraic trochee or bimoraic foot template; whereas Ola (1995a, 1995b) had proposed that the foot structure inventory of Yorùbá comprises two templates: FOOT-BINARITY (Syllable) and FOOT-BINARITY (Nucleus).

Essentially, these minimal template requirements provide the necessary contexts for certain phonological, morphological or morpho-phonological operations in these languages. For instance, while adopting the tenets of Moraic and Underspecification Theories, Urua (1999) claims that length in Ibibio can easily be accounted for as occurring to satisfy the syllabic weight oppositions in the language, thus making it possible to give a satisfactory account of why certain phonological processes such as consonant lengthening and lenition, vowel lengthening and truncation may occur in one instance but fail to occur in another, even when the phonological requirements are satisfied. By extension, Akinlabi and Urua (2002, p. 120) strongly assert that “without the assumption of a bisyllabic foot [for Ibibio], phonological generalisations regarding root-suffix structures cannot be captured”.

Furthermore, Orie and Pulleyblank (2002, p. 104) argue that hiatus resolution in Yorùbá “is driven by constraints on prosodic minimality”, and this naturally helps to explain why vowel deletion is employed to repair hiatus in one context while vowel assimilation is the choice in another. Essentially, they propose that the fundamental distinction between forms which exhibit deletion and those derived from assimilation follows from the need to optimise for prosodic minimality. Also, Ehineni (2017), in their account of prosodic reduplication in Yorùbá, observes that the reduplicant has a prosodic shape/template

which is either bimoraic or more, and this explains the reason for the non-application of reduplication when the base is less than a bimoraic foot, that is, monomoraic. In a similar vein, Oyinloye (2024) proposes that Yorùbá resorts to vowel doubling in its adaptation of English monosyllables so as to ensure that the adapted form is minimally a disyllabic foot, given the fact that the language subscribes to the “syllable-count” mechanism in its parameterisation of prosodic minimality which governs the well-formedness of all its native nouns. Finally, O & F argue that compensatory lengthening in Mwaghavul is principally driven by the need to satisfy the canonical foot template of the language – bimoraic foot – and this is achieved through a recovery/reaffiliation of a lost/stranded mora. All of these typological findings or generalisations are testaments to the analytical efficiency and explanatory force of PP.

Another fundamental assumption of PP is that each of the prosodic categories is distinctly recognised in individual grammars: on the one hand, they constitute the building blocks of the phonological system of a language; on the other hand, they can serve as the domains of and the impetus to certain morphological processes such as reduplication and affixation, as well as phonological phenomena such as vowel/consonant lengthening and shortening, phonotactic restrictions, and segmental distribution. For instance, it has been mooted in some quarters that the mora or the syllable, rather than the segment per se, is the domain of tone assignment in tone languages (e.g., Akinlabi & Urua, 2002) while the indicator of stress placement in stress languages is the foot (e.g., Akinlabi, 1995). Without recognising these prosodic units within a linguistic system, it would be difficult to explain why certain phonological phenomena behave the way they do. For example, without establishing the foot structure of Mwaghavul, a principled account of compensatory vowel lengthening in the language cannot be satisfactorily given (O & F). Similarly, in Ibibio, a satisfactory account of why certain phonological processes may apply in one context but fail to apply in another even when the phonological requirements are met will not be possible except syllabic weight distinctions are assumed for the language (Urua, 1999).

Furthermore, PP is designed to aid the full understanding of how the universal prosodic constituents operate in individual languages. For

instance, the principle of word minimality which stipulates that every word in a language must be at least bimoraic or disyllabic is parameterised in two main ways across languages: some languages enforce it through mora implementation; others do so through syllable-count. Languages that inherently feature contrastive vowel length and coda consonants (e.g., English, Mwaghavul, and Ibibio) usually implement word minimum by resorting to the mora (hence, bimoraicity), whereas languages which lack such features (e.g., Yorùbá and Igbo) do subscribe to the syllable (hence, bisyllabicity) to enforce the principle. See the illustrations in (6) and (7), respectively.

(6) Word minimum implementation by mora-count

English	Mwaghavul
key /ki:/	wé:t 'both'
pad /pæd/	pun 'eject'
far /fa:/	kǎ: 'grandmother'
plate /pleit/	ga:k 'open'
fast /fa:st/	wát 'thief'

(7) Word minimum implementation by syllable-count

Yorùbá
bàbá 'father'
owó 'hand'
èjè 'blood'
garawa 'bucket'
labalábá 'butterfly'

In (6), the English and the Mwaghavul words are at least bimoraic. For example, while /ki:/, /fa:/ and /pæd/ are bimoraic as a result of either the long vowel alone or a combination of the short vowel and the coda consonant, /pleit/ and /fa:st/ are trimoraic, given the combination of the diphthong/long vowel and the coda. Similar results are found in the Mwaghavul examples. On the other hand, the Yorùbá examples in (7) clearly reveal that the minimal word condition can be implemented by making a word to be either disyllabic (as in the first three examples) or more (as in the last two).

Similarly, although the idea of foot structure is originally meant to be an indicator of stress assignment in stress languages, particularly those whose system is sensitive to the weight of the syllable, PP equally makes formal provisions for their parameterisation in tone languages like Ibibio, Mwaghavul and Yorùbá. For example, Ibibio subscribes to the bisyllabic trochee (Akinlabi & Urua, 2002) while Mwaghavul employs the bimoraic trochee (O & F) to realise their respective minimal foot templates.

Finally, PP is a non-linear approach to phonological description, just as in Autosegmental and Metrical theories. In other words, it does not represent speech as linear sequences of feature matrices, but as parallel sequences in which one tier represents the 'regular' features of the segment (the features that make up a C or V) and the other tier represents suprasegmental features (such as tone). In the section that follows, we examine a few cases of how the tenets of PP have been applied in the description of Nigerian languages.

3. Application of Prosodic Phonology to Nigerian Languages

In this paper, my empirical illustrations of the modus operandi of PP are drawn from Ibibio, Yorùbá, and Mwaghavul.

3.1 Foot Structure in the Ibibio Verbs (excerpted from Akinlabi & Urua, 2002)

Following Akinlabi (1995), Ibibio verbs prosodically display the bisyllabic foot. This proposal is pursued further by Akinlabi and Urua (2002), who argue that this foot template "forms both the target of morphological processes and the domain of phonological processes" (p. 124). For example, they propose that vowel lengthening and shortening in the language are principally driven by the need to satisfy this minimal template requirement. In addition, they posit that the language also has a bimoraic foot, which forms the template for other morphological processes. On these premises, they propose the following foot templatic structure for Ibibio:

(8) Ibibio foot structures:

[σ σ]: syllabic trochee (heavy-light)

[μ μ]: bimoraic foot (light-light)

See the examples in (9), reproduced from Akinlabi and Urua (2002, pp. 122-123), to illustrate the above foot templates.

(9) a. CVCCV Verbs

tèmmé 'explain'

dámmá 'be mad'

b. CVVCV Verbs

fááṅá 'argue'

yèèmé 'wilt'

c. CVCV Verbs

kéré 'think'

sára 'comb'

All the verbs in (9) are underived, and they portray the Ibibio foot structure. While examples (9a & b) exhibit the heavy-light template, what is instantiated in (9c) is the light-light template. Interestingly, both templates are targeted by derived verbs which undergo certain morphological processes. In particular, monosyllabic verb root-suffix combinations in the language form a (bi)syllabic trochee. Consider the examples in (10), adapted from Akinlabi and Urua (2002, pp. 125-126), for an illustration of this important generalisation.

(10) a. CVC Roots

dép 'buy'

kòp 'lock [door]'

dép-pé 'not buying'

kòp-pó 'unlock'

b. CV Roots

sé 'look'

dá 'stand'

séé-γé 'not looking'

dáá-γá 'not standing'

c. CVVC Roots

déép 'scratch'

fáák 'wedge between two objects'

déé-βé 'not scratching'

fák-ká 'remove wedged objects'

Given the prosodic shape of the derived verbs in (10), it could be inferred that, "whatever the underlying form of the monosyllabic verb root, the root-suffix outcome has to take the form of a heavy (bimoraic) syllable

followed by a light (monomoraic) syllable”, and the corollary of this generalisation is that “all of the data can be accounted for if we assume that the prosodic target of the suffixed verb is a bisyllabic trochaic foot” (p. 127).

In summary, even though their formal analysis is couched on Optimality Theory (OT), Akinlabi and Urua assert that Ibibio is a language with every possible form of the trochee, which forms the domain of several phonological processes and the basis of segmental distribution. What could be deduced from their proposal is that, without leaning on the predictions of PP (e.g., the foot template requirement), such facts about Ibibio phonology cannot be satisfactorily explained.

3.2 Vowel Doubling in Yorùbá (excerpted from Oyinloye, 2024)

The overall argument made in Oyinloye (2024) is that Yorùbá subjects English monosyllables, including, of course, others that are more than one syllable, to Vowel Doubling (in conjunction, where necessary, with other processes, e.g., vowel epenthesis) so that the words can sound like Yorùbá native nouns by being minimally disyllabic since the majority of the borrowed words are nouns. All native nouns in the language are at least disyllabic in their prosodic structure. Let us consider a few examples of how such English forms are adapted in Yorùbá.

(11) Words of English origin borrowed into Yorùbá (Oyinloye, 2024)

English	Yorùbá	Gloss
/ka:d/	[ká.à.dì]	card
/bɛd/	[bé.è.dì]	bed
/bleɪd/	[bú.lé.è.dì]	blade
/fəʊn/	[fó.ò.nù]	phone

According to Oyinloye (2024, p. 57), the main motivation behind the doubling process in (11) is tied to prosodic parametrisation: whereby an individual language parameterises the empirical operation of a given universal prosodic target to make it conform to the language's prosodic requirements. By doubling the English's singleton vowel (which could be short, long or a diphthong), more syllables are created; hence, Prosodic Word Minimality (PWM) is satisfied in Yorùbá. The point is, without referring to the assumptions of PP, it would be difficult to give a

principled account of why Yorùbá settles for vowel doubling in its adaptation of English monosyllabic words.

3.3 Compensatory Lengthening in Mwaghavul

(excerpted from O & F)

The basic syllable structure in Mwaghavul is CVC, followed by CVV. Although Mwaghavul is a tonal rather than a stress language, its foot structure is mora-based, not syllable-based. By virtue of syllable count, the CVC and CVV syllables in Mwaghavul are monosyllabic but with respect to mora count, they are bimoraic. Given the preponderant distribution of CVC and CVV syllables in Mwaghavul lexical constructions, O & F propose that the language subscribes to the bimoraic foot template, as in (5b) above, which is parametrised below.

(12) Mwaghavul Foot Template:

Bimoraic foot (quantity-sensitive): [μ μ]

Having established the foot structure of Mwaghavul above, let us consider two contexts in which compensatory lengthening (CL afterwards) takes place in the language. Firstly, a bisyllabic personal name can be clipped to a monosyllabic form but the vowel of the surviving half of the name must be lengthened even though the underlying vowels of the full form are short, as shown in (13).

Full Name	Short Form
(13) a. tɔŋpàn	tɔ̃:ŋ or pã:n
b. fwàŋfàk	fwã:ŋ
c. d͡zìwúl	d͡zĩ: or wũ:l
d. mand͡zì	mã:n

The question is: why is the remnant vowel in the clipped form lengthened? O & F provide the answer as follows: the vowel is lengthened because the clipped form must conform to the minimal foot template of Mwaghavul, which is bimoraic, in addition to the need to recover the lost mora that is adducible to vowel deletion, which occurs during the clipping process.

Secondly, CL can arise in Mwaghavul when some particles are cliticized to some roots. When this happens, a number of phonological processes take place, the last of which is CL. O & F observe that, if the phonological

derivation does not terminate in CL, the resulting surface form would not only be ill-formed but would also contravene the foot template of the language, which is a bimoraic trochee. See data (14 & 15).

- (14) a. ni ʔa sɪ̄ → [nya: sɪ̄]
 it be there
 ‘It is so’
- b. ni ʔa pyá: → [nya: pyá:]
 it be white
 ‘It is white’
- (15) a. mú ʔa dɛ̄ŋ → [mwa:ʳ dɛ̄ŋ]
 they be top
 ‘They are on top’
- b. mú ʔa tɪ̄lɛ̄ŋ → [mwa:ʳ tɪ̄lɛ̄ŋ]
 they be outside
 ‘They are outside’

In (14) and (15), a glottal stop is deleted and an underlying vowel loses its mora to glide formation. The residue of such transformations runs afoul of the bimoraic syllable structure which is pervasive in the language. To resolve the anomaly, vowel lengthening is appealed to, as illustrated below.

(16) Underlying Representation:	/mu ʔa/	/ni ʔa/
(Glottal stop deletion):	mu a	ni a
Labialisation:	mw a	N/A
Palatalization:	ɾɾN/A	nj a
(Glottal stop deletion):	mw a	nj a
Compensatory vowel lengthening:	mw a:	nj a:
Surface Representation:	[mwa:]	[nja:]

The merger of the glide and the preceding consonant is motivated by the need to get rid of the Consonant-Glide cluster since consonant clusters are generally rare in Mwaghavul (Fwangwar, 2018). In order to recover the lost mora as a result of gliding, the second vowel in the underlying VV sequence is then lengthened. This is termed as CL in that the lengthening compensates for the lost mora that was originally affiliated with the underlying vowel which lost its root node to glide formation.

Having discussed the fundamental features of PP as well as its *modus operandi* in the context of three Nigerian languages, we now turn to why the theory is important and the few areas that seem controversial.

4. The Strengths of Prosodic Phonology

(i) PP has a significant theoretical advantage in that, aside from the fact that it is relatively self-sufficient in terms of its principles and *modus operandi*, its formal insights are also useful in other theories.

(ii) PP is equipped with the formal apparatus for synchronising, in a profound way, linguistic universality and linguistic idiosyncrasy as far as prosodic phenomena are concerned.

(iii) PP helps to explain the strong link which necessarily exists between the prosodic constituents (e.g., mora and foot) and the traditional prosodic properties of language (e.g., tone and stress).

5. The Weaknesses of Prosodic Phonology

(i) PP's formulation of the word minimum principle is somewhat controversial, as there are several instances in language in which it is grossly violated.

(ii) Extrasyllabicity is a problem for PP. Extrasyllabic materials are segments which lie outside the domain of certain prosody-based processes. Hence, such segments would be unparsable either minimally into feet or maximally into prosodic words.

6. Conclusion

PP is a theory which subsumes a number of other theories: Metrical Phonology, Syllable Theory (e.g., CV Phonology), and Moraic Phonology. In this regard, it is almost impossible not to assume some of the principles of the prosodic theory while working within any framework dealing with foot, syllable and mora phenomena. This makes PP a force to be reckoned with among the extant phonological theories. Having drawn my illustrations of its application from three Nigerian languages in this paper, I hereby recommend that those who are working on the phonologies of other Nigerian languages, including Nigerian English, should consider deploying its principles in their analysis.

Finally, it is apposite that I make a brief comment about an issue. I often hear modern linguists, especially phonologists, talk down on the practice of deploying theories in linguistic study. Well, it is not a bad idea to do a

purely descriptive analysis of a phenomenon in an academic work. But firstly, theories do provide a deeper understanding of why languages behave the way they do. Making a parallel comparison, just as an acoustic analysis helps to either confirm or debunk articulatory facts of language, so does a theoretical analysis help to provide an indepth explanation of certain (thorny) issues. Secondly, most of the linguistic forms which we often classify as exceptions in our descriptive analysis can easily be accounted for if an appropriate theory is appealed to. Above all, theoretical analysis not only enriches a given descriptive effort but also fulfils explanatory adequacy, a criterion that every linguistic analysis must ultimately fulfil. Nevertheless, what must be strongly discouraged is the practice of forcing a theory on a language, knowing full well that it is empirical data that fuels theories and not the other way round.

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Ethno-varieties of the Nurse Vowel /ɜ:/ in the English of Educated Nigerians

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Abstract

This paper investigated the realisation of the 'nurse' vowel /ɜ:/ by Nigerian educated speakers of English, who have one of the three major Nigerian languages as a first language. The purpose was to find out whether or not, ethnicity as a social variable had an influence on respondents' rendition of the vowel /ɜ:/ in the words nurse, colonel, birth, journey and curse. The Data were drawn from thirty respondents; ten from each of the three major ethnic groups, namely Hausa, Igbo and Yoruba. A questionnaire was administered to ascertain participants' biodata, while read aloud tests comprising a word list and a sentence list were used to test their pronunciation. Each respondent read aloud the 5 words and 5 sentences. Insights for this study were drawn from William Labov's Variationist Model. Findings showed that respondents' ethnic affiliations influenced their pronunciation of the vowel /ɜ:/. The vowel was almost non-existent in respondents' repertoires, as most of them substituted the vowel with the closest sound in their first language. Only 2% of the Yoruba, 2% of the Igbo and 8% of the Hausa respondents pronounced the central vowel. These may have been influenced by their exposure to the native-English environment or some specialised training.

Keywords: Educated Nigerian English, the nurse vowel, ethnicity

1.0 Introduction

This paper focuses on the sociophonetics of the central vowel of English /ɜ:/ as pronounced by some educated Nigerian English speakers, who are bilingual and have one of the three major Nigerian languages (Igbo, Hausa or Yoruba) as a first language. It is established in the literature that Nigerian speakers of English pronounce English sounds differently from the way the native speakers of English realise them (Jibril, 1982; Awonusi, 1986; Jowitt, 1991; Udofot, 2004; Tsojon and Aji, 2014; Fajobi & Akande, 2018). From the inception, there have been pronunciation

and spelling-related language variations that are socially conditioned. Some of these language issues are usually associated with social factors such as age, sex, parental background, class, and ethnicity. These social variables give rise to linguistic differences, which some scholars have addressed using deviationist and prescriptive approaches (Aladeyomi & Adetunde, 2007). However, Labov (1963) sees them as a 'language variation' modelled after the descriptive approach.

Language variation refers to the different ways of saying the same thing and this cuts across linguistic levels like phonology, morphology and semantics. Sociolinguistics deals with language variation across all linguistic levels, exploring how language intersects with society. Sociophonetics, on the other hand, is interested in the variations caused by the exertion of social variables like age, sex, social class, religion, frequency and ethnicity on language (Foulkes & Docherty, 2006). Baronowski (2013) submits that sociophonetics refers to the merger of sociolinguistics and phonetics and also the use of phonetic methods in the quantitative analysis of language variation and change. It is against this background that the present study investigates the influence of ethnicity on the realisation of the English central vowel /ɜ:/ and discusses the ethnolinguistic implications for the various realisations of the vowel.

2.0 Review of Literature

Several studies have been carried out on the segmental features and realisations of English sounds. Most of these studies have examined how social variables such as the level of education, ownership of schools, gender, location of schools and ethnicity have influenced the realisation of the English sounds. Jowitt's (1991) work shows that ethnicity and the level of education can influence the pronunciation of English sounds. His work demonstrates ethnic variation in the way the three major ethnic groups in Nigeria (i.e., Hausa, Igbo and Yoruba) realise some English sounds. Similar to Jowitt (1991) are Awonusi (1986) and Udofot (2004), who have also identified region of origin and level of education as crucial factors that often contribute to variation in Nigerian English, especially in the area of pronunciation. Akande (2008: 448), in his investigation of dialectal variation in the English of Nigerian university graduates, reveals "the correlation between the realisations of the phonological variables and their contexts of occurrence".

Soneye (2008) investigates the pronunciation and awareness of the CH digraph by some English university academics. The study shows that the lack of correspondence between spelling and the sounds of the CH digraph often leads to mispronunciation. Fajobi and Akande (2018) examine the rendition of the English interdental fricatives by a group of Yoruba speakers of English with a view to finding out how gender, level of education and linguistic context of occurrence can affect respondents' pronunciation. The study concludes that sociolinguistic variables (i.e., gender and level of education) can and do affect the realisation of linguistic variables. Research on the realisation of the English central vowel /ɜ:/, especially in relation to ethnicity, is still scarce despite the several works on segmental features of English. Paying attention to how ethnicity influences the pronunciation of this English central vowel can provide a rich account of inter-ethnic variation in the pronunciation of English and this paper is set to achieve this goal.

2.1 Nigerian English

Many studies have worked on Nigerian English as a distinct variety of English. For instance, Jowitt (1991) outlines ethnicity, educational level, and linguistic nature as the three key factors that contribute to the diversities found within Nigerian English. In terms of the ethnic factor, Jowitt notes the existence of varieties of Nigerian English, which are caused by the intrusion of various indigenous Nigerian languages. This elucidates the rationale behind the existence of Igbo English, Hausa English, and Yoruba English. Within these variations, there are additional subdivisions that are influenced by the diverse dialects of the indigenous languages.

Udofot (2003), based on levels of education, also suggests three kinds of varieties, i.e. Variety I (Non-Standard Variety), Variety II (Standard Variety), and Variety III (Sophisticated Variety). Udofot's categorisation of Variety I speakers include the primary and secondary school graduates, some second-year university students, Nigeria Certificate in Education (NCE) holders, and teachers in primary schools. Variety II is associated with the third- and fourth-year college students, university graduates, college and university lecturers, and other professions, English instructors in secondary schools, and people who have earned a Higher National Diploma (HND). The author describes those who speak Variety III as university lecturers in English and Linguistics, who have

gone through specialised training processes in English phonology and speakers, who have lived in English native speaking countries.

The existence of ethnic variation in Nigerian English has also been noted by Idowu (1999). The author notes that the Hausa pronounce the voiceless labiodental sound /f/ as /p/, just as the Igbo speakers of English say [folo] for the word "follow." The author notes that Yoruba speakers of English have a tendency to nasalise English vowels when they are followed by the nasal consonants. Igboanusi (2006) also notes that speakers of English in Ghana and Nigeria both exhibit the same pattern of omitting plosives before syllable-final /s/ in words like fix and the pronunciation of 'g' in words with final 'ng' like sing. Akinjobi (2006) examines the vowel production of speakers of Educated Yoruba English (EYE) in generally unstressed syllables of English words with suffixes that need a change in stress and reduction of vowels. The data for the study were gathered from 100 Yoruba respondents who spoke Educated Yoruba English (EYE) and a control subject, who was a Briton who attended the University of London. The study found that the control's pronunciation of the unstressed -e vowel in the word phonetician is noticeably reduced, the duration of stressed and unstressed syllables varied between EYE individuals and more of the respondents generated full, strong vowels in syllables, which, according to the Standard English, should lose stress.

Akande (2008) assesses the realisation of ten factors, such as the (th), (dh), (v), (er), and (u) in the spoken English of Nigerian graduates. The investigation disclosed that the English language skills of Nigerian graduates are characterised by th- and dh- stopping, h-dropping and h-insertion, absence of differentiation between lax and tense vowels, and the realisation of fricatives (whether voiced or voiceless). Faleye (2008) conducted a similar study into the difficulties that Primary School teachers of English in Ibadan encounter with pronunciation. The research employed 120 subjects who were requested to read a prepared text consisting of ten brief sentences intended to display morphophonological challenges typically encountered in spoken English. The results of the study have demonstrated that there exist various instances of mispronunciations in the respondents' English language usage. Akinjobi (2009) also investigates the quality factor in educated Yoruba Nigerian English and English syllabic consonants. As dictated by Standard English, the study's conclusions show that

educated Yoruba English speakers rarely employ syllabic consonants as syllable peaks. Instead, the supposed syllabic consonant is frequently followed by the insertion of strong vowels. Some words were substituted for them, as in the case of the term "pebble," which is pronounced as /pebu/ instead of /pebl/.

Oladipupo (2014) posits that Sociophonetic research is grounded upon the notion that language exhibits variation, with the most notable divergence occurring at the phonetic level and it is (therefore) a universally accepted fact that each individual produces phonemes differently, making it a challenging task to find two identical or even similar pronunciations from the same speaker. Consequently, researchers have affirmed that speech production can fluctuate based on the speaker's social background, including their gender, age, socioeconomic status, and ethnicity (Labov, 1966; Guy, 1981; Hovath, 1985), and their affiliations with social collectives and networks (e.g., Milroy, 1987; Eckert, 2000).

The variationist approach is founded on the idea that language variation is systematic, rule-governed, rather than arbitrary or free and that these variations can be influenced by social factors such as age, sex, education level, ethnicity, social status, and others, in addition to linguistic ones. This strategy focuses on identifying systematic linguistic variation and identifying the independent variables that affect linguistic variables through statistical methods. In order to ascertain if ethnicity as a social variable impacts the usage of the central vowel /ɜ:/ by educated Nigerian speakers of English, this study drew insights from Labov's (1966, 1972, 2006b) variationist model.

In the Labovian principle, the study can be interpreted by identifying /ɜ:/ as the linguistic variable and its different realisations, such as [e], [o], [ɔ], [ɔ:], [a], [ʌ], and [ɜ:] as variants, rather than errors or deviations. Sticking to the systematic and quantifiable nature of this model, the study provides frequency counts and percentages showing how these variants are distributed across speakers in the three major Nigerian ethnic groups. Emphasising the Labovian notion that language is patterned and rule-governed, the present study shows a consistent dominance of [ɔ] and a very low occurrence of the standard [ɜ:]. The study further aligns with Labov's emphasis on the relationship between language and society by treating ethnicity (Hausa, Igbo, Yoruba) as a key social variable conditioning phonological variation.

3.0 Methodology

The data comprised read-aloud speeches of the English central vowel /ɜ:/ by thirty (30) respondents, consisting of ten (10) Hausa, ten (10) Igbo and ten (10) Yoruba postgraduate students from three Nigerian universities. One of the universities is Federal-government owned, one is state-owned, and the third is a private university. The selection criterion was based on the southwest, southeast and northern locations of the institutions and by extension, the respondents, in order to have representatives of the three major ethnic groups in Nigeria. A questionnaire consisting of two sections was administered to the respondents. Section A elicited the relevant bio-data such as age, linguistic background, place of origin, place of residence and language use, in a bid to determine their exposure to the language and their bilingual status. Section B contained a read-aloud test, which comprised the English central vowel /ɜ:/ as the key test item placed strategically within the word and sentence lists administered to the respondents. The word list had five (5) words, while the sentence list had five (5) sentences. The data were subjected to both manual and instrumental analyses using Praat, a speech analyser, for the acoustic measurements.

4.0 Data Analysis and Discussion of Findings

4.1 The influence of ethnicity on the rendition of the Nurse Vowel /ɜ:/
Ethnicity as a social variable influences the rendition of the English central vowel /ɜ:/. In Table 1, the frequency of the various representations of the central vowel across the three major Nigerian ethnic groups as found in the data is explained.

Table 4.1: Frequency of the ethnic-variants of /ɜ:/ in the three groups

BBC	Variants	Hausa	Igbo	Yoruba	Total
/ɜ:/	[e]	8	11	10	29
	[o]	3	2	4	9
	[ɔ]	23	27	25	75
	[ɔ:]	11	7	8	26
	[ɜ:]	4	1	1	6
	[ʌ]	1	0	2	3
	[a]	0	2	0	2

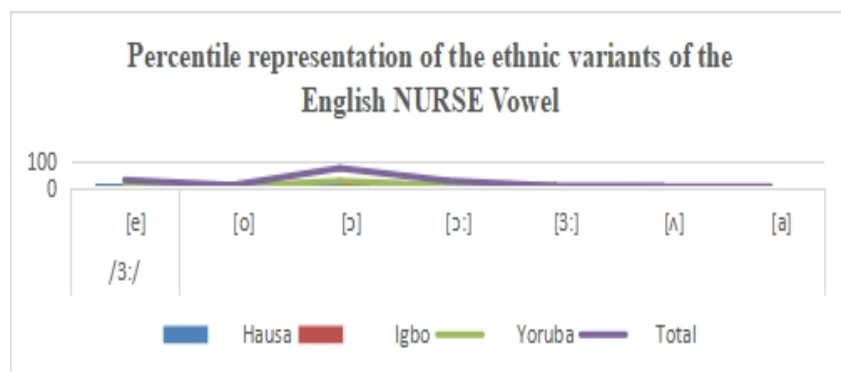


Fig. 4.1

Across the three ethnic groups, respondents realised the NURSE vowel as [e] and this makes a total of twenty-nine tokens. The /e/realisation is found in words like birth, journey and nurse. It was realised as [o] by 9 respondents; 3 Hausa, 2 Igbo and 4 Yoruba respondents in the word ‘colonel’. The [ɔ] realisation of the NURSE vowel was found in words like ‘curse, colonel, journey and nurse and seventy-five tokens were made from the [ɔ] realisation with twenty-three tokens from Hausa, twenty-seven from Igbo and twenty-five from Yoruba. This sound is realised as [ɔ:] by twenty-six respondents across the three ethnic groups, 11 Hausa, 7 Igbo and 8 Yoruba educated speakers. In the same vein, 4 tokens were realised as [a], no Hausa respondent pronounced the vowel /ɜ:/ as [a], but two Igbo respondents did, and two Yoruba respondents, in the word “birth”. The NURSE vowel was realised as [ʌ] by one respondent who is an educated Hausa speaker of English. It was observed that some tokens tilted towards the RP owned by 4 Hausa speakers, 1 Igbo speaker and 1 Yoruba speaker in the pronunciation of the word “birth”.

The result of the various pronunciations of the NURSE vowel is in accordance with the findings of Igboanusi (2006), who opines that the NURSE vowel is problematic for Nigerians. According to the author, the vowel is realised as /e/ in the word girl; as /ɔ/ in the word slurry and that the Yoruba pronounce the central vowel as /a/ in words like shirt, learn, and terms. Linda (2013) also found that Igbo speakers of English in Nigeria tend to substitute the /ɜ:/ with /e/ in the word girl.

English central Vowel	Participants' realisations	Total tokens produced	Percentage	Words and respondents' actual pronunciation
/ɜ:/	[e]	8	16%	<i>birth/bet/, journey/dʒeni/, nurse/nes/</i> ,
	[o]	3	6%	<i>colonel/koloni/, journey/dʒoni/, colonel/kolonel/</i>
	[ɔ]	23	46%	<i>colonel/kɔnel/, curse/kɔs/, nurse/nɔs/, journey/dʒɔni/</i>
	[ɔ:]	11	22%	<i>journey/dʒɔ:ni/, curse/kɔ:s/</i> ,
	[3:]	4	8%	<i>nurse/n3:s/, colonel/k3:nel/, birth/b3:θ/</i>
	[ʌ]	1	2%	<i>journey/dʒʌni/</i>

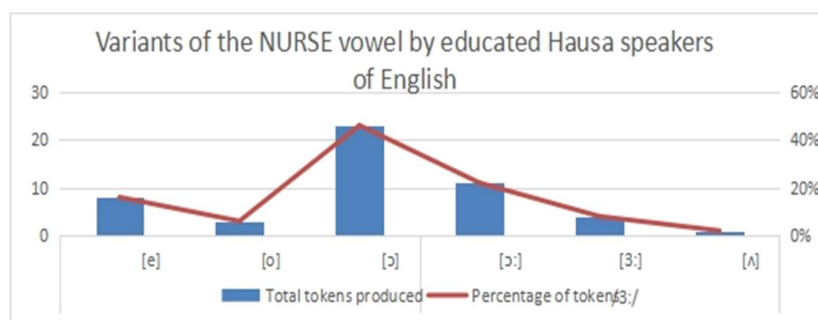


Fig. 4.2

Table 2 above shows the percentage of the pronunciation of the English central (NURSE) vowel by the Hausa English speakers, which is seen to have six realisations, with [ɔ] being the most prominent, with 46% of the total tokens generated. This was followed by the [ɔ:] realisation with 22% of the tokens generated. The [e] had 16%, the [o] was 6%, the [ʌ] had 2% and the central vowel /ɜ:/ was pronounced by 8% of the Hausa speakers. This is in line with Mohammed's (2011) assertion that Hausa speakers of English tend to realise the NURSE vowel as [e] in words like 'girl'.

Acoustic Analysis of the variants of the word *Colonel* /'kɜ:nəl/ by Speakers from the three Ethnic groups

Fig. 4.1.1: Pronunciation of *Colonel* [kolonel] by a Hausa Respondent

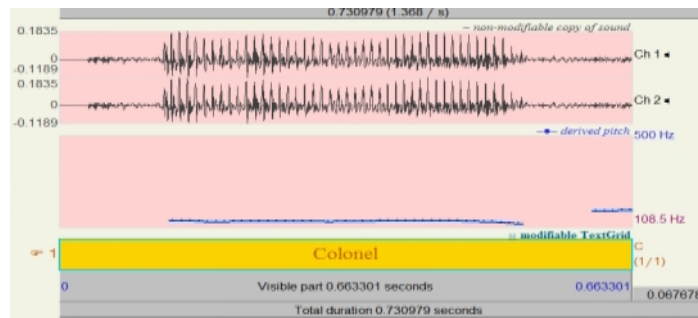


Fig 4.1.2: Acoustics of *Journey* [dʒɔni] as pronounced by a Hausa speaker

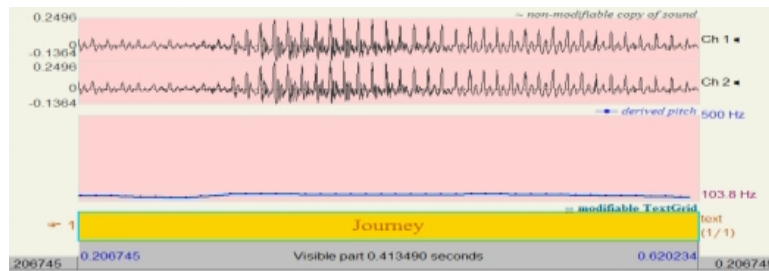


Table 3: Realisation of /ɜ:/ by Igbo Educated Speakers of English

The Nurse Vowel	Participants' pronunciation	Tokens produced	Percentage	Words and respondents' actual pronunciation
/ɜ:./	[e]	11	22%	<i>birth/bet/urney/dʒeni/, nurse/nes/</i>
	[o]	2	4%	<i>colonel/koloni/, journey/dʒoni/</i>
	[ɔ]	27	54%	<i>colonel/kɔnel/, curse/kɔs/, nurse, /nɔs/ journey/dʒɔni/</i>
	[ɔ:]	7	14%	<i>journey/dʒɔ:ni/</i>
	[3:]	1	2%	<i>colonel/k3:nel/</i>
	[a]	2	4%	<i>birth/bat/</i>

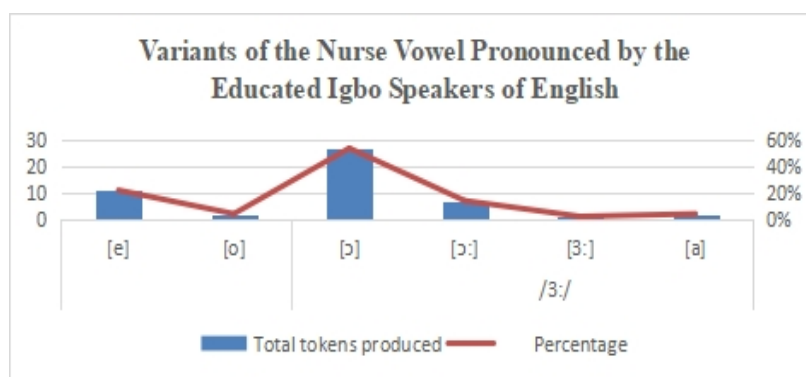


Fig. 4.3

Fig. 4.1.3: Pronunciation of *colonel* [kɔnel] by an Igbo respondent

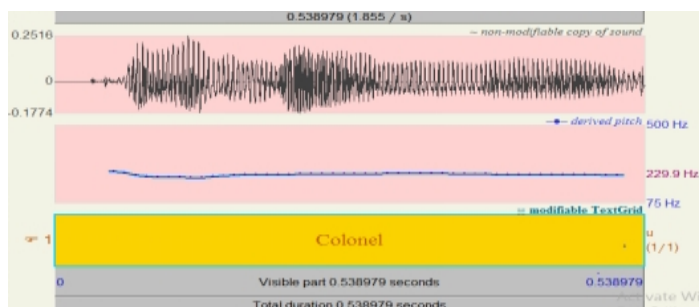
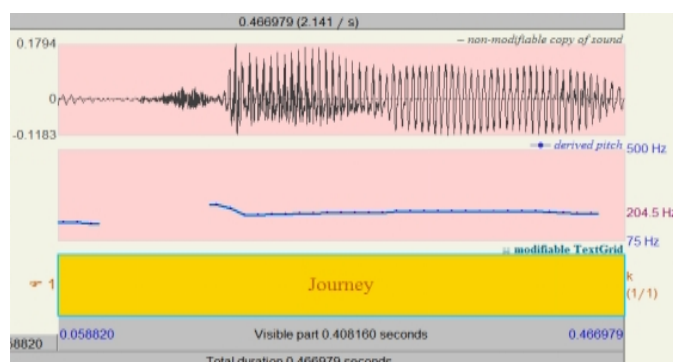


Fig. 4.1.4: Acoustics of *Journey* [dʒɔ:ni] as produced by Igbo speaker of English



The percentage of the variant pronunciation of the English vowel by the educated Igbo speakers of English is outlined in Table 3, above. The table shows that the NURSE vowel has six variants, with a larger percentage of the tokens generated being pronounced as [ɔ] taking 54% of the total tokens generated. We also have [e] with 22% of the tokens as [o] and 4% as [ɔ:]. The [ɔ:] had 14% and the [a] as 4%. Only 2% of the Igbo educated speakers pronounced the vowel as [3:]. It may therefore be said from the findings of this study that the prominent realisation of the NURSE vowel by the Igbo speakers is [ɔ].

Table 4: Realisations of /ɜ:/ by the Educated Yoruba Speakers of English

English central vowel	Participants' realisations	Tokens generated	Percentage	Words and respondents' actual pronunciation
/ɜ:/	[e]	10	20%	<i>birth</i> /bet/, <i>journey</i> /dʒeni/, <i>nurse</i> /nes/
	[o]	4	8%	<i>colonel</i> /kolonel/
	[ɔ]	25	50%	<i>colonel</i> /kɔnel/, <i>curse</i> /kɔs/, <i>nurse</i> /nɔs/, <i>journey</i> /dʒɔni
	[ɔ:]	8	16%	<i>journey</i> /dʒɔ:ni/
	[ɜ:]	1	2%	<i>birth</i> /bɜ:θ/
	[ʌ]	2	4%	<i>birth</i> /bʌt/

The variant pronunciation of the English central vowel by Yoruba speakers is displayed in Table 4. The NURSE vowel has six realisations, with [ɔ] having 50% of the tokens generated, followed by [e] with 20%, [ɔ:] with 16%, [ʌ] with 2% and [ɜ:] with 2%.

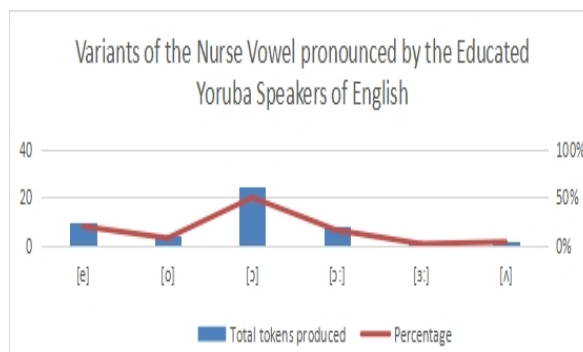


Fig. 4:

Fig. 4.1.5: pronunciation of *colonel* [kɔnel] by a Yoruba Respondent

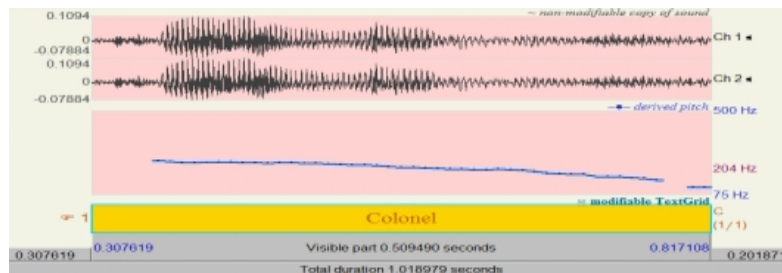
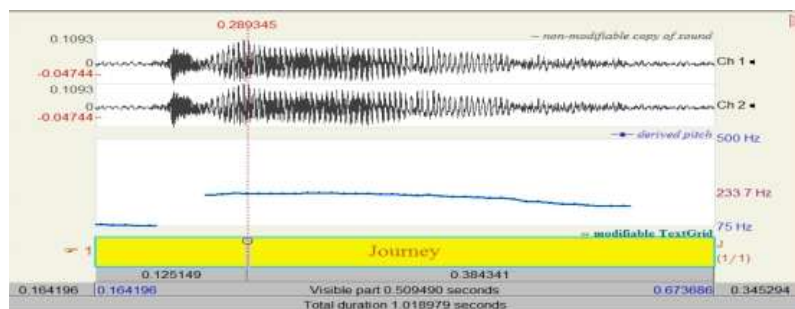


Fig 4.1.6 Acoustics of Journey [dʒɔ:ni] as produced by a Yoruba Speaker of English



Looking at the realisations of the NURSE vowel across the three ethnic groups as presented above, it is glaring that while there are different representations of the NURSE vowel, only 6% of the total tokens were able to realise this sound according to the Standard British English pattern. This can be explained by the extra training and exposure to the SBE that a few of the respondents had gone through. With Hausa taking the bulk of the representation, it can then be concluded that in a way Hausa speakers of English tilt towards the BBC.

4.2 The Implications of ethnicity as a social variable on the pronunciation of the English central vowel /ɜ:/

Studies have shown that RP is not only impractical but also that Nigerian English has undergone phonological domestication. This domestication process is one of the major implications of ethnicity on the realisation of the English central vowels. The NURSE vowel noticeably has seven variants across the three ethnic groups; the variant with the highest number of occurrences is [ɔ], which carries 50% of the total tokens. This then also means that a domestication process has equally occurred here, which involved the domestication of the NURSE vowel as [ɔ] across the three ethnic groups, especially in words like *slurpee*, *nurse*, and *curse*. However, noteworthy that some tokens are still in accordance with the native speakers' pattern of pronouncing the sound. These tokens represent 4% of the total tokens, with four tokens from Hausa, one from Igbo and one from Yoruba.

Going by this observation, it would be appropriate to conclude that out of the three major ethnic groups, Hausa realisation of the NURSE vowel is closest to the native British English. The findings made here corroborate Awonusi's (2004) confirmation of the differences in accents of Nigerian English, which may be largely due to the different paths of systems of education in Western, Eastern and Northern Nigeria. Olajide-Buari and Soneye (2024) also confirmed the influence of ethnicity on the pronunciation of Educated Nigerians who are motivational speakers. Therefore, these varieties exist in the country, and it is not yet clear, which one of them may be adopted as the standard variety for the teaching of Oral English in Nigerian schools. Adegbija (2004) posits that though it is widely accepted that there should be a standard variety, there is still a long way to go in determining the firm properties of this "standard variety".

The implication of this blurry modelling scenario is huge for the formulation of a succinct policy of education and/or pedagogy. The question of which of these domesticated varieties could be recommended for official adoption in teaching lingers, although the varieties are continuously used by teachers. However, this descriptive taxonomy enables an onset of the characterisation of Nigerian English sounds within the purview of Nigerian English linguistics and conclusions can be drawn on certain features which characterise Nigerian English ethnic varieties such as the pattern of substituting the

English central vowel/ɜ:/ with [ɔ], [ɔ:] and [e] in the three main indigenous languages of Nigeria.

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**Acoustic Evidence of L1 Influence in the Production of
Polysyllabic English Words by Igbo and Yoruba Primary
School-Age Children**

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Abstract

This study examines the phonological strategies employed by Igbo and Yoruba children first-language speakers in the production of English polysyllabic words. These learners' native languages favour relatively simple syllable structures; the research thus investigates how they adapt to the more complex phonotactic patterns of English. Data were collected from twenty-four participants, comprising twelve Igbo speakers and twelve Yoruba speakers, of ages five to eight years. Each participant produced a controlled list of forty-five English words containing complex syllable structures. The speech data were analysed acoustically using Praat, and the resulting patterns were examined through qualitative phonological analysis and statistical comparison. The findings reveal recurring phonological repair strategies, including vowel epenthesis, consonant deletion, and cluster simplification, which indicate a tendency among the participants to restructure complex English syllables to conform to the preferred phonological patterns of their first languages. Statistical analysis showed no significant difference between the Igbo and Yoruba groups in their production patterns ($F(1, 22) = 3.90, p = 0.061$), although the result suggests a tendency toward variation in the phonological strategies employed by the two groups. The findings are interpreted within the frameworks of Transfer Theory, Prosodic Phonology and Optimality Theory (OT).

Keywords: L1 Transfer, Prosodic Phonology, Igbo and Yoruba English, Acoustic evidence

1.0 Introduction

If language development in children is a complex process, then L2 learning is a much more complex one. However, early L2 learning is comparatively much easier to accomplish than learning it at an

advanced age. If sustained over a long period of time, it even often leads to bilingual acquisition. Most children usually attain the exhibition of both receptive and expressive language skills by age three. This level of language development, however, generally follows a natural pattern; that is, the acquisition of unmarked phonological structures before marked structures (Jakobson, 1968). Consequently, CV syllable structure is acquired first, after which CVC structure is acquired; then followed by CCVC and CCVCC structures, and so on (Fikkert, 1994). The order of this patterning, however, largely depends on the phonotactics of the target language. Beyond age three, children who have attained a fair degree of proficiency in the internalisation of the phonotactics of their L1 may face a great degree of challenge in learning the phonotactics of an L2, especially if such is quite different from that of the L1. The natural tendency of L2 learning children is to resort to their L1's phonological resources in their new language experience. This might consequently imply L1 phonological influence on the L2 learning or acquisition experience. Before now, a great deal of work had been done, centring around L2 learning or acquisition in general (Best & Tyler (2007), Flege & Bohn (2021), among others.

Moreover, more specifically, Igboanusi (2010), Akinjobi (2016), and Oladipupo (2018) have documented L1 influence in Nigerian English. Despite numerous studies on L1 influence in Nigerian English, most of the existing studies rely largely on perceptual analysis. There is still limited acoustic evidence showing how L1 phonological structures influence the production of polysyllabic English words by young learners. This study, therefore, investigates the acoustic correlates of L1 transfers in the English production of Igbo and Yoruba primary school-age children. The objectives are to identify phonological repair strategies used by Igbo and Yoruba children in producing polysyllabic English words; to examine the acoustic characteristics of these repair strategies and to determine whether there are significant differences in vowel production between Igbo and Yoruba children.

2.0 Literature Review

The influence of a speaker's first language (L1) on their second language's (L2) phonetic production has been widely studied, especially in bilingual and multilingual contexts (Ofulue, 2018). For Igbo and Yoruba children acquiring English, phonetic transfer effects

manifest in segmental and suprasegmental features. These can include vowel space modification (Besta, 2019), voice onset time (VOT) differences (Carlet, 2021), and syllable structure adaptations (Awoyale, 2020). This section reviews existing research on L1 phonetic influence on L2 acquisition from the Standard Nigerian English perspective, focusing on acoustic measures relevant to polysyllabic English (as L2) word production.

2.1 Phonetic and Phonological Features of Igbo and Yoruba

Both Igbo and Yoruba are tonal languages of the Niger-Congo family and are characterised by a syllable-timed rhythm. This is unlike English, whose rhythm is stress-timed (Jowitt, 2019). This rhythmic variance has a major implication for the acquisition of English prosody. Apart from the rhythmic timing difference, other phonological features such as syllable structure and phonotactics also define the level of L1 influence on a child's L2 acquisition journey. Syllable structure includes the canonical (C)V in both Igbo and Yoruba, which contrasts with English's (C⁰⁻³) V (C⁰⁻⁴) structure. According to Ufomata (2009), this structure in Igbo and Yoruba strictly prohibits syllable-final consonants and consonant clusters in the onset. This contrasts with English, which permits complex codas. The vowel systems of both L1s also differ significantly from English in terms of the quantity and quality of the phonemes. Igbo has eight vowel phonemes, while Yoruba has seven oral vowels, in contrast with English, which has twenty distinct vocalic phonemes. Both Igbo and Yoruba lack the front-central /ə,ɜ:,ʌ/ and back-central vowel /ɒ/ found in English (Ugorji, 2010). This disparity in quantity and quality of the phonemes leads to the production of a different set of perceptual categories for English vowels by this set of L2 speakers (Akinbo, 2021). As implied above, both languages also lack the full inventory of English diphthongs such as /ɪə/, /əʊ/, /eɪ/, /ʊə/, etc. These fundamental differences in syllable structure, rhythm, and vowel inventory create predictable grounds for potential transfer. Consequently, children learning English as L2 will naturally apply these L1 structural constraints, leading to the acoustic deviations this study aims to measure.

2.2 L1 Phonetic Transfer in Early-Age Bilinguals

L1 phonetic transfer is a major feature of bilingual phonological acquisition. Fabiano-Smith & Goldstein (2010) opine that the influence

of the L1 on the perception and production of an L2 can be particularly dominant for early-age bilinguals, who are often still consolidating their L1 phonological system. This transfer phenomenon is not random but is governed by the principle of crosslinguistic influence, in which case, the established phonetic categories and phonotactic rules of the L1 act as a filter for L2 input and output.

A number of studies within the Nigerian context attest to the reality of this phenomenon. Igbo and Yoruba, with their tonal rhythm and simple canonical (C)V syllable structure, strongly influence the production of English by their L1 speakers. Shehu (2017) notes that the phonotactic constraints of these languages lead to systematic modifications of sounds in English word production. For instance, the absence of complex onsets and codas in the L1s results in strategies such as consonant cluster simplification and vowel epenthesis to break up consonant clusters. Furthermore, the variance between the vowel inventories of both Igbo and Yoruba, when compared with that of English, often leads to L1-driven vowel substitutions and a restructuring of the L2 vowel space (Ufomata, 2009; Akinbo, 2021).

From the point of view of rhythm, a considerable number of studies confirm that Nigerian English exhibits a syllable-timed rhythm as a result of the influence from the L1s of the speakers (Eka, 1985; Gut, 2002). This contrasts sharply with the stress-timed rhythm of its lexifier language, British English. Jowitt (2019) submits that this results in a perceptibly different speech rhythm, which gives the Nigerian English a unique accent, traceable to the rhythmic properties of indigenous languages like Igbo and Yoruba. On the acquisition of prosodic structure, Fikkert (1994) examines how children acquire prosodic structures, focusing on the development of syllable types and stress patterns. From a crosslinguistic perspective, Demuth (2006) compares syllable structure acquisition across different languages, highlighting both universal patterns and language-specific variations. The work also emphasises the influence of linguistic input on the acquisition process.

2.3 Polysyllabic Word Production and L1 Effects

Regardless of the syllable structure and phonotactics constraints, L2 monosyllabic structures are more easily produced than disyllabic

structures, while disyllabic structures are more easily acquired than polysyllabic structures. The level of difficulty in production progressively increases proportionately with the number of syllables in the structure. This is implicitly so because the learners have to integrate segmental (syllable structure and phonotactics) production with suprasegmental prosodic features (stress placement, syllable timing), all of which are vulnerable to L1 influence.

For Igbo and Yoruba learners of English, Gibbon & Gut (2002) observe that due to the syllable-timing of their L1, the learners' production of English polysyllabic words tends to exhibit a more even rhythmic pattern across syllables, failing to realise the appropriate stress contrast characteristic of native English. Likewise, in the acquisition of English morphemes, such as number and tense markers, Murakami & Alexopoulou (2015) claim that morpheme acquisition across diverse L1 backgrounds demonstrates that learners from languages with restrictive coda conditions, like Igbo and Yoruba, show a higher rate of omission for these morphemes in obligatory contexts. This is not a grammatical deficit but a morphophonological transfer effect; the L1 grammar does not permit the syllable-final consonants required to realise the morpheme. Therefore, the production of polysyllabic words like *wanted* [wɒntɪd] or *books* [bʊks] becomes challenging for the learner. This is often resolved through cluster simplification or an entire morpheme deletion to conform to L1 structural constraints (Jowitt, 2019).

2.4 Acoustic Measures of L1 Influence

Ladefoged (2006) describes acoustic phonetics as the sub-field of phonetics that examines the physical properties of speech sounds, focusing on the acoustic characteristics of spoken language. Johnson (2003) adds that it involves analysing the acoustic waveform and spectrogram of speech to understand how sounds are produced and perceived. The advancement of acoustic phonetics through software like PRAAT, SFS, Audacity and WaveSurfer has brought about the precise and empirical measurement of aspects of human speech, including L1 transfer effects, thus taking analysis beyond impressionistic descriptions to data-driven analysis. Kartushina et al. (2016) affirmed that acoustic measures such as formant frequencies (F₁, F₂), VOT, and vowel duration provide objective evidence of how L1

phonological categories shape L2 production. Furthermore, a number of studies on Nigerian languages, such as Yoruba, and Nigerian English have effectively utilised these tools. For example, Akinbo et al. (2024) conducted an acoustic study on vocal expressions in two genres of Yoruba oral poetry, *Ìjálá* and *Èṣà*, analysing acoustic correlates like pitch, intensity, and vibrato; Osewa & Ugorji (2019) also explore the acoustic values of the pitch properties that characterise tone types in Itsekiri and provide clearer descriptions to justify the tonemic characterisation; and Carlet (2021)'s study on vowel production reveals that Igbo and Yoruba speakers often produce English vowels with formant values that reflect their L1 vowel positions. Studies on VOT also reveal that Nigerian speakers, including those with Igbo and Yoruba L1, often produce English voiceless plosives (/p, t, k/) with significantly shorter VOT values, aligning with the VOT settings of their native languages, rather than the aspirated targets of English (Carlet, 2021; Ufomata, 2009). Acoustic studies also throw more light on strategies of vowel reduction and epenthesis: Chang (2012) notes that speakers adopt epenthesis as a universal repair strategy for handling prohibited phonotactic structures. The paper notes that it is a direct acoustic manifestation of L1 transfer for Igbo and Yoruba learners. Hence, the insertion of a vowel, visible in the spectrogram as a new formant structure, helps to preserve the (C)V syllable template.

2.5 Theoretical Framework

This study is premised on the theoretical foundations of both Transfer Theory (Odlin, 1989), Prosodic Phonology Theory (Selkrik, 1984; Nespor & Vogel, 1986) and Optimality Theory. Transfer Theory posits that a learner's existing L1 linguistic system fundamentally influences their acquisition of an L2. It can be inferred from this theory that the phonological structures of Igbo and Yoruba will be systematically applied to the learners' English production. Consequently, certain aspects of the L2 phonology which are at variance with the L1, such as consonant clusters and codas, are simplified based on the provisions of the L1 phonology. This theory is, however, complemented by prosodic phonology, which explains how speech is organised into hierarchical prosodic units such as syllables, feet and prosodic words. In summary, this combined framework provides a balanced foundation for the study:

Transfer Theory identifies the source and nature of the crosslinguistic influence, while prosodic phonology is particularly relevant to this study because the repair strategies observed in the children's production such as epenthesis, resyllabification and temporal separation operate at the level of syllable and prosodic structure. OT proposes that linguistic outputs are determined by the interaction of universal constraints that are ranked differently across languages (Prince & Smolensky, 2004). Together, they give a principled explanation of how and why the phonological systems of Igbo and Yoruba manifest so distinctly in the acquisition of English phonology by the participants.

3. Methodology

This research adopted a purposive sampling method to select 24 Yoruba and Igbo children aged five to eight in both Lagos and Anambra states. All the participants were L1 speakers of either of the languages, while they were L2 speakers of English. Speech samples of participants were elicited using 45 English words. Each participant produced a controlled list of forty-five English words containing complex syllable structures and phonotactic patterns not evidenced in Igbo and Yoruba languages. Data collection utilised monophonic audio recorded at 44.1 kHz sampling frequency, and were analysed using Praat software. Measurements were taken using spectrograms to identify acoustic cues: vowel quality was determined by measuring formant frequencies of (F_1 and F_2) in Hertz (Hz); intensity peaks were measured in decibels (dB) and deeps were marked. The spectrograms were observed for possible epenthesis and intrusive release, while duration was measured to confirm prosodic timing. Additionally, vowel variation analysis was conducted between the Igbo and Yoruba groups using 24 tokens of varied pronunciations. Descriptive statistics were also carried out for F_1 , showing vowel height and F_2 for the BACK feature. Normality (Shapiro-Wilk) and homogeneity of variance (Levene) were conducted and One-way ANOVA was run separately for F_1 and F_2 to test for significant group differences. Lastly, the effect size was calculated to measure the proportion of variance by group.

4. Data Analysis

The data from the two different L1 participants were placed under Praat and analysed for variational phonological patterns and possible

acoustic interpretations were given. This section discussed the observed phenomena and gave acoustic interpretations as displayed on the spectrograms. The features include acoustic evidence of coda repair, consonant cluster repair and vowel change. The F₁ and F₂ of distinct vowel productions in Yoruba and Igbo groups were also analysed using descriptive statistics and one-way ANOVA to check the spatial and homogeneity relationship between the productions of the participants from the two different L1 groups.

4.1 Coda Repair

Coda position refers to the final consonant(s) of a syllable. This is evidenced in the English language and aligns with its phonotactics but coda is not allowed in both Igbo and Yoruba syllable structures. However, in the production of English words with a coda, the participants were observed to have employed different strategies. Consider Table 1 from the research data sample:

Table 1: Sample of Participants' Production Showing Instances of Coda Repair

1	Word	Input	Yoruba Participants' output	Igbo Participants' output
a.	Elbow	/ 'el.beu/	[el.bo]	[é:bò]/[el.bo]
b.	Butterfly	/ 'bʌt.ə.flaz/	[bo.ta.flaz]	[bò.tà.flaz]/[bò.tà.fu.la(j)ɪ]
c.	Calendar	/ 'kæl.en.də/	[ká.lan.dà]	[Kà.lɪn.dà]

The data samples in (1b-c) show strict coda repair for the initial syllables, while (1a) shows alternate pronunciations with and without the coda repair. This gives a signal that children who are exposed early to English language learning are likely to conquer L1 interference over time. In (1a-b), it is also observed that the physical properties of the lateral sound may have contributed to this phonological allowance of / é.l.bò/ instead of the coda repair strategy in / ɛ.lu.bo/ or the onset cluster in / bɔ.ta.flaz/; such epenthesis is bypassed due to sonority hierarchy where the lateral being a high sonority liquid functions more as a moraic coda. From this phonological perspective, the lateral does not remain in the coda position following a consonant because it serves as a Tone-Bearing Unit (TBU). In these varieties, the lateral does not merely close the syllable; it hosts the pitch contours (High), inherent to the speaker's native prosodic system. Consequently, the high sonority of the lateral satisfies the L1 requirement for melodic stability while

simultaneously adhering to the L2 (English) syllabic structure. Acoustically, the constricted but not closed vocal tract results in low F_1 captured between 250Hz and 400Hz and high F_3 above 2500Hz. The F_2 fluctuates based on the quality of the vowel in its environment; the value of F_2 rises to between 1800Hz and 2200Hz after front vowels and drops as low as 1000Hz to 1500Hz after back vowels, reflecting steady formant transitions (Stevens and Blumstein, 1994). Some of these acoustic features are captured in Fig. (1a,b)

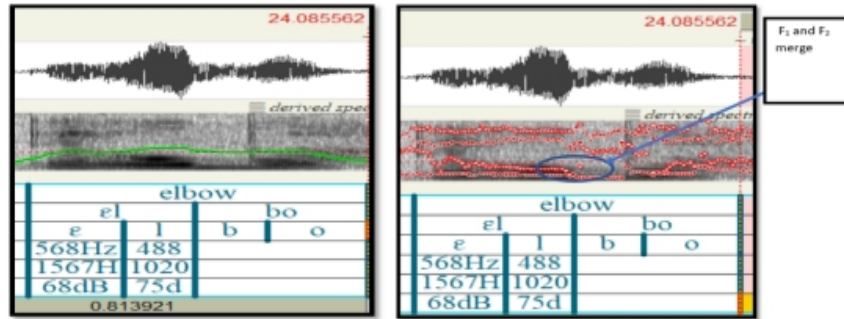


Fig. 1. Spectral view of the word 'elbow' showing formants merge (in **Fig 1b**), similarity in the intensity value of the vowel /ε/ and lateral /l/ (Fig.1b)

It is also attested in literature that dark or velarised laterals occur at coda positions. From Fig 1, we observe that there is no clear F_1 and F_2 separation. This near merging adds a colouration of a back vowel quality, making it sound like [lu, lo], giving it an alignment-like no coda effect. For the sample in example (1b-c) in relation to resyllabification, intensity marker characterised by the yellow or green line in Praat rises on vowels which are syllable nuclei, so intensity lines peak on each syllable. This means that local features in the speech envelope, that is, clear intensity peaks and deeps can be used to determine a number of syllables. See Fig. (2).

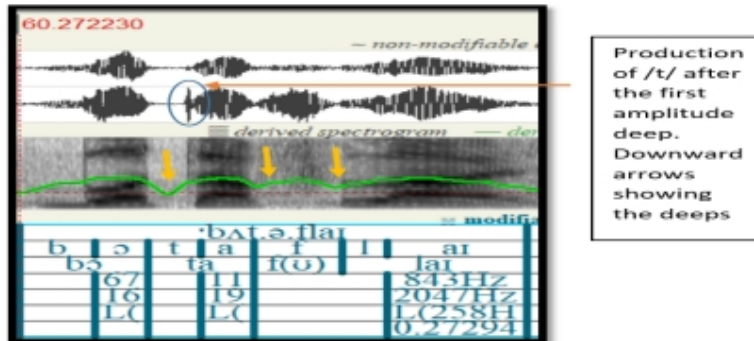


Fig 2. Showing resyllabification in the word 'butterfly' by an Igbo participant
4.2 Consonant Cluster Repair

Ideally, both Igbo and Yoruba phonologies do not permit consonant clusters and consequently employ either epenthesis or consonant deletion as repair strategies. Epenthesis repair is observed on the spectrograms below, with visible formant bars between the consonants or after a coda.

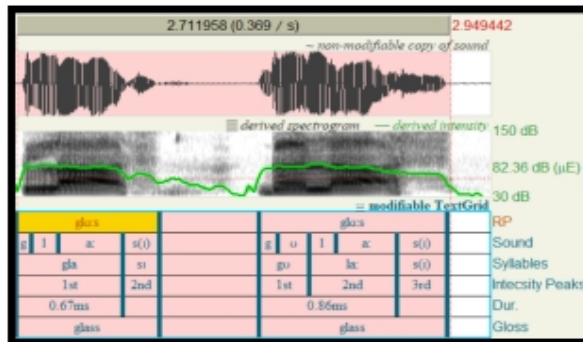


Fig. 3. Spectral views of the word 'glass'

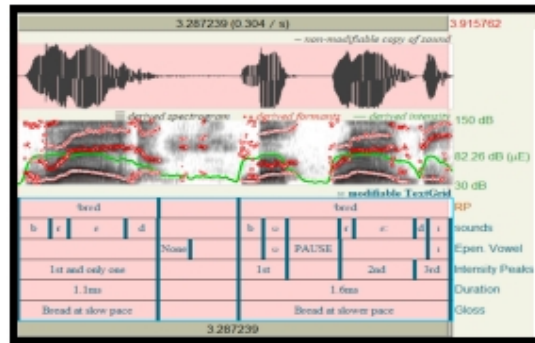


Fig. 4. Spectral views of the word 'bread'

In Fig. (3), the first spectrogram shows a /gl/ cluster with the lateral /l/ having faint bars immediately after the burst; while the second spectrogram of Fig. (3) has steady dark bars immediately after the bilabial burst, signifying the presence of an epenthetic vowel in between the cluster /gl/, thus giving us /gʊl/. In Fig. (4), the final consonant space in the first spectrogram is empty, indicating no vowel insertion after the coda, while the second spectrogram of Fig. (4) indicates speech wave activity after the coda, housing the epenthetic vowel at syllable or word final position.

However, it is observed in the speeches of Yoruba and Igbo L1 learners of English that certain consonant clusters are permissible.

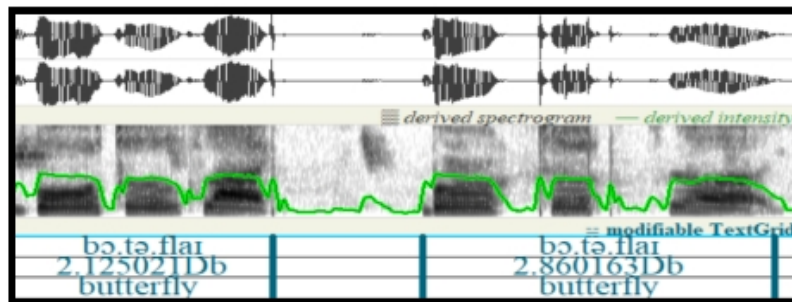


Fig.5. Slow and slower speech rate of 'butterfly'

In the production of the word butterfly, a back-vowel-like sound is perceived in between the cluster /fl/, which suggests a syllable break.

However, in Fig (5), when produced in slow rate at 2.13dB and a slower rate at 2.86dB, the /fl/ cluster is maintained, giving the word a total of three syllables. However, in other non-sonorant clusters, there are acoustic traces that may be used to argue that, despite the early exposure to the English language, these children struggle with some clusters that do not align with the phonology of their L1. Part of this was discussed earlier on coda laterals without distinct F₁ and F₂, which acoustically gives a colouration of a back-vowel-like sound. Though this is a coda case, in instances of consonant clusters, it is more of a temporal repair for consonant clusters while suppressing full epenthesis. This silent temporary boundary is perceived as a pause or micro-break in Fig. 6 and 7, between the voiceless alveolar fricative and the following consonant cluster, e.g. /s-k, s-t and s-tr/. This pause is acoustically described with no formants and a brief period of about 0.2 ms of near silence or sometimes turbulent airflow, treating the initial as a syllabic unit, thus inserting a prosodic boundary. This phenomenon is defined as temporal separation or intrusive release. This is illustrated in Fig.6 and Fig.7 below.

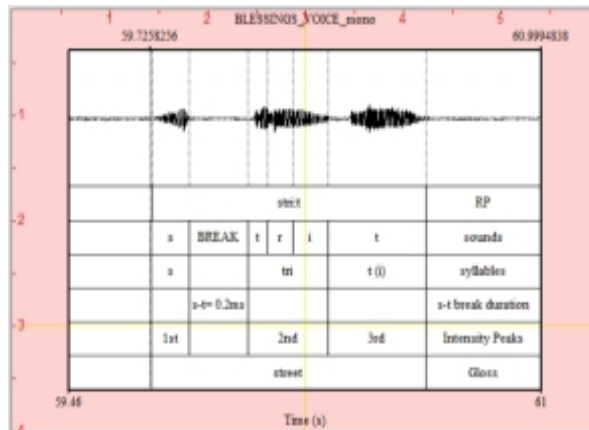


Fig.6. Micro break in sCC word ‘street’

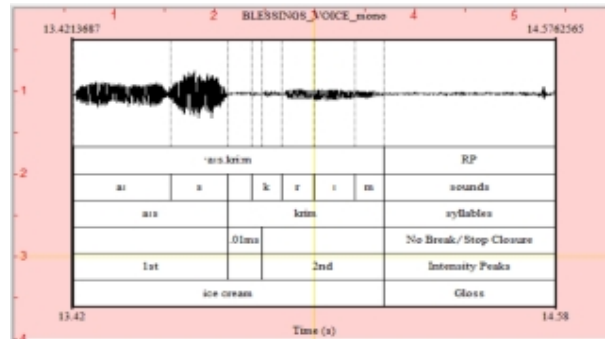


Fig.7. Syllabic break in s.kCV word 'icecream'

In /st-/ clusters, there is a tight timing compared to that relating to that of /sk-/. While /sk-/ is coarticulated because of the differences in places of articulation, alveolar and velar, /st-/ shares the same place of articulation. Following this, for the same place of articulation, a period of maintaining fricative airflow followed immediately by sealing off airflow with the tongue for the /t/ closure. For /sk-/ coarticulation, there is the tendency of frication overlap in the participants' production because while the blade of the tongue is still at the alveolar region for the production of /s-/, the tongue retracts towards the velar for the production of /-k-/. This causes a frication bleeding into the stop closure in the waveform. While this production may seem simpler than /st-/, the timing may be considered longer because of the double articulation. For /str-/ cluster, after frication and sealing of airflow and burst period, the tongue immediately assumes a rhotic position, making a three-time rapid gesture. It is observed in the data, that the three consonants are simplified to two /s-tr-/. This is marked by the closure duration from end of frication to burst. Studies have shown that SCV clusters vary in closure durations and durations are shorter in adults than in children, varying in speech rate and also individual differences. The duration measured after /s-/ frication to /-k-/ burst is 0.231dB showing abnormal pause which can be easily explained as prosodic boundary repair in consonant clusters. This is compared with that of a normal speech production of a non-cluster /s.k/ where /s/ is a coda of a preceding syllable and /k/ as the onset of the following syllable. The duration between sound production is 0.141dB

4.3 Vowel Change

Two main types of changes were observed in the vowel production of the participants. These are monophthongisation of diphthongs and vowel strengthening. They are analysed in 4.3.1 and 4.3.2.

4.3.1 Monophthongisation

Table 2 shows sample monophthongisation from the participants.

Table 2: Sample Monophthongisation from Participants

	Word	Input	Participants' Output	Sound Change	Type
a	Ice cream	/aɪskrɪm/	/aɪskrɪm/	NA	NA
b	table	/teɪbl/	/tebul/	→/ei e/	simplification
c	zero	/zɪərəʊ/	/zɛrɔ/	→→→/ɪə ɛ; əʊ o/	simplification

→→→As observable from the table, certain diphthongs are simplified to monophthongs: /ei e, ɪə ɛ, əʊ o/ etc. However, the diphthong /-aɪ-/ was retained in all its appearances. In spectral view, the monophthongs are characterised by near horizontal straight F₁ and F₂ bars, while the trajectory F₁/F₂ shift in diphthongs, giving a sloping F₁ and F₂ and a peripheral vowel space.

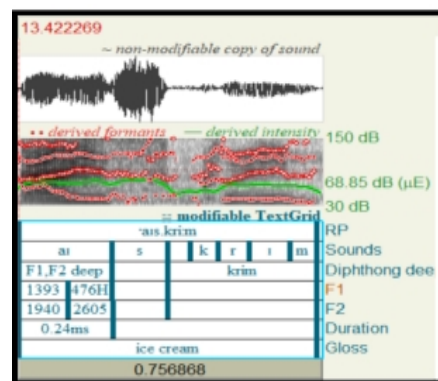


Fig. 8

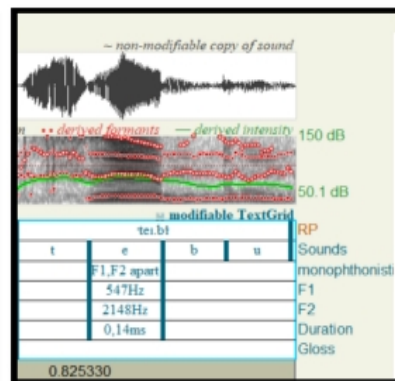


Fig. 9

Comparing Monophthongisation in ‘table’ (Fig.9) with the diphthong in ‘ice cream’ (Fig.8)

In Fig 9, it is observed that the simplified /-ei-/ in the *table* keeps clear separate F₁ and F₂ lines and is realised at 0.14ms while the /ar-/ which did not undergo simplification is produced at 0.24ms and has a deep hollow F₁ and F₂ as seen in the second spectrogram of Fig (8).

4.3.2 Vowel Strengthening

Weak vowels like /ə/, usually produced in unstressed syllables, assume properties of a full-blown vowel in the participants’ speech samples. Acoustically, the schwa has a significant short duration, as well as weak formants with mid0 F₁ and F₂. Fig (11) shows full bands and fully realised formant values of the full vowels produced in place of the weak ones. The samples are at word medial, after voiceless plosive, and at word final, after voiced and voiceless fricatives respectively.

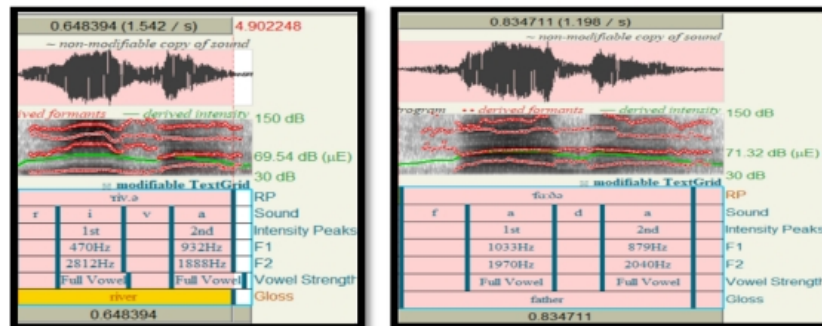


Fig. 10: Spectral views of schwa strengthening at mid and final positions in ‘father’ and ‘river’

4.4 Variation between the Participants’ L1 Sub-Groups’ Vowel Production

In the previous sections, the phonological and acoustic features observed in the participants’ production were discussed. Bear in mind, however, that the participants belong to two different linguistic groups, Igbo and Yoruba, which form the basis of their different L1s. Acoustic evidence shows that there are some variations in some vowel realisations between both linguistic groups. Table 3 shows the

participants' realisation of vowels /ɪ/ and /ə/, as well as the F₁ and F₂. A total of twenty-four tokens were analysed. See Table 3.

Table 3: Participants' Realisation of Vowels /ɪ/ and /ə/, as well as the F₁ and F₂

S/N	Participant	Group	Word	Target Vowel	Output	F1	F2
1	1	Yoruba	Calendar	/ɪ/	[a]	630.00	1741.00
2	2	Yoruba	Calendar	/ɪ/	[a]	612.00	1844.00
3	3	Igbo	Calendar	/ɪ/	[ɪ]	532.00	2299.00
4	4	Igbo	Calendar	/ɪ/	[ɪ]	655.00	2428.00
5	5	Igbo	Calendar	/ɪ/	[ɪ]	683.00	2550.00
6	6	Igbo	Calendar	/ɪ/	[ɪ]	441.00	2444.00
7	7	Yoruba	Calendar	/ɪ/	[ɪ]	521.00	2245.00
8	8	Yoruba	Calendar	/ɪ/	[a]	628.00	1738.00
9	1	Yoruba	Potato	/ə/	[o]	531.00	1961.00
10	2	Yoruba	Potato	/ə/	[o]	609.00	1814.00
11	3	Igbo	Potato	/ə/	[e]	462.00	2151.00
12	4	Igbo	Potato	/ə/	[e]	563.00	2158.00
13	5	Igbo	Potato	/ə/	[e]	473.00	2386.00
14	6	Igbo	Potato	/ə/	[e]	512.00	2233.00
15	7	Yoruba	Potato	/ə/	[o]	625.00	1702.00
16	8	Yoruba	Potato	/ə/	[o]	552.00	2164.00
17	1	Yoruba	Hospital	/ə/	[a]	540.00	1480.00
18	2	Yoruba	Hospital	/ə/	[a]	990.00	1953.00
19	3	Igbo	Hospital	/ə/	[u]	440.00	2097.00
20	4	Igbo	Hospital	/ə/	[a]	716.00	1937.00
21	5	Igbo	Hospital	/ə/	[u]	622.00	1665.00
22	6	Igbo	Hospital	/ə/	[u]	461.00	1583.00
23	7	Yoruba	Hospital	/ə/	[a]	960.00	1693.00
24	8	Yoruba	Hospital	/ə/	[a]	630.00	1388.00

The descriptive statistics in Table 4, using PSPP, shows that Yoruba L1 participants produced vowel F₁ with a mean of 652.33Hz, SD at 156.43; while Igbo L1 participants produced F₁ at 547Hz, SD at 99.47. In Table 4, F₂ is realised for Yoruba L1 participants at a lower mean of 1810.25Hz, SD at 249Hz and Igbo L1 participants at 2161Hz for Mean and 303.32 for SD.

Table 4: Statistical Mean and SD of Yoruba L1 and Igbo L1 Participants' Vowel F₁

Descriptives								
Group	N	Mean	Std. Deviation-	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
F ₁ IGB	12	546.67	99.47	28.71	483.47	609.87	440.00	716.00
YOR	12	652.33	156.43	45.16	552.94	751.72	521.00	990.00
Total	24	599.50	139.10	28.39	540.76	658.24	440.00	990.00

Table 5: Statistical Mean and SD of Yoruba L1 and Igbo L1 Participants' Vowel F₂

Descriptives								
Group	N	Mean	Std. Deviation-	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
F ₂ IGB	12	2160.92	303.32	87.56	1968.20	2353.64	1583.00	2550.00
YOR	12	1810.25	248.86	71.84	1652.13	1968.37	1388.00	2245.00
Total	24	1985.58	325.11	66.36	1848.30	2122.87	1388.00	2550.00

Normality and homogeneity of variance were checked using histograms, Shapiro-Wilk tests and Levene's test. No serious deviation was observed. All $p > .05$.

ANOVA was conducted separately for F₁ and F₂.

ONEWAY/VARIABLES= F₁ BY Group/HOMOGENEITY

Table 6: Test of Homogeneity of Variances

	Levene Statistic-	df1	df2	Sig.
F ₁	.46	1	22	.503

Levene's test indicated homogeneity of variances (p = .053). The ANOVA for F₁ showed no significant effect of F₁ between Yoruba and Igbo participants.

Table 7: F₁ ANOVA

	Sum of Squares	df	Mean Square	F	Sig.
F ₁ Between Groups	66992.67	1	66992.67	3.90	.061
Within Groups	378007.3	22	17182.15		
Total	445000.0	23			

F (1, 22) = 3.90, p = 0.061 > 0.05. This suggests that there is no difference in vowel height between Igbo and Yoruba participants' production because it is statistically significant to the conventional $\alpha = 0.05$

To get the effect

$$\text{size } \eta_p^2 = (F \times df_{effect}) - (F \times df_{effect} + df_{error})$$

Where F=3.90, $df_{effect} = 1$, $df_{error} = 22$

$$\eta_p^2 = 3.90 \times 1 - 3.90 \times 1 + 22 = 3.90 - 25.90 = 0.151$$

This signifies that 15% of the variance in the dependent variable is associated with group that is, after accounting for error. Basically, 15 is medium to large effect, meaning that effect is meaningful despite the fact that p is non-significant. It can be caused by lack of sufficient evidence in the sample to reach $p < .05$

ONEWAY /VARIABLES = F2 BY Group/STATISTICS = DESCRIPTIVES HOMOGENEITY.

Table 8: Test of Homogeneity of Variances

	Levene Statistic-	df1	df2	Sig.
F ₂	.37	1	22	.550

For F₂, Levene's test indicated homogeneity variance of p = 0.550, showing that the group variances are equal because p = 0.550 > .05

Table 9: The F₂ ANOVA

	Sum of Squares	df	Mean Square	F	Sig.
F ₂ Between Groups	737802.7	1	737802.7	9.59	.005
Within Groups	1693277	22	76967.14		
Total	2431080	23			

F₂ ANOVA

F (1, 22) = 9.59, p = 0.005 < 0.05. the p is significant and this indicates that Yoruba L1 and Igbo L1 participants differed significantly in vowel backness.

To get the effect size

$$\eta_p^2 = (F \times df_{effect}) / (F \times df_{effect} + df_{error})$$

Where F=9.59, $df_{effect}=1$, $df_{error}=22$

$$\eta_p^2 = 9.59 \times 1 / 9.59 \times 1 + 22 = 9.59 / 31.59 = 0.304$$

The effect of F₂ is large and statistically significant, showing a strong, meaningful difference accounting for 30% of the variance in vowel backness.

5. Findings

The data analysis yielded four main findings: acoustic evidence of coda repair, consonant cluster repair, vowel change, and vowel variation between the participants' L1 sub-groups' production. The study reveals similarities in the L1 influence on L2 (i.e. English) of the participants. The data show that Igbo and Yoruba children systematically avoid coda consonants (e.g., elbow → $\epsilon l.bo$ / $\acute{\epsilon}\acute{\epsilon}.b\grave{o}$). However, just like in the example given, it is observed that sonorants, in this case laterals, sometimes violate the NO CODA constraint in both languages due to their vowel-like acoustic features of Low F_1 and high F_3 . The study also observes that /gl-/, sCV-, and sCC clusters undergo intrusive release or temporal separation, epenthesis or consonant deletion as repair strategies. The findings support the claim that syllable boundaries can be acoustically detected through intensity peaks and prosodic timing. The results of temporal separation are two-like syllables /s-CV; s-CC/ instead of a complex one /sCV; sCC/ and a longer prosodic timing. This supports the report that children usually simplify their production of longer clusters when compared with adults. The temporal separation realised as micro pauses is mutually exclusive with epenthesis, such that they are introduced only when epenthesis is avoided.

Furthermore, L1 influence is also perceived in the regularising of L2 vowels to align with the vowel system of L1. The prevalence of the schwa sound that characterises unstressed syllables, deemphasised, running or fast speech, is often strengthened to a full vowel in the participant's speeches. Conversely, diphthongs get simplified to monophthongs ($ei \rightarrow e$, $\acute{a}u \rightarrow o$). These observations support Flemming (2005) and Allen et al. (2008), who posit that weak vowels often get strengthened in non-native speech samples. However, the diphthong /aɪ/ was consistently retained; this may be attributed to its presence in the VV sequence of contracted Igbo forms, e.g. /aɪɪ--aɪ/ (2nd Pers. Plural 'we' in Igbo).

Statistically, F_1 results of Igbo and Yoruba vowel production, using ANOVA, show that there is no significant difference in vowel height with $p = 0.061$, even though some scholars may view it as a near-significant situation. The 15% effect size also suggests meaningful variance that a larger sample might detect. Conversely, there is a

significant difference in Igbo and Yoruba F2 vowels with $p=0.005$. The results show that Igbo children produced more fronted vowels (Mean = 2160Hz) than Yoruba children, who exhibited more vowel backness (Mean = 1810Hz). Spectral views and amplitude peaks and deeps, duration and formant readings of F1/F2 trajectories, formant durations, and prosodic breaks all form acoustic evidence, providing measurable cues of where Igbo and Yoruba learners diverge from RP English production.

Conclusion

The study focused on acoustic analysis of selected polysyllabic words by the participants, to provide evidence of the influence of the participants' L1 on their English utterances. The results show that there is a systematic L1 influence on their polysyllabic word production. This is expressed through three primary strategies: coda repair, consonant cluster repair, and vowel change. Furthermore, statistical analysis of vowel formants variation between the Igbo and Yoruba groups indicated a significant difference in vowel backness (F2). These findings offer quantifiable, acoustic validation of L1 phonological constraints and their influence on L2 speech production in early and middle childhood. To overcome or at least minimise the level of L1 influence on the L2, it is recommended that children should be constantly exposed to L2 through media at an early age. Even in school, the children should be given targeted teaching in phonics.

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Gender Influence on the Conversational Intonation Choices of Selected Educated Nigerian Speakers of English

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Abstract

Earlier research efforts on English intonation have focused on its formalised patterns; natural speech intonation features have been insufficiently investigated. Also, there has been a dearth of studies on gender disparity in English intonation usage by educated Nigerian speakers of English (ENSE). This paper explored selected male and female ENSE's conversational English intonation tune choices to know the disparity level in their intonation patterns and their natural speech intonation choices conformity with their interactional context. Seventeen excerpts (containing 85 tone units) were selected from 17 electronic media participants' spur-of-the-moment utterances. The analysed excerpts contexts determined their selection. Data were analysed using frequencies and percentages of the falling and the rising tunes in the study sample's utterances. David Brazil's Discourse Intonation (DI) model constituted the theoretical framework. The participants' intonation patterns revealed only 7 of the 17 excerpts (41.2%) largely subscribing to DI. Male participants' 6 of 12 excerpts (50.0%) and only 1 of the 5 female participants' excerpts (20.0%) conform to DI, though their choices of rising and falling tunes are similar. This implies that educated male Nigerians are more aware of DI than their female compatriots, though almost alike in their usage of the fall and the rise.

Keywords: Formalised intonation; Educated Nigerian speakers of English; Male participants; Female participants; Discourse intonation

1.0 Introduction

Intonation, which is the variation in voice pitch that is intentioned to convey a specific message in an utterance, is a prosodic feature of speech that reveals a speaker's true linguistic intention in a conversational situation. The meaning that intonation yields superimposes on the essential meaning of words (Clark, Yallop and Fletcher, 2007: 359) as words generally may not be able to express the subtle shades of meanings which intonation conveys.

English, which is a stress-timed language, is principally intonational because English intonation can make a word stand out in its tone unit, classify sentence types or indicate specific meanings that sentences are intended to communicate. Conversely, Nigerian languages are tone languages which only use superimposed intonation to a limited degree (Cruttenden, 1986: 10). This non-elaborate use of intonation in Nigerian languages seems to make its extensive use in English a dilemma for Nigerian speakers of English as a second language.

Due to its communicative importance and the fact that effective communication is the wheel on which the society runs, intonation serves as an important link between society and language, it may cause confusion between interlocutors if they do not share the same cultural background or when they come from different speech communities. Generally, it is capable of causing problems between native and non-native speakers as they may not understand each other's intonational meanings appropriately. Wells (2006) states that "When interacting with someone who is not a native speaker of English, they make allowances for segmental errors, but they do not make allowances for errors of intonation. This is because they do not realise that intonation can be erroneous." Since English intonation conveys independent meanings, native speakers concern more about the proper usage of intonation in effective interaction.

According to Jiang (2011: 977), intonation does not only serve a variety of pragmatic acts, it also expresses "a range of social meanings, especially for gender identity". Linguistically, gender differences are not created by nature; rather, they are "determined by the individual and society as a whole" (Orazbekova et al., 2015: 14). That is, gender identity is established more by the dictate of culture than nature. There are societal expectations on how a man should sound to reflect his masculinity and a female's intonational choice to sound ladylike. There is therefore the need to understand how these genders use language, especially intonation, for effective communication to take place.

Meanwhile, it is a general notion that the suprasegmentals, particularly intonation, are difficult to teach and, consequently, difficult to learn. Compounding the problem is the assertion by Cauldwell and Hewings (1996: 327) that most English Language Teaching (ELT) textbooks present only a small set of intonation rules and these same rules are simply repeated throughout the learning process. This is

contrary to what happens in the teaching of grammar where elementary learners are taught simple grammatical rules and layers of complexity are added as the learners' progress. These formalised rules, according to Cauldwell and Hewings (1996: 333), would enable us to "describe only a fraction of intonation choices made in the language as a whole". To account for detailed intonation choices made in natural speech by native speakers of English, Cauldwell and Hewings (1996) propose the naturally-occurring speech or discourse intonation (DI) model which is an approach in which all intonation choices are considered as being related to their context of occurrence.

Aim and Objectives

This paper aims to investigate gender disparity in the spontaneous speech intonation patterns of selected educated Nigerian speakers of English (ENSE), male and female. In view of this aim, the specific objectives of the study are therefore to:

- i. explore the selected ENSE's awareness of the discourse intonation (DI) model;
- ii. examine their use of the discourse intonation patterns;
- iii. investigate their consciousness of the pragmatic import of the discourse intonation tunes in communication; and
- iv. ascertain the influence of gender on intonation usage.

2.0 Review of Literature

Earlier studies on English intonation (Udofot, 1997 and 2007; Jowitt, 2000; Okon, 2001; Adesina, 2005; Akinjobi and Oladipupo, 2005 and 2010; Atoye, 2005 and Melefa, 2001) and the West African Examinations Council's (WAEC, 2013-2016) provisions for the teaching of English intonation have so far focused on its formalised patterns. Even the 2024 National Examinations Council's (NECO) senior school certificate examination only tested knowledge in English speech sounds, rhyme, word stress and emphatic/contrastive stress.

However, language being a means of societal interaction which combines grammatical and social rules, sociolinguistic studies have shown that speech acts and style are systematically influenced by a range of socio-cultural factors which include the aspects of speakers' social background such as their age, gender, ethnicity and socio-economic status (Eckert and McConnell-Ginet, 2003; Labov, 2001;

Lakoff, 2004; McConnell-Ginet, 1978) as well as the speakers' speech communities and social networks (Eckert and McConnell-Ginet, 2003). Gender having been identified as a socio-cultural factor, the existence of gender patterns, by which the speech community is categorised into male/female, in language use has been confirmed by sociolinguistics among native English speakers. The same situation has also been noticed in the use of intonation (Brend, 1975; Eckert and McConnell-Ginet, 2003; Lakoff, 2004; McConnell-Ginet, 1978). Brend (1975) indicates some differences in using the intonation patterns by males and females. Lakoff (2004) states that American women make more use of the question intonation in conjunction with declaratives to show their politeness and cooperation in conversation.

From a corpus experimental study conducted among teenagers in Cambridge, United Kingdom, it is evidenced that female speakers have shown their tendency to use the rising tune in statements, while male speakers, on the other hand, use more falling tunes (Jiang, 2011). As indicated by Trench (1996), the falling tune with statements, wh-questions and commands all represent the speaker's dominance in respect to information and authority. The samples' boundary tone calculation shows that the studied male teenagers used more falls than their female counterparts. The tone usage of male teenagers displayed their assertiveness and confidence in their utterance. The intonational functions of rising tone express speaker's feeling and display their deference to the hearer's assumed knowledge. Lakoff (2004) states that females have been constrained by gender stereotypes which require women to act as a lady. In this social environment, parents, teachers and adults treat the children differently in line with their sex. For instance, "If a little girl 'talks rough' like a boy, she will normally be ostracised, scolded..." (Lakoff, 2004: 40). This study evidenced the use of rises in non-polar questions by female speakers. It assumes that, by using the rising tone, the female teenage students in the study have already learned to "speak like a lady" and act politely. Jiang (2011) concludes that the socio-cultural influence is one of the most influential elements to impact the usage of intonation patterns of female and male speakers.

Generally, the recommended formalised intonation rules taught to learners are, by themselves, insufficient to mirror the comprehensive intonation choices made in spontaneous utterances. Being a natural occurrence and a mode of communication, language is

dynamic and it changes so as to keep pace with the society. It is therefore not practicable to limit it to a finite set of rules because individuals are inclined to convey diverse shades of meanings and attitudes with varying intonation patterns which the interlocutors understand based on the context of their interaction, but which are usually not rule-based. Taking a cue from Adejuwon (2019) who examined the discourse context of educated Nigerian's intonation choices in the non-interrogative English utterances, this paper, therefore, investigates the conversational intonation tune choices in the utterances of selected educated Nigerian speakers of English (ENSE), both male and female, to find out the extent of the conformity of their natural speech intonation patterns with the context of their interaction.

3.0 Theoretical Framework: Discourse Intonation (DI) Model

Discourse Intonation (DI) model is a comparatively new approach to the teaching and analysis of everyday speech that assists in enabling English language learners "to make their meanings and intentions clear to a listener" (Brazil, 1994: 2). This model, initiated by David Brazil, is specifically helpful in this age when there is increasing interest in enquiries on the connection between intonation choices and the speaker's communicative purpose. According to Clark et al. (2007: 359), quite a number of researchers have in recent times "turned their attention to the role of intonation in discourse". This paper adopts the tone system of speaker choice variable in the DI model as its theoretical fulcrum due to the currency of DI, its wide acceptance and close relevance to spontaneous utterances. Speakers have the freedom to choose a tone (referred to in this paper as tune in line with more recent usage in ELT textbooks) instead of another depending on their context of interaction.

Tune, for which Brazil (1997) uses tone, is defined as pitch movements distinguished by their exact direction or contour (Coulthard, 1985: 101). Brazil (1997: 9-10) recognises five tunes, that is, fall, rise, fall-rise, rise-fall and level as the "complete set of possibilities". Nevertheless, vital to tune choice is the proclaiming/referring (P/R) opposition "that is realised by the two tunes most frequently found in many kinds of discourse, the 'fall' and the 'fall-rise'" (Brazil, 1997: 68). The fall depicts its tone unit as "something freshly introduced into the conversation", whereas the fall-rise portrays the tone unit on which it is placed as "what we are talking

about” (Brazil, 1997: 68-69). That is, a falling tune is a proclaiming tune while a rising tune is a referring one. The italicised letters “*p*” (proclaiming) and “*r*” (referring) are accordingly used in place of graphic symbols ↘ and ↗ respectively (Brazil 1997: 69).

Methodology

The study participants comprised 17 educated Nigerian speakers of English (ENSE) whose utterances were recorded during discussion programmes and within-news interview sessions on the electronic media (Nigerian Television Authority – NTA, Africa Independent Television – AIT, Channels Television and Federal Radio Corporation of Nigeria – FRCN). The number was composed of 12 males and 5 females. This number distribution was based on the availability of the two genders during the study. The media outfits were selected on the basis of their ownership; two were government-owned while two were of private ownership. Based on the data collected, a text containing 17 excerpts was prepared. Due to their centrality to the messages of the excerpts, 85 tone units were selected for analysis from the excerpts. The portions that are underlined in the excerpts are the analysed tone units.

All the participants had academic certifications varying from National Certificate in Education (NCE) to university degrees, being professional broadcasters, senior civil servants and other similarly qualified professionals. Educated Nigerian English, which represents the most socially acceptable in Nigeria, is said to be spoken mostly by university graduates (Gut, 2005: 154). Conversely, Adejuwon (2011: 51) has found out that acquiring a university degree in English Language is not necessarily a proof that one is better in the use of English intonation than those who are taught this prosody elsewhere. The important thing is the intensity or quality of the teaching together with the instructional facilities as well as the eagerness or interest of the learner.

Analysis of the data collected was done based on the identification and the quantification of the intonation tunes the study participants used. The exact intonation tunes that the study sample used were identified and the regularity of their occurrence was established. The symbols *p* (for proclaiming tune) and *r* (for referring tune) were employed in place of the falling arrow (↘) and the rising arrow (↗) respectively to represent the tunes placed on the illustrative

tone units in the data analysis. This is in agreement with how Brazil (1997: 69) changed from using arrows to employing the symbols *p* and *r*. Also, conventional punctuation marks were replaced with slashes in line with the practice by Brazil (1997) and Roach (2009) in their intonational analysis. Single slash (/) represents non-sentence-final tone unit boundary while the use of double slashes (//) represents sentence-final tone unit boundary. The instrumental approach was applied to identify the participants' intonation patterns. The acoustic analysis for the study was done by playing back the recorded data to the wasp speech filing system (sfs/wasp) software on the computer. Some of the spectrograms (that is visual representations of the intonation contour) consequently generated are used in the tone-unit illustrations for the analysis. These tone units were taken from the excerpts.

STATA version 11 (a software package for statistical data analysis that was created by Statacorp in 1985 but released for use in 2013), which permits command and reduces error, was used to do a univariate (descriptive/qualitative) analysis of the data. This produced the frequencies and percentages of the occurrences of both the proclaiming and the referring tunes in the study sample's utterances. Thus determined was the participants' conformity with the DI model.

Data Presentation

The 17 excerpts, with 85 underlined tone units for analysis, composing the data for this study, as earlier mentioned, are presented below:

1. //\Nigeria is very much a transitional society//\We are moving towards modernity/
\we are not yet there//We are trying/I think Jonathan got his finger on it by saying/
\his was a transformational leadership//\I've not seen enough transformation/
\but it's an aspiration/\a transit/from what used to be/to where we are today//
\The Nigerian universities are in various stages of lack of preparedness/\but there are
some high quality institutions like the one I'm associated with now//
2. //\In terms of putting this together/what are the materials/what are the tools you need
in actually putting this together//
3. //\I need a hammer/I need a scissors/I need a screw driver/I need chemical glue//

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4. // NEMA and the Federal Government have met / time and time / and time again /
 \ looking for ways of finding a solution // But I dare say / as usual / not much has been
 done so far / because everyone knew that there was going to be flooding / especially in
 the northern part of the country // We seem to know what to do / but how to implement /
 \ whatever we decide to do / is always the problem // It's not enough to continue to sit
 down / people are losing property / children are being washed away / houses are
 washed away // And it's unfortunate / that it is at this point in time / we are still
 meeting / and talking / when the disaster is already here / and another one is looming //
5. // I guess it's ever increasing / and majorly / it's because of awareness // A few years
 ago / people thought it was impossible to do this in Nigeria / but now the belief is there /
 \ that we do it here // Therefore / the patronage also is ever increasing //
6. // Dynamo Kiev have somehow threatened the other teams in Europe // Do you think
 people expect anything good from Dynamo Kiev this time around //
7. // I think the only positive thing we can expect from Dynamo Kiev / perhaps / is for
 them to rack up as many points as possible //
8. // I think the reason why there is a bottleneck in the way African theatre / or Nigerian
 theatre / isn't advancing to that Broadway level / is because we don't have a model that
 works / and we haven't figured out how to create value //
9. // Yes / but all the groups / the producers / the theatre practitioners / the venue
 builders / must take off at the same time //
10. // The collaboration here is to highlight the role that even the military can play
 this time / given the national emergency // It has been directed by the President and
 Commander-in-Chief / that all efforts must be made / to be able to cover this area in a
 specific time period / and the best crop of logistics for this type of operation / when it
 comes to the nitty-gritty / is the military //
11. // The issues remain community-based / to a large extent // Federal government does
 not go to allocate land in states // It is the state governments that do that // The state
 governments do not go to communities to generate the trash // It is these communities
 that have the duty / to ensure that they take charge of their environment //
12. // Yes // Ultimately / the objective of a company is profitability // But you see / in
 business / the moment you begin to look at your profit / without looking at the good of
 your stakeholders / there would be discord //

13. //^You are trying to create food security in Nigeria/^ and in other parts of Africa/^ But these are roles/^ that some people think/^ can best be secured/^ by the government of the day//
14. //^First of all/^ in the part of Nigeria I come from/^ they say/^ a hungry man is an angry man//^ The moment you are able to ensure that your people are fed/^ fifty to seventy percent of the problems are solved//^ Don't forget/^ the moment your next door neighbour is unable to feed/^ you have a security issue//^ Coming to the involvement of the government/^ I haven't seen a much more concerned government/^ in trying to get food security for our people/^ than this current government//
15. //^I think we depend on oil/^ from the report/^ we depend on oil basically//^ So/^ we should go into manufacturing/^ into agriculture/^ into other areas/^ so we would be able to make sure that we also earn income from them//
16. //^At House of Representatives/^ we have done our part//^ We have done it well/^ and I know Nigerians are proud of us//^ For you to know that we have done our own part/^ we go to the constituencies through the committees//^ My people are not having food/^ roads are not good/^ hospital not working/^ educational system in shamble/^ power is not okay/^ and we keep on having crimes here and there//
17. //^Mr President should stop the importation of any spare part//^ Save our foreign exchange//^ Our foreign reserve shrinks due to importation of spare parts//^ This will create job for our people/^ and also will create capacities all over the country//

As already stated, it should be noted that *p* (for proclaiming tune) and *r* (for referring tune) have been used instead of the falling arrow (↘) and the rising arrow (↗), respectively, to indicate the intonation tunes employed by the speakers. Also, slashes have been used in place of conventional punctuation marks, with a single slash (/) representing a non-sentence-final tone unit boundary and double slashes (//) signifying a sentence-final tone unit boundary. These changes were effected in line with the principles of DI.

Data Analysis

It is obvious that DI is still a strange model in the English intonation of ENSE, going by the intonation patterns of the participants under study. Out of the 17 excerpts produced by both male (12 excerpts) and female (5 excerpts) participants, only 4 had complete conformity with DI. These are Excerpts 7, 9, 13 (by male participants) and Excerpt 2 (by a

female participant). Both the proclaiming and the referring tunes placed on these excerpts, irrespective of whether the tone units are sentence-final or non-sentence-final, are in conformity with DI because the participants were either supplying information or establishing common grounds between them and their interlocutors. For instance, the lone analysed tone unit in Excerpt 2 was produced with a terminal falling tune even though it is non-sentence-final:

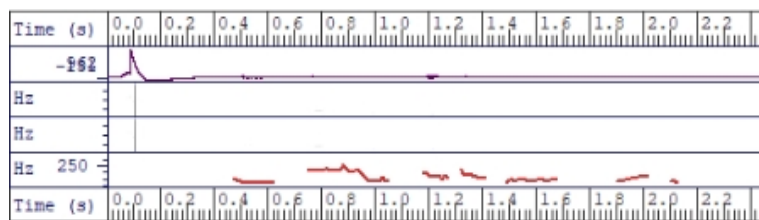


Figure 1: SFS screen capture of “In terms of putting this together...”
 The final tone unit in Excerpt 13 was produced with a rising pitch at the end:

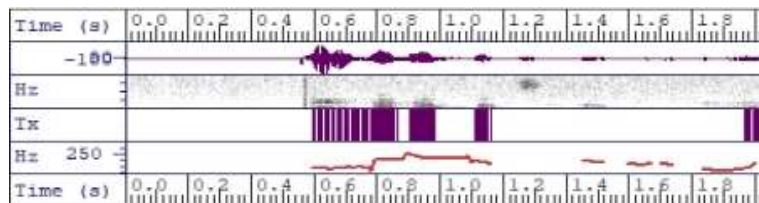
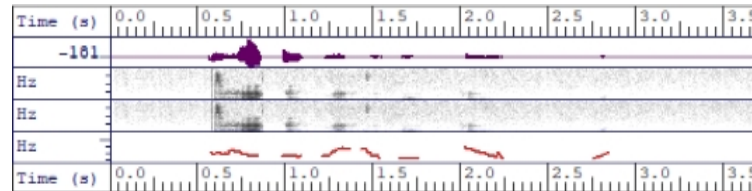


Figure 2: SFS screen capture of “and in other parts of Africa//”

Above average conformity with DI was recorded in 3 excerpts (Excerpts 5, 10 and 17), all produced by male participants. The participants who produced these excerpts did not record full conformity with DI because their intonation choices were influenced by their knowledge of systemic or grammatical intonation rather than their context of interaction. For instance, the participant who produced Excerpt 10, being a government functionary, was privy to the fact that

the President had given certain directives and was therefore giving information. His choice of the rising tune on a tone unit in the excerpt, a non-sentence-final tone unit, is therefore grammatical rather than discursal:



//r It has been directed by the President and Commander-in-Chief/

Figure 3: SFS screen capture of “It has been directed by the President and Commander-in- Chief

Average conformity with DI was recorded in an excerpt (Excerpt 12) while below average agreement with DI was recorded in another excerpt (Excerpt 14), both produced by male participants. The choice of the proclaiming tune in the last 2 tone units of Excerpt 12 (1 non-sentence-final and 1 sentence-final) is clearly in accord with DI because these tone units are essentially conveying information. There is however a muddling of tunes in the remaining 2 tone units as the one that is referring to a shared knowledge (a terminal tone unit) was spoken with a proclaiming tune while the one that is passing new information (a non-sentence-final tone unit) was produced with the referring tune. This shows that the participant’s intonation choice was guided by the formalised rule, not DI.

Eight of the 17 excerpts (47.1%) do not conform to DI (Excerpts 1, 6, 15, 16 by male participants and Excerpts 3, 4, 8, 11 by their female counterparts). So, 33.3% of the male participants’ excerpts run contrary to DI while 80.0% of the females’ did not conform to DI.

Adding the excerpts that are in total accord with DI and those with above average conformity, we only have 7 out of 17 excerpts (41.2%) that largely subscribe to DI. Of these 7 excerpts, 6 were produced by male participants out of their 12 excerpts (50.0%) while only 1 out of the 5 female participants’ excerpts (20.0%) conforms to

DI. This implies that educated male Nigerians are more in tune with DI, though averagely, than their female counterparts who are less aware of and sparingly use DI, at least in the aspect of non-interrogative tone units.

Meanwhile, while the foregoing has shown that educated Nigerians generally do not make conscious use of DI in their spontaneous utterances, the analysis so far has also revealed that both educated male and female Nigerians do not often follow the rule-based or grammatical patterns in their choice of intonation tunes. Twenty-six of the 61 tone units spoken by the male participants are sentence-final while 35 are non-sentence-final tone units. That is, going by the formalised intonation rules, one would expect a greater occurrence of the rising tune than the fall, non-sentence-final tone units being greater in number than the sentence-final ones. They however uttered 41 (67.2%) of their tone units with the fall while producing only 20 (32.8%) using the rise. Nine of the 24 tone units produced by the female participants are sentence-final while 15 are non-sentence-final. In spite of the preponderance of the non-sentence-final tone units however, the female participants uttered 16 (66.7%) tone units with the falling tune and said just 8 (33.3%) with the rising tune.

In contrast to the Cambridge corpus experimental study reported by Jiang (2011), this paper has revealed that there is no noticeable difference in the intonational choices of both genders of ENSE. Both male and female participants produced about equal percentages of their respective tone units with the falling and the rising tunes. This implies that neither male nor female ENSE sounds more assertive or submissive than the other.

6. Conclusion

This paper has only revealed a significant difference in the male and female educated Nigerian speakers of English conformity with the discourse intonation model, with the male participants recording average conformity while the females' conformity was quite low. There is however no striking disparity between male and female ENSE with

regard to their grammatical intonation patterns as both the male and female participants' choices of the fall and the rise recorded almost equal percentages. Therefore, ENSE are generally the same in their intonation tune choices as they use English intonation to assert or cooperate to very similar degrees, irrespective of gender. It is however recommended that the discourse intonation principles be accommodated in the spoken English curricula and English intonation be taught at all levels by experts in the phonology of English to improve its proficient use.

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Pragmatic Implications of Intonation Patterns of Post-Millennials in Nigeria

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Abstract

This paper focuses on the phonological level of analysis in exploring the pragmatic impact of intonation patterns on the speech of post-millennials. The study investigates the use of intonation patterns to achieve politeness in conversations. Attitudinal functions of intonation, intended meaning, and the impact of intonation on listeners were explored. The theoretical framework adopted for the study is Halliday's Systemic Functional Linguistics. The study adopts a qualitative research design in which speech samples from twenty post-millennials in Plateau State College of Nursing Sciences, Vom, Jos Campus, were recorded secretly, ensuring that all ethical considerations were in place. Samples for analysis were purposively selected such that only utterances relevant to the study were analysed based on the intonation patterns used. The collected utterances were analysed using Praat. The findings of the research reveal that meaning components can be deduced from aspects of attitude revealed through intonation; intonation helps determine the intended meaning of speakers in an utterance; and the effect of an utterance on a listener can be examined using the intonation patterns of the speaker's response.

Keywords: Pragmatic, intonation patterns and post-millennials

1.0 Introduction

Intonation has been a core concern in linguistic studies for many years. It is important to recognise that intonation patterns are not mere pitch changes; they perform a decisive pragmatic role in conveying a speaker's attitudes, intentions and the overall flow of discourse. In Nigerian English, intonation takes on particular importance due to the country's rich linguistic diversity and the influence of various indigenous languages on its English. The post-millennial generation, or Generation Z, represents a unique unit shaped by rapid technological advancements, globalisation, and distinct socio-cultural experiences. Their communication styles, heavily influenced by digital media and online interactions, are often characterised by novel linguistic features, including intonation patterns (Ekayati et al., 2024). These intonational

variations can reflect shifts in pragmatic norms, signaling new ways of expressing agreement, disagreement, sarcasm or politeness.

In Nigeria, the pragmatic implications of post-millennial intonation are particularly outstanding. The intersection of generational identity with ethnic and regional linguistic backgrounds creates a complex tapestry of intonational usage. For instance, the intonation patterns used by a post-millennial speaker from the Igbo ethnic group might differ significantly from those of a speaker from the Hausa or Yoruba groups, reflecting the influence of their respective mother tongues (Asadu et. al., 2019). These differences can lead to potential misinterpretations or communication breakdowns, highlighting the need for pragmatic awareness. Moreover, the rise of social media and digital platforms has accelerated the spread of new intonational trends among post-millennials. Features such as uptalk (rising intonation at the end of declarative sentences), vocal fry and specific pitch contours associated with online slang or memes are increasingly prevalent in their spoken interactions.

Aim and Objectives of the Study

The study aims to investigate the intonation patterns used by post-millennials to express politeness. Specifically, the objectives of the study are to:

- i. explore the attitudinal functions of intonation patterns used by post-millennials;
- ii. analyse speakers' intentions in terms of face-saving and face-threatening acts as perceived through the use of intonation patterns;
- iii. deduce the effect of intonation patterns on hearers' interpretation of utterances.

Research Questions

The study is guided by the following questions:

- i. How do intonation patterns reveal aspects of speakers' attitudes towards hearers and towards the subject matter?
- ii. How can speakers' intentions be interpreted in terms of face-saving and face-threatening acts using intonation patterns?
- iii. What is the impact of intonation patterns on the interpretation of utterances?

2.0 Literature Review

2.1 Intonation

Intonation refers to the variation in pitch during speech, often used to signal grammatical structure, speaker attitude, or discourse function (Dash, 2022). Wells (2006) describes intonation as the melody of speech, characterised by patterns of rising and falling pitch that contribute to the expression of syntactic boundaries and emotional nuances. Meanwhile, Brazil (1997) defines intonation as the use of pitch variation to reflect the speaker's ongoing assumptions about the listener's state of knowledge. The primary types of intonation include falling, rising, and fall-rise intonations. Each type is associated with particular meanings: for example, rising intonation may indicate a question or uncertainty, while falling intonation may suggest finality or certainty. Beyond grammatical roles, intonation serves vital pragmatic functions. It can indicate politeness, highlight contrast or emphasis, express emotions, or signal sarcasm and irony. In spoken interaction, especially informal conversation, intonation often serves as a tool for managing turn-taking, showing agreement or disagreement, or softening the force of a statement. Among post-millennials, who are known for fluid and expressive speech styles, intonation becomes even more crucial as a vehicle for social signalling and identity expression.

Nigeria's sociolinguistic environment exhibits diglossia, where English is predominantly used in formal contexts such as education and governance. At the same time, indigenous languages are more commonly spoken in informal settings (Obodo & Uche, 2024). However, post-millennials, particularly in urban areas, navigate a hybrid linguistic environment. Nigerian Pidgin (NP), a creole blending English and local languages, often serves as a lingua franca among youths, influencing intonation patterns. For instance, the rising intonation in declarative sentences common in NP has permeated the English spoken by young Nigerians, a phenomenon that has been referred to as Nigerian uptalk. This blend reflects the adaptive strategies of a generation balancing global influences with local identity.

2.2 The Use of Intonation to Achieve Politeness

Intonation, the melodic variation of pitch in speech, is essential in conveying politeness across languages and cultures. Speakers can soften directives, express deference, or signal empathy by modulating pitch

contours, thereby navigating social hierarchies and maintaining harmonious interactions. For instance, a rising intonation in requests (e.g., “Could you close the window?”) often conveys tentativeness, reducing the imposition on the listener. In contrast, a falling intonation in statements may assert confidence without sounding abrupt. These prosodic strategies align with Brown and Levinson's (1987) politeness theory, where intonation serves as a linguistic tool to manage “face-threatening acts” and preserve mutual respect. However, interpretations of polite intonation are culturally contingent; what signals deference in one context might imply uncertainty or submissiveness in another, underscoring the need for cross-cultural awareness in communication.

The interplay between intonation and politeness becomes even more distinct when considering contextual factors such as power dynamics, gender norms, and situational formality. Studies reveal that speakers in service industries (e.g., hospitality) often adopt exaggeratedly melodic intonation to project warmth and approachability. At the same time, in educational settings, teachers may use controlled pitch ranges to balance authority with approachability. Technological advancements, such as speech analysis software, have enabled finer-grained examinations of these patterns, demonstrating how micro-variations in pitch and rhythm influence perceptions of politeness. Wichmann (2000) found that listeners associate slower speech rates and mid-level pitch ranges with politeness in British English. However, over-reliance on stereotypical intonation patterns risks performativity, where politeness becomes formulaic rather than genuine. Furthermore, emerging research on non-Western languages, such as tonal languages like Mandarin, challenges Eurocentric models by revealing how lexical tone and intonation interact to express politeness. This evolving field underscores the complexity of intonation as both a universal and culturally specific marker of politeness, urging further interdisciplinary exploration into its sociolinguistic and psychological dimensions.

Intonation refers to the variation in pitch during speech, often used to signal grammatical structure, speaker attitude, or discourse function (Dash, 2022). Crystal (2008) describes intonation as the systematic use of pitch movement in speech to convey grammatical, attitudinal, or discourse-related meanings. Brazil (1997) emphasises the role of intonation in reflecting a speaker's assumptions about the

listener's knowledge. In Nigerian English, intonation patterns reflect both indigenous language influences and pragmatic innovations shaped by youth culture and digital communication.

Studies like Abaide et al. (2021) and Ado (2017) demonstrate how Nigerian English diverges from native varieties in the use of rising and falling tones, particularly in managing politeness and pragmatics. For example, falling tones dominate in contexts where rising tones would be more expected in RP (Received Pronunciation), due to traditional norms of respect and assertion. Similarly, Obodo and Uche (2024) highlight diglossic environments where English coexists with indigenous languages, influencing tonal adaptation.

Abaide et. al. (2021) studied how interlocutors in the Nigerian English-speaking homes use intonation of questions to trigger a pragmatic inference. The study adopted Mey's (2001) Pragmatic Acts theory for the analysis of the data collected. Three Nigerian home movies were randomly selected from two cultural areas where major movies are produced in Nigeria. One of the movies exhibits the Igbo culture and the other two movies exhibit the Yoruba culture. The study revealed that intonation contrasts play a critical role in conveying pragmatic meanings. It was also revealed that Nigerians use intonation in ways different from native speakers to convey meanings in relation to cultural context or situations.

Furthermore, the study shows that commonly or highly used types of questions for pragmatic import in Nigerian English-speaking homes are Wh-questions and yes/no questions. Tag questions are rarely or inappropriately used. Fall and rise tunes are often used in Nigerian English-speaking homes compared to what obtains in Standard English, where four tunes are used. The Pragmatic import of intonation of questions in Nigerian English-speaking homes may mean a request, anger, a warning, a command, a surprise, an abuse, an insult, or a call to order. They, therefore, conclude that the prosodic information realised varies across speakers and contexts. Therefore, the interlocutors need to be familiar with the socio-cultural contexts of their environment to achieve mutual understanding, social cohesion and to avoid misrepresentation of intentions.

The intelligibility of everyday speech is built on the mastery and use of appropriate intonation patterns. This makes intonation the music of everyday speech, of which its appropriate use has been the final hurdle that the majority of the speakers of English as a Second Language

have not crossed. Asadu et. al. (2019). In their paper, Asadu et. al. investigated the intonation patterns of the randomly selected 45 bilingual educated speakers of English, from diverse educational backgrounds representing the three senatorial zones in Ebonyi State. The study revealed a low level of proficiency in the use and assignment of accurate patterns of intonation in the utterances of the participants. Aside from the widely known and commonly used intonation patterns of fall, rise, rise-fall and fall-rise, it was observed that there was the use of low pitch accent, low boundary tone in the utterances of the participants. Significant inclination towards the falling tone was observed. However, bilingual make-up or educational qualifications do not determine appropriate use of intonation patterns. In a bid to, therefore, account for effective communication among educated bilingual speakers of English, more time should be given to the development of this skill using meaningful utterances in context rather than the use of words or sentences in isolation.

Ado (2017), in his study on the Realisation of the Rising Tone in Nigerian English, remarks that Nigerian English differs significantly from British English, with the obvious disparity in the use of the rising tone and the meanings associated with it. The paper analyses the realisation of the rising tone and the extent to which its use in Nigerian English differs from that in British English. He submits that the rising tone can be said to be underutilised in PNE compared to the falling tone. He further contends that it is not regarded with great significance in the expression of various attitudes, as in RP and holds that it often sounds odd to most Nigerians when RP uses it. The Nigerian speaker automatically is believed to be speaking like a foreigner, and in most cases, such a person is derided or stigmatised and eventually discouraged. However, Ado (2017) posits that we cannot say that it is totally not in use because a handful of Nigerians are very recently adopting the rising tone in their communication in a way that is not conventional in Nigerian English.

From the studies reviewed, it is evident that much attention needs to be given to the study of intonation in Nigerian English so as to enable Nigerian speakers of English to realise the need to utilise the resources which intonation gives in effective communication. It is against this backdrop that the present study investigates the use of intonation patterns to express politeness among post-millennials in Nigeria.

3.0 Methodology

This study employed a qualitative research design. Data were collected through covert recordings of interactions of post-millennial students in the Plateau State College of Nursing Sciences, Vom, some in a Use of English class and others outside the classroom. A total of nine excerpts were transcribed and selected purposively to reflect speech behaviour across various socio-ethnic groups. The recorded utterances were analysed using Praat, a software for analysing utterances. Analysis followed Halliday's Systemic Functional Linguistics, focusing on pitch contour, direction (rising/falling), and pragmatic effect. Themes explored included politeness, authority, request-making, sarcasm, and hesitation.

Excerpt 1

A: 'Ma please I want to see you?'

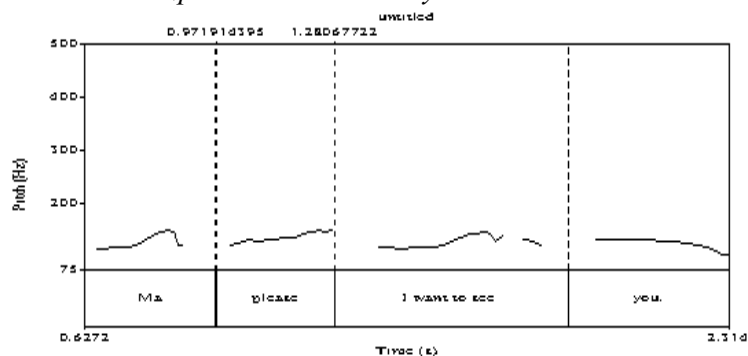


Figure 1: Praat picture of pitch contours in *Ma please I want to see you.*

The display in Figure 1 is a physical presentation of pitch movements in the utterance. It can be seen how the pitch begins a low level and moves upward in the pronunciation of *please* and the fall in *you*. *Please* is observed to begin at 120Hz and rise to 150Hz. *You*, on the other hand, begins at around 143Hz and falls to about 102Hz. This picture shows that *please* is said on a rising tone while *you* took a falling tone.

The rising terminal indicates deference and a polite request. This aligns with Wichmann (2000), who associates rising tones with tentative politeness. Thus, the rise with which 'please' was uttered signals an emphasis on the need to mitigate the threat to the addressee's face considering that the utterance would have been impolite as the falling

tone at the end signals finality which would have rendered the utterance imperative.

Excerpt 2

A: /Ma, please /try, maybe they'll hear your own.

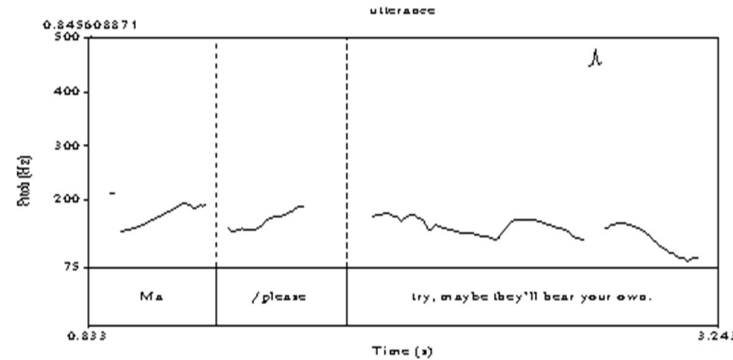


Figure 2: Praat picture of pitch contours of /Ma, please /try, maybe they'll hear your own.

Figure 2 shows that *Ma* is produced with a tone that rises from 143Hz to 193Hz, while *please* shows a rising movement of 142Hz -188Hz. The slightly rising tone used in uttering ‘ma’ and ‘please’, conveys indirect appeal. Such tonal choices suggest how Nigerian post-millennials adjust their tone for empathy or alliance. By that, the speaker invites the addressee to explore the sympathy maxim of the politeness principle.

Excerpt 3

B: I'm waiting for you. Do you want to go and prepare and come \back?

A: yes \ma.

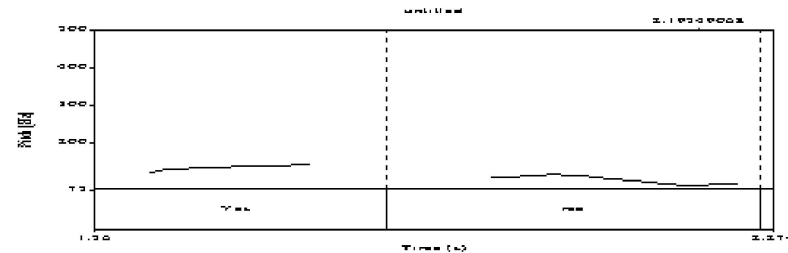


Figure 3: Praat picture of pitch contours of yes \ma.

Figure 3 shows the pitch of yes ma. The utterance shows a falling tone on ma with 139.1hz as the initial pitch and 87.1hz as the final pitch.

B: How many minutes do you need?

A: /ten...?

101hz-165,1hz

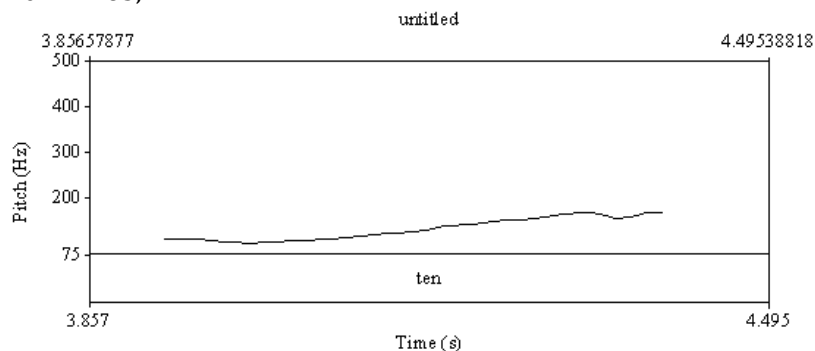


Figure 4: Praat picture of pitch contours of ten

The analysis of the *ten* as displayed on the Praat picture in Figure 4 shows that the utterance is said with a rising tone. It starts from about 91.3hz and rises to end at 139.1. The response given by A to the first question asked by B ends with a falling intonation, which indicates that A just felt the need to give an honest and certain response. However, the response to the second question goes beyond just giving information because of the rising tone used. The tone indicates that A is aware that B holds the decision-making power in the conversation and that it would only be a privilege if they are given the chance to choose how long to take before returning. As such, in a bid to be polite, A, in responding, returns the authority to B by presenting the response as a suggestion that requires B's approval and this is achieved by the use of hesitation and the rising tone.

Analysis of Speakers' Intentions in Terms of Face Saving and Face Threatening Acts

Excerpt 4

*Is this how you people behave in your father's house?! Jesus! Chai!
You girls are dirty.*

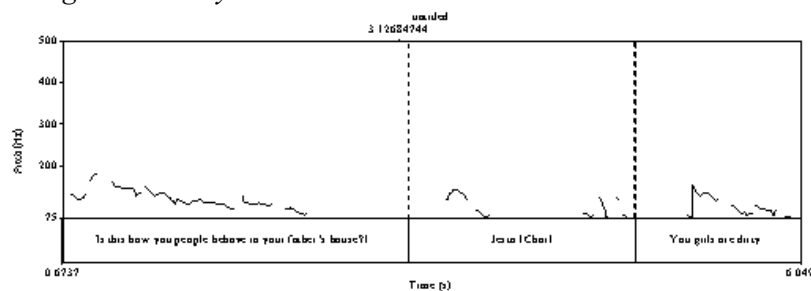


Figure 5: Praat picture of pitch contours of *Is this how you people behave in your father's house?*

The information in Figure 5 shows an initial rise followed by a fall at different points of the long utterance. *Jesus!* is uttered with an initial pitch of 141.1hz that later drops to 77.1hz. *Chai!* is uttered with an initial pitch of 131.1hz that goes down to 75.8hz. *You girls are dirty* also experience a fall from 129.4Hz to 78.3Hz. The tone used in uttering the rhetorical question suggests disapproval or reprimand due to its rise-fall effect. It also suggests anger or shock. The intonation used here undermines the politeness of the sentence and instead conveys judgment and authority. The exclamations' *Jesus!* and '*chai!*' express surprise, frustration or disappointment. Being said with a high-pitched tone, it adds a dramatic judgmental tone. The final part of the declarative, '*you girls are dirty*', said with a falling tone, which signals finality, sounds blunt and accusatory. Overall, no form of mitigation was done using tone. Instead, the tones used at every point reinforced the impoliteness and moral judgments. This expresses an instance of a bald on record face threatening act without redress, as no form of mitigation was put in place. A softer tone could have mitigated the face threats inherent in the excerpt.

Excerpt 5

A: 'We need your help, ma!'

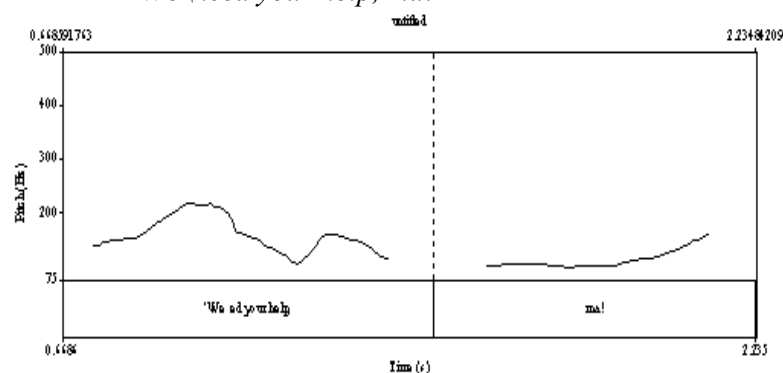


Figure 6: Praat picture of pitch contours of 'We need your help, ma!'

The focus of this analysis is on ma which is a separate intonation phrase with a rising pitch from 103.3hz to 151.3hz as presented on the Praat picture above. Exaggerated rising tone shows group solidarity in appealing to power. The face-threatening nature of public requests is softened through communal phrasing and tone. The exaggerated rise in the tone of 'need' in the utterance emphasises the plea, making the speaker sound humble, deferential and non-threatening, enhancing politeness. Additionally, the general tone of the utterance is soft and gentle, which signals respect and sincerity, making the request feel polite and heartfelt. Although the speaker is making a direct request, which may be considered impolite going by the words, the carefully modulated pitch of the utterance serves to mitigate the face-threatening effect of the request as no lexical hedge is used.

Excerpt 6

A: Let's go and see the too much talk.

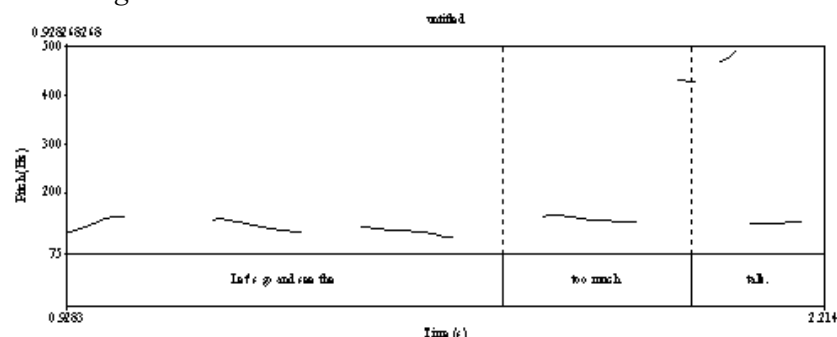


Figure 7: Praat picture of talk

As reflected in Figure 7, *talk*, which is the nuclear element of the entire utterance, has a flat intonation that fluctuates around 139.5hz.

D: Ah! Ma, you'll still enter?

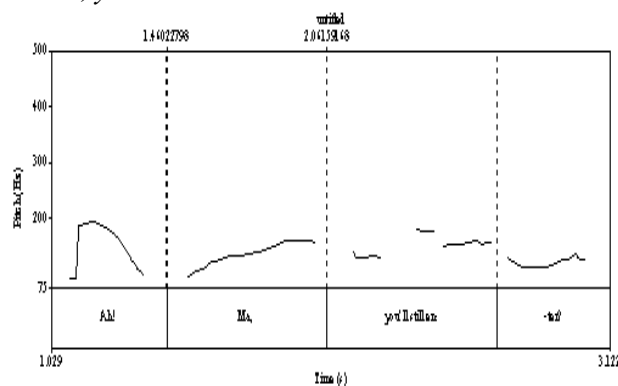


Figure 8: Praat picture of pitch contours of *Ah! Ma, you'll still enter?*

The intonational information in Figure 8 reveals the use of a falling tone on *Ah* (197.2hz to 91.2hz fall) and a rising tone on *Ma* (89.4hz to 176.1hz rise), which are both separate intonational phrases. There is a brief rise on *-er* as indicated by the 123.7hz to 165.44hz.

Uttered on a flat tone, A's utterance signals disbelief or mockery rather than genuine interest. It reveals A's distrust and highlights that

the talk may be deceptive. Although sarcastic, the soft tone of the utterance adds to its politeness as it mitigates the impolite effect of the sarcasm. From the response of D, the tone of the exclamation 'ah!', the high pitch at 'ma' and the rising tone at the end of the utterance confirm the suspected deceit as it signals a defeat. It suggests an urgency and a desire that that which is concealed will not be unravelled. Nevertheless, the intonation patterns used give the utterance an effect of an appeal rather than an enquiry, as the words depict. It is, therefore, an indirect way of pleading that the said 'ma' reconsiders 'entering'.

The Effects of Intonation Patterns on Hearers' Interpretation of Utterances

Excerpt 7

B: *you /told...*

A: *(hurriedly) ^Zinkur! Sorry ma. I forgot.*

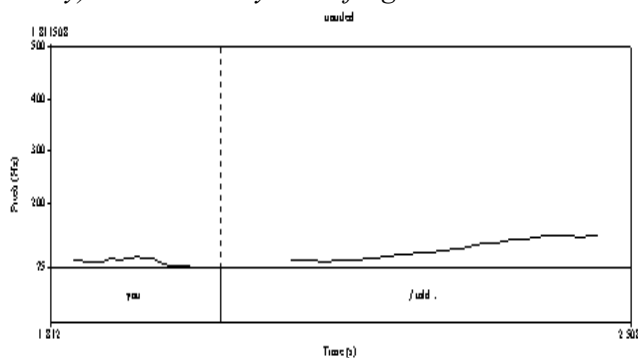


Figure 8: Praat picture of pitch contours of *you /told...*

The picture in Figure 8 shows a rise from *you* to *told*. With the rise from 89.4Hz to about 147.3Hz, it is obvious that *told* is the nuclear element of the entire tone phrase.

The rising tone in speaker B's utterance has an interrogative effect, which has a face-threatening effect on A. it may have a subtle reprimand or a note of caution for A to verify the information given. A, in response, realises an error and quickly addresses it using an exclamatory 'Zinkur!'. The high pitch in the utterance has a note of apology while accepting a fault. It thus signals A's interpretation of B's

utterance as perceived from the rising intonation to be a reprimand. Hence, the apologetic tone used by A.

Excerpt 8

A: *this plenty welcome...*

B: *ma, we're always welcoming.*

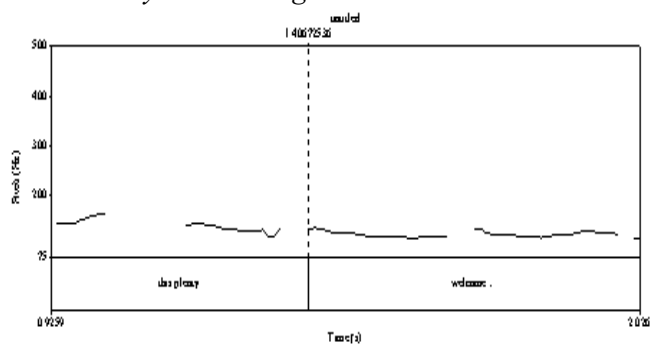


Figure 9: Praat picture of pitch contours of *this plenty welcome...*

From the Praat picture above, *-come* is the nuclear syllable. It is produced with a relatively flat tone as there is no indication of rise or fall. The flat tone, however, extends to the entire nuclear word *welcome*.

A's utterance made with a flat tone and emphasis on *plenty* sounds sarcastic. It may signal disapproval, suggesting that the welcome is excessive, not genuine or politically motivated. Although A avoided confronting the 'suspicious' welcome directly, B was able to interpret the utterance as questioning the integrity of the act referred to as the 'plenty welcome'. As such, B's utterance becomes a defence, carefully reaffirming that they are always welcoming, refuting the subtle accusation in A's tone that the welcome is for some political reason.

Excerpt 9

B: *the whole work was on verbs. So what exactly was your contribution?*

A: *I contributed on... they said we should just browse on anything we can. So I contributed on verb and types...*

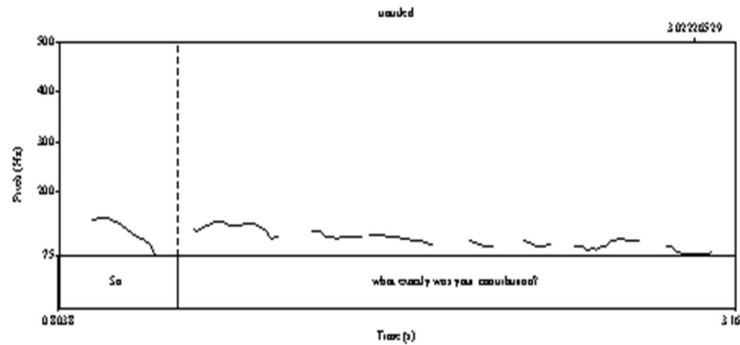


Figure 10: Praat picture showing pitch contours of *So what exactly was your contribution?*

The picture shows that *so* falls from about 178hz to about 73hz to indicate a falling tone. A fall is also observed on *what exactly was your contribution?* Showing the lowest pitch at *-tions* with about 76.3hz.

From the B excerpt above, a falling intonation at the end of the utterance which is interrogative. The effect of the falling tone projects reinforces the power of B over A. The power signal as well as the interrogative nature of the utterance which went without any form of mitigation, posed a face threat on A. The effect of the threat is seen in the broken nature of A's contribution which featured incomplete utterances that suggest hesitation, doubt, uncertainty and fear. This leads A to complete the sentence with a rising tone, which could be interpreted as seeking A's approval or disapproval.

4.0 Findings

This study sets out to examine how intonation patterns function pragmatically in the speech of post-millennials in Nigeria, particularly in expressing politeness. Three core objectives guided the analysis: to explore the attitudinal functions of intonation, analyse speaker intentions in relation to face theory, and assess how these patterns influence hearers' interpretations. Findings from the data analysis are summarised below:

4.1 Attitudinal Functions of Intonation

The study revealed that post-millennials in Nigeria rely heavily on rising intonation in emotionally charged or socially sensitive utterances to

express deference, hesitation, empathy, and politeness. Speakers used upward glides to soften requests and seek alignment, particularly when addressing figures of authority. This allows the speaker to be treated with a friendly attention. In contrast, falling intonation was consistently associated with certainty, finality, or assertiveness, often used by figures in authority (e.g., teachers) to establish control. These findings affirm Wichmann's (2000) assertion that rising tones function as politeness cues and Halliday's (1994) position that intonation reflects interpersonal stance within social context.

4.2 Speakers' Intentions and Face Management

Intonation patterns in the data were found to be instrumental in realising face-saving and face-threatening acts, aligning with Brown and Levinson's politeness theory. Rising tones and gentle pitch contours were used to mitigate directness, thus preserving both the speaker's and the hearer's face. Conversely, bald-on-record acts (e.g., commands or criticisms) featured falling or flat tones, reinforcing authority and threatening the hearer's face. Interestingly, instances of sarcasm and indirect disapproval were marked by flat tones, offering subtle commentary while preserving plausible deniability. These tone choices demonstrate how post-millennials tactically manage power asymmetry and social cohesion through prosodic modulation.

4.3 Impact on Hearers' Interpretation

Hearers were shown to interpret utterances not just lexically, but heavily based on intonational cues. Rising tones were perceived as uncertainty, politeness, or a call for empathy, while falling tones—especially when used in questions—were seen as confrontational or final. Misinterpretation often occurred when intonation did not align with expected social functions, especially among peer interactions or in hierarchical conversations. The study underscores the importance of intonational competence in achieving pragmatic clarity and avoiding communicative breakdowns, especially in multilingual contexts where syntactic cues alone may not suffice.

In sum, the findings demonstrate that intonation in Nigerian post-millennial speech operates as a dynamic pragmatic resource, indexing speaker attitude, modulating interpersonal risk, and shaping the trajectory of dialogue. The prosodic choices are culturally situated

and reveal a generational negotiation between respect, solidarity, and social agility.

5.0 Conclusion and Recommendation

This study has examined the pragmatic implications of intonation patterns among Nigerian post-millennials. The findings reveal that intonation serves not only grammatical purposes but also crucial interpersonal functions. Post-millennials employ rising tones for politeness, falling tones for authority, and flat tones for irony or disapproval. These patterns affect how messages are received, with potential for miscommunication across cultural or age divides. It is recommended that English Language instruction in Nigeria pay more attention to prosodic competence, incorporating pragmatic awareness into curricula. Future studies may examine intonation in digital speech (e.g., voice notes) and cross-generational perceptions of politeness.

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Socioeconomic Factors and Pronunciation Trends Involving Suprasegmental Features in Abuja Central Area, Nigeria

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Abstract

This study examines the relationship between socioeconomic factors and pronunciation trends with a particular focus on suprasegmental features: intonation, stress, tone, and rhythm, among English speakers in Abuja Central Area, Nigeria. Drawing on sociolinguistic and phonological frameworks, the research explores how variables such as education level, income, occupation, and social mobility influence the use and variation of suprasegmental features in spoken English. Through a combination of field interviews, audio recordings, and perceptual analysis, the study reveals distinct patterns in prosodic usage that correlate with socioeconomic status. Findings suggest that speakers from higher socioeconomic backgrounds tend to exhibit suprasegmental features aligned with Standard English, whereas those from low socioeconomic brackets retain more localised or non-standard prosodic trends, giving rise to sociophonetic variations. The research underscores the role of social identity and linguistic accommodation in shaping spoken English in urban-multilingual settings. These findings contribute to a broader understanding of pronunciation trends in postcolonial urban centres and highlight the dynamic interaction between social structure, on the one hand, and phonological and phonetic expressions, on the other.

Keywords: Socioeconomic Factors, Pronunciation Trends, Suprasegmental Features, Sociophonetic Variation, Inclusiveness

1.0 Introduction

Language variation and change are often influenced by a range of social and economic factors, particularly in urban centres experiencing rapid development and diverse population growth. Abuja, the capital city of Nigeria, represents a unique linguistic landscape where multilingualism and socioeconomic diversity intersect, necessitating sociophonetic variations. Interacting with and listening to individuals and groups of people in the motor park, marketplaces, schools, and government offices in the Central Area of Abuja, pronunciation trends involving suprasegmental features such as intonation, stress, tone, and rhythm are subtly but significantly shaped by speakers' socioeconomic backgrounds.

Language is not only a tool for communication but also a marker of identity, education, and social class. In Abuja Central Area, English functions as an official language among speakers from diverse ethnic and linguistic backgrounds. As a result, the pronunciation trends of English in this region often reflect a complex interplay of linguistic, cultural, and socioeconomic influences. Suprasegmental features, in particular, play a critical role in conveying meaning, emotion, and the intention of the speaker. However, the mastery of these features varies widely across speakers and is often influenced by socioeconomic status. In Abuja Central Area, English spoken by residents and workers reflects differing pronunciation trends. Those from higher socioeconomic backgrounds may have had greater access to formal education, international exposure, and media resources, potentially resulting in a pronunciation closer to Standard British English (SBE). In contrast, interactions and experiments have shown that individuals from low socioeconomic strata may have had limited access to such resources, which may result in more localised or hybrid suprasegmental trends.

Most phonological studies in Nigeria focus on segmental features or broader dialectal variation without sufficiently considering the influence of social and economic variables on suprasegmental features. This study, therefore, seeks to fill this gap by exploring how socioeconomic factors influence the use of suprasegmental features in the pronunciation of English in Abuja Central Area. Understanding these trends will not only enrich sociolinguistic knowledge in the Nigerian context but also have practical implications for English language teaching, public speaking training, and communication strategies in professional settings.

This study aims to investigate how socioeconomic factors bring about sociophonetic variations and pronunciation trends of suprasegmental features among English speakers in the Central Area of Abuja. The objectives of this research include:

- i. identify the predominant suprasegmental pronunciation trends among speakers of different socioeconomic backgrounds in Abuja's Central Area;
- ii. analyse the relationship between specific socioeconomic variables and the use of suprasegmental features in English speech; and

- iii. explore the sociolinguistic implications of suprasegmental pronunciation trends on identity, communication effectiveness, and inclusiveness in the urban area of Abuja.

The scope is limited to adult residents, including individuals from diverse socioeconomic backgrounds. The research centres on how socioeconomic variables influence the use of suprasegmental features in spoken English. Equally, to identify patterns and variations in speech prosody and how these reflect or are shaped by speakers' socioeconomic environments. Data were collected using interviews and speech recordings and analysed with PRAAT, maintaining quantitative methodology.

The research provides insight into how socioeconomic variables influence these aspects of pronunciation. From a linguistic perspective, the study contributes to the growing body of sociophonetic research by highlighting the role of prosody in shaping regional and social identity. From a sociological standpoint, the findings offer a deeper understanding of how socioeconomic status affects language use in a multicultural and multilingual environment. Practically, the study has implications for education, language policy, and speech training. Educators and language instructors can use the findings to design more inclusive and effective pronunciation curricula that acknowledge the influence of social background. Speech therapists, media professionals, and public speakers in Abuja can also benefit from the research by adapting their communication to various audiences. Moreover, the study informs urban sociolinguistic planning by identifying how pronunciation trends evolve in response to demographic changes and economic disparities.

2. Literature Review

Researchers have carried out a lot of studies on pronunciation; we see these researchers' views to ascertain the diverse ways in which pronunciation trends involving suprasegmental features have been explored. Yunsun (2021) examines changes in the perception of suprasegmentals in pronunciation among Korean EFL learners. The researcher investigates changes in perceptions of suprasegmental features among nine adult Korean learners of English as a foreign language (EFL) after offering three hours of one-on-one pronunciation instruction. According to the researcher, the participants learned

English in Korea for at least ten years at public and or private institutions and have no prior pronunciation-focused training. The responses of the participants were qualitatively analysed through coding. Findings show that their perceived importance of suprasegmentals had generally increased and that their perspectives of pronunciation features had widened from a segment or a word to a sentence after the treatment.

Udofot (2022) examines the phonetics and phonology of Nigerian English. The study focuses on pronunciation features in Nigerian English at the segmental and suprasegmental levels. The researcher's work systematically describes the phonological (including prosodic) patterns of English as spoken by Nigerians. He identifies features such as stress patterns, intonation, rhythm and syllable prominence that differentiate Nigerian English from other varieties of English. Importantly, his analysis links these phonological traits to sociolinguistic variables such as education level and proficiency, suggesting that greater exposure to English and formal education leads to suprasegmental patterns closer to Standard British English. This is relevant to this paper because it provides a foundation for understanding how socioeconomic indicators (education) correlate with pronunciation features as a basis for exploring more specific socioeconomic variables in Abuja. Ida (2022) examines integrating segmental and suprasegmental aspects of pronunciation in Norway's lower secondary English classroom. According to the researcher, this research investigates pronunciation teaching among English teachers at a Norwegian lower secondary school.

Arini *et al* (2024) examine the complex interplay of segmental and suprasegmental features in English phonology. This research delves into the intricate relationships between the segmental (phonemes) and suprasegmental (prosody) elements of the English language phonology. Ramilia *et al* (2024) examine students' pronunciation skills on the ability of suprasegmental and segmental aspects in English pronunciation. The research investigates the correlation between students' overall pronunciation proficiency and their competence in both suprasegmental and segmental aspects of English pronunciation. This research employs a qualitative approach and draws upon data collected from a diverse language background of the learner, exploring the intricacies of suprasegmental features. Amoniyani, Oladipo & Ogunka (2024) examine stress assignments in Nigerian English. The researchers focus on suprasegmental features, stress placement specifically, among educated

speakers of English. The study analyses stress patterns among educated Yoruba and Igbo speakers of English, demonstrating that Nigerian English speakers frequently assign stress differently from Received Pronunciation (RP) norms and this pattern is influenced by their linguistic and educational background. This is relevant to this topic because the research connects speaker background (education, language group) with suprasegmental pronunciation trends, offering an empirical approach that parallels socioeconomic variables such as education and social identity, useful for similar analysis in Abuja. Ibrahim (2024) examines suprasegmental features of Nigerian English. The researcher's core focus was on suprasegmental aspects (stress, pitch, length) and proficiency.

The researcher's work examines suprasegmental features with emphasis on how Nigerian speakers, even those educated, struggle with achieving proficiency in these areas. The study points towards external influences such as education quality, exposure, and language use contexts that influence suprasegmental mastery. This research is relevant to this paper in the sense that it offers insights into how socio-educational variables align with suprasegmental performance and provides information that can support hypotheses about socioeconomic influences on pronunciation trends in Abuja. Oladipupo & Akinjobi (2025) carry out a sociophonetic study of young Nigerian English speakers. Their core focus was connected speech processes such as r-liaison and consonant deletion and social differentiation. Although focused on segmental/suprasegmental sociophonetic variation among young speakers, this study places speech patterns within a social variation framework, showing how even rhythm and consonant processes can vary with speaker characteristics. This is very relevant to the topic in the sense that the sociophonetic methodology used here, correlating speech variation with social attributes (age, gender, class), can be extended to socioeconomic traits (for instance, class, education, occupation) relevant to Abuja. Oluranti (2025) examines phonological variations in Nigerian English.

The researcher's core focus was on vowel shifts (phonological variation) among speakers from different language backgrounds. This exploratory study examines how phonological variation, including suprasegmental tendencies tied to rhythm and stress, varies across Nigerian English speakers from major ethnic groups. It highlights sociolinguistic factors (linguistic background and social context)

influencing speech variation. This is relevant to this research in the sense that, even though not specifically focused on Abuja or socioeconomic status, it foregrounds how social and cultural differences influence phonological trends, a perspective the researcher can integrate as part of the broader sociolinguistic framework. Oye-Yinka (2025) examines suprasegmental usage in human speech. The researcher's core focus was on a descriptive overview of suprasegmental features and their communicative roles. This linguistic inquiry discusses key prosodic elements (stress, rhythm, intonation) and highlights the lack of conscious observance of suprasegmental features in non-native contexts. Though general, the paper underscores how suprasegmental competence affects communication effectiveness among L2 speakers. It is relevant as a theoretical anchoring for literature review on suprasegmental properties (pitch, stress, intonation) and sets the stage for analysing how socioeconomic status might affect the mastery of these features among Abuja English speakers.

Yerly (2025) examines how to overcome segmental and suprasegmental challenges among professionals. The researcher observes that professionals face significant challenges in achieving speaking proficiency in English in Indonesia. Precisely, the difficulties are with consonant sounds (/θ/ and /v/), vowel quality, stress patterns, and intonation. The researcher examines common segmental and suprasegmental errors that prevent professionals from speaking properly. The researcher uses a descriptive qualitative approach involving 235 professionals as participants. A set of questionnaires and recordings of the participants' speech are used as a source of data. It is discovered that difficulty with /v/, misplacement of word stress, intonation errors, difficulty with /θ/ and vowel reduction are still a struggle for the professionals to achieve the expected speaking proficiency. In summary, no previous work has specifically examined the socioeconomic factors and pronunciation trends involving suprasegmental features in Abuja Central Area. Consequently, the pronunciation trends involving suprasegmental features remain underexplored. This gap in the literature underscores the need for focused research on pronunciation trends involving suprasegmental features.

An Overview of Suprasegmental Features and Socioeconomic Factors

Suprasegmental features, also known as prosodic features, are the aspects of speech that go beyond individual phonemes or segments (Jowitt, 2019; Udofot, 2004; Akinjobi, 2006; Akindele *et al*, 2018). They operate over larger units of speech such as syllables, words, phrases, and sentences. These features help convey meaning, emotion, emphasis, and syntactic structure, and are essential in both spoken language comprehension and production (Eyisi, 2013; Roach, 2010; Onuigbo, 2010). The suprasegmental features include: intonation, rhythm, stress and tone. Intonation refers to the variation of pitch while speaking. It affects the melody of speech and is used to express different types of sentences (statements, questions), attitudes, and emotions. (Crystal, 1969; Pierrehumbert and Hirschberg, 1990). For instance, rising intonation in yes/no questions:

"Are you coming?" (↗ at the end) confirmation; ↗ for uncertainty).

Rhythm in speech refers to the pattern of stressed and unstressed syllables (Pike, 1945; Abercrombie, 1967). It is the timing aspect of speech that gives it a flow. English Language is stress-timed.

Examples: Stress-timed rhythm: *"The CAT SAT on the MAT."* (stresses fall on content words).

Stress is the perceived frequency of sound; it is how high or low a voice sounds. In speech, pitch helps to distinguish the speaker's identity, emotional state, and sentence modality (Jones, 1950; Pierrehumbert, 1980). Examples: High pitch to show excitement: *"Wow, that's amazing!"* (raised pitch). Low pitch to indicate seriousness: *"This is a serious matter."*

Tone refers to the use of pitch to distinguish word meaning in tonal languages. A change in tone can change the meaning of a word even if the segmental content remains the same. (Moir, 2002; Hyman, 1975). Examples (using Yoruba): Yoruba word "owo": *owó* (money); *òwò* (business) (Same segments, different tones = different meanings). Igbo tonal minimal pairs: *akwa* (egg vs. bed vs. cloth).

Socioeconomic factors refer to the combination of social and economic factors that influence and shape an individual's position within society, including income, education, occupation, and related

social attributes. Socioeconomic factors have been used to describe unequal access to education and resources in Nigerian class structures (Agwadu, 2023). Socioeconomic background could be treated as parental income and schooling conditions affecting speech features (Johnson, 2021). Socioeconomic variables could be framed in class struggle and inequalities in Nigerian society (Okolie, 2024). Socioeconomic factors have been analysed in youth unemployment in Nigeria, defining socioeconomic conditions as determinants of opportunity (Omoju, *et al.* 2023).

Socioeconomic factors use issues like wealth and access to resources to explain Nigerian stratification (Jato, 2025). Socioeconomic stratification relates to educational background and family income differences influencing language performance among Nigerian students, illustrating class differences in practice (Johnson, 2021). Social stratification has been used in work and society in Nigeria, describing how traditional and modern economic factors divide Nigerian populations into ranked social groups (Okaka, ****).

Socioeconomic stratification has been conceptualised in Nigeria as the symbolic and material division between affluent elites and impoverished masses shaped by economic and political forces (Okolie, 2024). Class stratification in Nigeria has been defined as a structured hierarchy where education, income, and access to resources divide Nigerians into distinct social layers that reproduce inequality among the upper class, the middle class and the lower class. Examples of these inequalities are seen in Abuja Central Area of Nigeria (Agwadu, 2023). Sociophonetics is described as the link between speech patterns and these social factors (Oladipupo, 2014).

3. Theoretical Framework

Exemplar Theory in phonetics and phonology proposes that linguistic knowledge is not stored as abstract symbols or rules but as linguistic categories formed based on the stored memories of actual speech instances, called exemplars. These exemplars include rich phonetic details, segmental and suprasegmental, and are influenced by frequency, social context, and the speaker's identity. Each time we hear a word, the phonetic details (segmental and suprasegmental) are stored in our memory. Over time, categories emerge from patterns in these accumulated exemplars. Key proponents of the exemplars theory is Robert A. Johnson who introduced it into phonetics in 1997, emphasising

storage of detailed phonetic episodes in memory. Janet Pierrehumbert (2001, 2002) expanded the theory by modeling how exemplars influence phonological categories and change over time, applied it to intonation and prosody. David B. Pisoni contributed to the understanding of auditory memory and perception in exemplar-based models. David Goldinger (1998) showed how speech perception and production are interrelated through exemplar memory. Paul Boersma and Bruce Hayes, though known for Optimality Theory, through their probabilistic models, align with exemplar-based approaches in handling variation. Relevant to pronunciation trends involving suprasegmental features, Exemplar Theory explains how suprasegmental features are learned and replicated through repeated exposure by professionals in the area of pronunciation. Accounts for variation and change in pronunciation, especially in dynamic environments such as second language learning or multilingual contexts, help understand why certain pronunciation patterns become more common over time (that is, why trends emerge).

4. Methodology

This study adopts a quantitative design and intelligibility ratings and PRAAT for articulation and perception tests among respondents. The target population comprises the inhabitants of Abuja Central Area, Nigeria. They are divided into three categories according to their socioeconomic statuses as follows: Upper Class Pronunciation (UCP), Middle Class Pronunciation (MCP), and Lower-Class Pronunciation (LCP). The Received Pronunciation (RP) is used as a standard pronunciation in this research.

Upper Class: These are the wealthiest residents, including politicians, top business executives, expatriates, and high-ranking civil servants. Examples of Locations: Maitama, Asokoro, Parts of Wuse II and Central Business District.

Middle Class: These are professionals and small business owners who earn steady incomes but not enough to afford the luxuries of the upper class. Examples of Locations: Garki (e.g., Area 11, Area 3), Wuse Zone 3-6, Jabi, and some parts of Utako.

Lower Class: This group includes low-income earners such as artisans, petty traders, drivers, security guards, and unskilled workers. Examples of Locations: Garki Village, Durumi (some parts), Kubwa (though technically outside the central area, many commute daily), slum pockets within Wuse and Garki

Table 1: Summary of the Inhabitants of Abuja Central Area

<u>Class</u>	<u>Typical Areas</u>	<u>Housing Type</u>	<u>Typical Occupation</u>
Upper Class	Maitama, Asokoro	Luxury homes, gated estates	Politicians, business executives
Middle Class	Wuse, Garki, Jabi	Flats, bungalows	Civil servants, professionals
Low Class	Garki Village, Durumi	Boys' quarters, shared rooms	Artisans, petty traders, taxi drivers

Jane Maura, 2025

Purposive sampling technique is used to select participants from various socioeconomic backgrounds. 60 inhabitants were selected: twenty (male 10, female 10) participants were selected randomly from each socioeconomic group and the participants ranged between the ages of twenty to fifty years with a range of educational levels. The data was collected through speech recording; the selected participants read (articulate) aloud and equally listen (perception) to standardised tests and engage in brief, spontaneous speech tasks. The analysis was done using acoustic analysis software, PRAAT. The consent of all participants was obtained. Their identities were kept confidential and all the data obtained were used strictly for academic purposes.

5.0 Data Presentation and Analysis

The data gathered from the field on pronunciation trends were presented and analysed. The predominant suprasegmental pronunciation trends among speakers of different socioeconomic backgrounds in Abuja Central Area were identified. The inhabitants were tested for pronunciation trend using sentences.

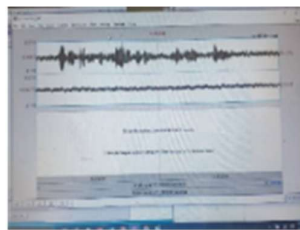


Fig 1: Sentence 1 RP
11.859592

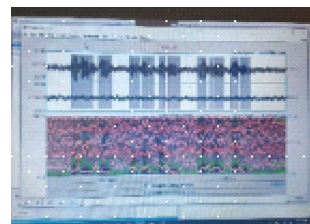


Fig 2: Sentence 1 UCP
8.411429

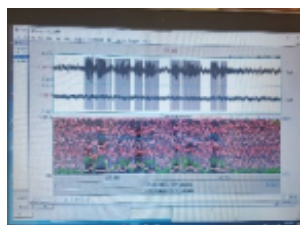


Fig 3: Sentence 1 MCP
9.730612

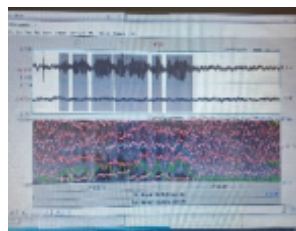


Fig 4: Sentence 1 LCP
5.877551

Table 2: Sentence 1: “If I were in your position, I would reconsider your approach immediately.”

Feature	Upper Class (UCP)	MiddleClass(MCP)	Lower Class (LCP)	Standard English (RP)
<u>Intonation</u>	Controlled fall-rise	Expressive fall	Strong falling tone, abrupt at the end	Even fall-rise contour
<u>Stress</u>	“ <u>position</u> ”, “ <u>reconsider</u> ”, “ <u>immediately</u> ”	“ <u>your</u> ”, “ <u>reconsider</u> ”	“ <u>reconsider</u> ”, “ <u>immediately</u> ” heavily stressed	Emphasis on “ <u>reconsider</u> ” and “ <u>immediately</u> ”
<u>Rhythm</u>	Flowing, unhurried	Slightly formal pacing	Abrupt pacing; uneven	Balanced and formal rhythm
<u>Tone</u>	Cautious, advisory	Constructive and polite	Firm, almost directive	Advisory and formal tone

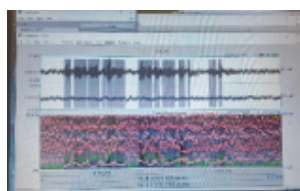


Fig 5: Sentence 2 RP
11.180408

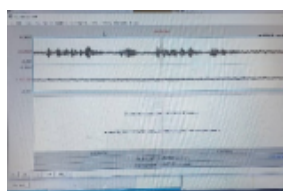


Fig 6: Sentence 2 UCP
9.090612

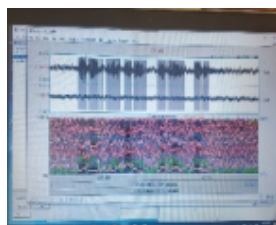


Fig 7: Sentence 2 MCP
8.542041

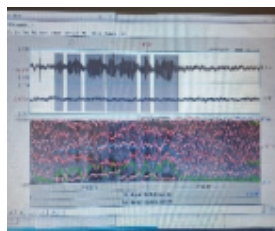


Fig 8: Sentence 2 LCP
4.924082

Table 3: Sentence 2: “Could you please explain what exactly happened yesterday evening?”

Feature	Upper Class (UCP)	Middle Class (MCP)	Low Class (LCP)	Standard English (RP)
<u>Intonation</u>	Rise on “please”, fall on “evening”	Gentle rise-fall pattern	Sharp rise on “what” and “evening”	Rising on “please”, falling at the end
<u>Stress</u>	“ <u>please</u> ”, “ <u>exactly</u> ”, “ <u>evening</u> ” (light stress)	Clear stress on “ <u>please</u> ” and “ <u>happened</u> ”	Heavier stress on “ <u>what</u> ” and “ <u>yesterday</u> ”	“ <u>please</u> ”, “ <u>explain</u> ”, “ <u>happened</u> ” stressed
<u>Rhythm</u>	Smooth, fast-paced with no slurring	Slight pauses between clauses	Uneven rhythm; might drop function words	Balanced, slightly formal rhythm
<u>Tone</u>	Formal, inquisitive tone	Polite and curious	Demanding or confrontational	Neutral to formal tone

The spectrographic presentations above bring out the trends involving suprasegmental features in pronunciation variations among the upper, middle, and low classes in Abuja Central Area. Fig. 1: Sentence 1 RP and Fig. 5: Sentence 2 RP are used as a standard to see how far the UCP, MCP, and LCP approximate that of RP. The articulation of Sentence 1 and 2 by the respondents was measured using PRAAT software application. Suprasegmental features often work together: a stressed syllable

typically has higher pitch and longer duration, overlapping with rhythm and intonation. Intonation contours often involve patterns of stressed and unstressed syllables. Looking at Fig. 1, Sentence 1 RP and Fig. 5: Sentence 2 RP, the duration is similar at 11.859592 and 11.180408 respectively. In Fig. 2, Sentence 1 UCP; Fig 3, Sentence 1 MCP; Fig 6, Sentence 2 UCP, and Fig 7, Sentence 2 MCP, I discover similar duration at 8.411429, 9.730612, 9.090612 and 8.542041 respectively. This shows that the people in the upper (UCP) and middle (MCP) classes use the suprasegmental features differently compared to the people that fall within the low (LCP) class. This is as a result of the socioeconomic factors discovered among the inhabitants of Abuja Central Area. The low class people pronounce each syllable with equal time, unlike the stress-timed rhythm of Standard English, which those in the upper and middle class pronounce differently. Again, the pronunciation of LCP lacks sentence stress differentiation. Functional words (is, at, the and so on) are given equal stress as content words. Furthermore, there is limited use of rising and falling intonation patterns. Looking at Fig 4, Sentence 1 LCP and Fig 8, Sentence 2 LCP, I discover that the duration ranges from 5.877551 and 4.924082. The waves in the selected portions are simply showing the intonation, stress, rhythm and tone which are summed up in duration. Again, the features are equally shown as the respondents articulate the sentences in Table 2 and 3.

Analysing the relationship between socioeconomic variables and the use of suprasegmental features in English reveals how language functions as both a reflection and reinforcement of social structures. Let's explore this across upper, middle, and low socioeconomic classes, integrating detailed examples and analysis.

Looking at the educational level and suprasegmental feature, the upper class or the highly educated ones tend to have greater metalinguistic awareness due to formal education. More deliberate and varied use of intonation, stress, and rhythm for rhetorical and persuasive purposes was discovered in their utterances. Greater exposure to standardised or prestige forms of English (Received pronunciation).

Example: A university professor may vary pitch and intonation to mark topic changes:

"Today we're discussing *Marxism* ↗ — a *critical* theory that questions capitalism ↘."

Rising intonation was to signal a topic introduction while falling intonation was to assert a key point. Stress placed on *Marxism* and *critical* for emphasis. The middle class/moderately educated made reasonably effective use of suprasegmental features, often mimicking educated speech and may use stress and pitch for clarity and emphasis, especially in professional contexts.

Example: A mid-level manager in an office meeting:
"We *need* to finish the report by *Friday*. That's the *deadline*."

The placement of stress on *need*, *Friday*, and *deadline* was to clarify urgency. Intonation falls at the end of the sentence signals certainty. The lower class/the less educated group, who has less exposure to formal speech contexts uses the suprasegmental features in a more localised and less varied way. These people may exhibit monotonic pitch patterns or localised intonation contours specific to regional dialects, idiolects, or sociolects.

Example: A working-class speaker in casual conversation:
"I went down the road and saw me mate. He was just standin' there."

Narrower pitch range, flatter intonation. Suprasegmental use is functional but not elaborated for emphasis or rhetorical effect. Income and occupation are closely tied to class identity and often shape both the context and style of communication. Upper Class/ High-Income Professions: Professions such as law, politics, and academia demand refined oral communication. Speakers often exhibit control over pacing, pitch modulation, and rhetorical stress.

Example: A corporate executive in a presentation:
"Our *profits* have increased by *twenty percent* in the *last quarter*."

Strategic stress and rhythmic pacing enhance authority and clarity. Middle Class/White-collar Jobs, use of suprasegmentals often tailored for effective communication in client-facing roles (e.g., teaching, sales, administration). Less formal than upper-class speech, but typically conscious of pitch and stress to maintain professionalism.

Example: A school teacher:

"Let's *all* turn to page *thirty-six* and read the first *paragraph*."

Moderate use of pitch rise/fall and stress to manage group attention.

Low Class/Blue-collar jobs may involve less formal communication and greater use of community dialects. Suprasegmental features may be more reflective of regional speech norms.

Example: A factory worker talking to a colleague:

"Yeah, we start at *six*, but I come in at *five-thirty* to get a jump on it."

The intonation patterns are flatter, with less modulation for rhetorical effect. Exploring the sociolinguistic implications of suprasegmental pronunciation trends in the urban Abuja context and for English studies globally requires examining how features such as intonation, stress, rhythm, and tone affect identity construction, communication effectiveness, and inclusiveness.

Identity construction in Abuja, a cosmopolitan and multi-ethnic capital city, suprasegmental features often reflect a speaker's socioeconomic status, education level, ethnic background, or alignment with global or local identities. English is widely spoken as a second language but with noticeable influence from indigenous languages such as Hausa, Igbo, and Yoruba. Suprasegmental cues, such as pitch contours and syllable timing, often signal ethnolinguistic affiliation. Speakers code-switch or adjust prosody to reflect or construct a "urban Nigerian identity", blending local rhythm with standard English intonation. There is a growing prestige associated with adopting the western suprasegmental norms, particularly among the urban elites and younger generations, often influenced by media and education. Globally, suprasegmental features are key in marking varieties of English (e.g., Indian English, Nigerian English, Singaporean English). These features shape perceptions of authenticity and authority. These features function as identity markers distinguishing native and non-native speakers, or speakers of different English varieties. In World Englishes, there is a shift from 'nativeness' to intelligibility and identity affirmation, allowing for recognition of diverse suprasegmental norms.

Effective communication often depends on mutual accommodation of suprasegmental features. Misalignment in suprasegmental features can lead to misunderstanding. Shared suprasegmental norms among urban speakers can enhance clarity and

reduce communication barriers. Overly localised intonation patterns may limit inter-ethnic or inter-class communication, while globalised patterns may enhance cross-cultural intelligibility. Research shows that incorrect stress placement or unnatural intonation is a bigger barrier to understanding than segmental errors. Suprasegmental features are central in teaching English for international communication. There is growing emphasis on “listener-oriented pronunciation”, which involves tailoring suprasegmental features for clarity, not mimicry of native norms.

Pronunciation norms in Abuja can include or exclude speakers from professional, social, or educational domains. Suprasegmental features may index someone as “rural” or “uneducated”, reinforcing linguistic discrimination. Conversely, the adoption of urban or Westernised intonation can serve as a symbol of belonging to aspirational social groups but may lead to alienation within local ethnic communities. Globally, suprasegmental norms often become tools of gatekeeping, especially in academic and corporate settings where “standard” English is valued. An inclusive perspective values pluricentric norms that acknowledge the legitimacy of diverse suprasegmental systems. Failure to include multiple suprasegmental profiles in pronunciation teaching can result in linguistic insecurity and educational inequality.

6.0 Conclusion and Suggestions for Further Study

In conclusion, the study concludes that socioeconomic status significantly shapes the pronunciation trends of suprasegmental features among English speakers in Abuja’s Central Area. Higher socioeconomic status tends to be associated with more standardised suprasegmental usage, while low socioeconomic status corresponds with more localised or non-standard prosodic trends. These findings underscore that pronunciation, particularly suprasegmental mastery, is not merely a linguistic trait but also a socio-cultural marker. It affects perceived fluency, intelligibility, and even the speaker’s social integration and opportunities. Hence, efforts to improve English language teaching in Nigeria must consider these social variables, especially in multicultural urban centres.

Suggestions for Further Study

Future research could expand beyond Abuja's Central Area to include comparisons with other urban and rural areas in Nigeria to examine regional variation and influence on the observance of suprasegmental features.

Also, investigating the effectiveness of targeted teaching strategies to improve suprasegmental competence among students from various socioeconomic backgrounds would be valuable for curriculum development. In addition, future studies could assess how speech technologies or mobile-assisted language learning tools can aid in teaching prosody to socioeconomically disadvantaged learners.

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Socio-phonological Analysis of Palato-alveolar Fricatives in the Selected Utterances of Nollywood English Speakers

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Abstract

Variations in pronunciation can be conditioned by many factors, which include gender and other sociolinguistic factors in the utterances of L2 Nigerian speakers of English. This study aimed to carry out a socio-phonological study of the palato-alveolar fricatives in the spoken utterances of Nollywood English speakers. This is with a view to identifying and describing the variant realisations of these fricatives in the selected utterances of the Nollywood actors/actresses and investigating the extent to which gender could impact the realisations of these fricatives. For this study, spoken utterances of 20 major characters were sampled from five Nollywood films downloaded from *YouTube*. These films comprise those where English was spoken. Using insights from the variationist framework, speeches were sorted and subjected to quantitative and qualitative analyses. With the aid of Daniel Jones' pronouncing dictionary, variant realisations of palato-alveolar fricatives of Nollywood English speakers were identified and described. The sorted data were further analysed acoustically using PRAAT to further describe the identified variants. The study revealed that four variant patterns were observed for the two tested palato-alveolar fricatives from the utterances of the selected Nollywood characters.

Keywords: Socio-phonology, Fricatives, Palato-alveolars, Nollywood, Gender, L2 Speakers, Phonological Variations.

1.0 Introduction

Human language is characterised by a dynamic nature, which results into it being used in various ways for various reasons. This implies that all languages display internal or embedded variations. This dynamic feature of language makes its usage vary from group to group, region to region and speaker to speaker, especially in the areas of pronunciation, meaning and syntactic construction. All these areas of language keep evolving in all the languages of the world. Oladipupo and Akinola (2019), citing Simons and Fenning (2017), confirm the multilingual nature of Nigeria with more than 500 different local languages. From these languages, Hausa, Igbo and Yoruba are regarded as major languages.

Existing with these numerous indigenous languages and Naija (Pidgin) is English, a colonial language which now holds an important position and performs a vibrant function in the country's national and international affairs. It is the language of inter-ethnic and intra-ethnic communication, as well as the official language in education, administration, law, commerce, and the media, amongst others (Akerere, 2017; Awonusi, 2020). While spoken English in the Nigerian context has been researched by many researchers from different viewpoints, it is confirmed that English has evolved from being a foreign language used between native and non-native speakers to an international language. Some of these works focused on the sub-regional varieties of the language and eventually reported the pronunciation influences of contact between Nigerian English as an existing variety.

Studies have confirmed that Nigerian English (NigE), which is a vibrant variety among world Englishes, has a wide variety. Its variation can be connected to different factors; the most important of which are: the existence of different ethnic groups in Nigeria, which has a great impact on the kind of English people speak, and the level of education, which can also sometimes reveal the variation that is often observed in NigE (Fajobi & Akande, 2018). Another factor of variation that has been recently researched is the gender of speakers, which, according to some scholars, could either be significant or not (Fajobi & Akande, 2018; Jolayemi & Adebayo, 2023). While other factors, such as parental background and the kind of schools attended (whether private or public), are important and can affect both spoken and written English, many scholars have emphasised the region of origin and the level of education as the major factors that have so far contributed to variation in NigE (Fajobi & Akande, 2018).

2.0 Literature Review

The focus of socio-phonology as an interrelated approach in phonological studies is to expatiate that language variation is not solely methodical and systematic but also inclusive of social implications/interpretations. Socio-phonology studies do this by merging both phonetics, phonology and sociolinguistic methods and approaches. This is because it concentrates on the way individuals' linguistic variation shows in their ability to articulate sounds and this may be determined by social factors such as ethnicity, age, gender, religion, family background and other linguistic features that are connected to language variations. In most cases, the socio-phonetic

variation of a speaker is gradient rather than categorical. (Afolarin, 2016). This implies that variations may be observed in a way that a particular form is used statistically more by a social group than another.

Akinyode (2020), citing Brosnahan (1971), claims that it is possible to tell the part of a country a Nigerian comes from simply by listening to their spoken English and this is because the accents of most speakers of NigE differ depending on the region they belong to (Akanke 2008; 431). This has been recently researched to be true in other minor Nigerian languages (Akindele, 2020; Afolarin, 2016). So, it is possible to refer to someone as speaking Hausa English, Igbo English, Yoruba English, Okun English, Edo English, Tiv English, among others, because these varieties of English are remarkably distinct from one another in pronunciation.

In view of English co-habiting with Nigerian native languages and cultures, it has been subjected to marked interference and severe changes (Adegbite, 2024), resulting in a local variety of world Englishes known as NigE, which is different at all linguistic levels (syntax, phonology, lexical, discourse and pragmatics) from Standard British English, her model variety. However, the systematic difference is much more pronounced at the level of phonology, where the Nigerian English accent is often coloured and spiced with interference phenomena and lack of early exposure to the L1 model.

While existing studies on the status of palato-alveolar fricatives in the Nigerian English accent have established the presence of voiceless palato-aveolar fricative /ʃ/, its absence is also obvious in the phonological interference of some northern accents (Simo-Bobda, 2007) and among some Yoruba speakers of English from the Ibadan and Ogbomoso axis of Oyo State. These specific NigE speakers do substitute voiceless palato-alveolar fricative /ʃ/ for the voiceless alveolar fricative /s/, such as *cushion*, *cashew*, *show* and *sure* pronounced as /kʊsɪŋ/, /kæsu:/, /səʊ/ and /suə/ (Oladipupo & Akinola 2019, citing Awonusi, 2004; Igboanusi, 2006).

In other studies, the voiced palato-alveolar fricative /ʒ/ is an absent phoneme in the Nigerian English accent except in the repertoire of sophisticated speakers of English in Nigeria (Oladipupo & Akinola, 2019, citing Jibril, 1986). Studies have observed that speakers of English as a second language generally articulate the voiceless and the voiced palato-alveolar fricatives interchangeably. These studies confirm that some forms of variability exist in the pronunciation of the palato-

alveolar fricatives /ʃ/ and /ʒ/ in NigE (Udofot 2004; Awonusi 2004; Oladipupo & Akinola, 2019; Jolayemi & Adebayo 2023).

Oladipupo and Akinola (2019) revealed that graphological representations have huge impacts on how speakers perceive and subsequently pronounce /ʃ/ and /ʒ/ as some graphemes aid the realisations of both variables while some constrain them. Their findings further showed that speakers' gender had no significant influence on the realisations of both the /ʃ/ and /ʒ/ variables. Also, Jolayemi and Adebayo (2023) reported that students articulate the voiced palato-alveolar fricative /ʒ/ with a variant of /ʃ/ at the word-medial position and rejected the hypothesis on gender differentiation. These findings have both focused on undergraduates' articulations of these fricatives. Thus, they limit our insight into the existing variations of palato-alveolar fricatives in the spoken utterances of Nollywood English speakers.

It is against this backdrop that this present study, however, investigates the variability of palato-alveolar fricatives in the spoken utterances of Nigerian Nollywood veterans who are English speakers, with the aim of identifying and describing the variant realisations of the palato-alveolar fricatives in their spoken utterances. It is observed that these variables may be influenced by social factors such as ethnicity, gender, style and other linguistic factors. However, this study is limited to the influence of gender, especially as earlier discoveries show little or no gender significance.

One of the approaches of variety differentiation in world Englishes is the variationist approach, which emphasises the existence of different varieties of spoken English. A variationist work such as this cannot but refer to the Labov variation model (Labov 1963, 1972, 1994, 2006). In these works and other works that make use of the variationist approach (Trudgill 1974; Mesthrie 1997; Herat, 2005), scholars often examine how social variables such as age group, gender, ethnicity, social class and the level of education can lead to systematic differences and variability in language use. Drawing insights from this approach, the differences between SNE and other native varieties of English are seen as features rather than errors (Banjo 1971; Eka 2000; Udofot 2004, 2013). Although another approach for treating SNE is the contrastive approach, which considers 'deviant' spoken forms as errors rather than features (Aladeyomi & Adetunde, 2007), this present study relies heavily on the variationist model for its theoretical framework. As noted above, NigE and indeed any variety of English that functions in a multilingual

setting cannot maintain uniformity as such a variety of English is often subjected to interference from indigenous languages. In connection with this, Gut (2004: 815) observes that:

there is no uniform accent of English spoken throughout Nigeria. In fact, the diversity of the different kinds of English in the country is so great that Nigerian English (NigE) is usually divided into several sub-varieties.

On Udofot's (2004) variation analysis, she uses a native speaker of British English as a control subject against some Nigerians in order to make a comparison between NigE and British English. In this study, she identifies three varieties of NigE based on how close or far they are to British English. Firstly, she identifies the sophisticated variety (VIII), which she claims is spoken by people with a university education and people who have undergone special speech training. This variety is systematically different from British English mainly in the area of accentuation and intonation. Another variety identified in that study is the standard variety (VII), which is used by speakers with tertiary education and is different from VIII in its accentuation and intonation patterns. Variety I is the non-standard variety, which has some prosodic differences from British English as well as from the VII and VIII. Udofot seems to be making some correlations here between the level of education of speakers and the varieties of English they use.

Akande (2008: 432) has noted that "... this correlation is not a clear-cut one as there may sometimes be a mismatch between the level of education and proficiency in English" (Jibril, 1982; Udofot, 1997) and remarks further that "language variation is a complex phenomenon, especially in a multilingual and multicultural setting with diverse socio-religious and family backgrounds such as we have in Nigeria".

3.0 Theoretical Framework

The Labovian variationist framework is a theory of variations in language use by different language users. Since the inception of this theory in 1960, it did not receive much attention until much later, when language researchers began language variation studies. According to Ammour (2012), the result of Labov's work, *The Social Stratification of English in New York City from 1966*, gave rise to a fresh approach known as variationist sociolinguistics, which considered cultural relativism and ordered language heterogeneity and since then has become a distinct academic discipline.

This framework for studying and analysing language use remains relevant in language comparison, either in different languages or the same language of different dialects. In other words, even while there may be obvious functional language differences, no variety within a given language will be regarded as superior to the other in terms of its structure and usage. It is this diversity that is of interest to linguistic heterogeneity. According to this view, language not only varies but it does so systematically and in line with the social trait that its speakers possess. Therefore, it becomes more understandable why language variety does not happen randomly. Instead, it happens systematically and for the systematicity to thrive, variant choices of language use must be considered.

Therefore, Labov's variationist model is founded on the notion that since choices speakers make when using language routinely vary, they can be qualitatively represented. The model also focuses on the idea that responsibility must be held strongly in a variation analysis. Therefore, every possible variation of a linguistic variable must be considered. It is also necessary to compare the overall number of occurrences of the variable to the frequency of each variant in a relevant context. This is because a variation analyst is not only interested in the independent occurrences of linguistic features but also requires a systematic investigation of repeated choices a human make.

4.0 Methodology

The data for this study were sourced from the spoken utterances of 20 Nollywood characters: 10 males and 10 females. The participants were purposively sampled from five recently produced Nollywood movies downloaded from YouTube (*Fame and Furry, Home Coming, Let's Exchange Wives, Love in Every Word and Last Straw*). English was the main language used in these films. Four participants from each film whose utterances were used were major characters who spoke often in the movies and, therefore, had more use of the palato-alveolar fricatives in their interactions.

All the words with the palato-alveolars from the utterances of the characters in the five movies were transcribed. However, only 20 words that were common to all the selected characters in the five movies were purposively selected. Ten words containing voiced palato-alveolar fricative and 10 words containing voiceless palato-alveolar fricative. In total, 400 tokens were sourced for 200 voiced and 200 voiceless palato-

alveolar fricatives. The tokens generated were listened to, categorised, counted, and grouped with a view to:

- i. identifying and describing the variant realisations of the palato-alveolar fricatives in the spoken utterances of Nollywood English speakers; and
- ii. finding out if there are any gender differences in the variant realisations and the effect of such differences in social interactions.

The participants' conversations were copied from the movie videos and were later transferred onto a speech analyser; audacity, where it was possible to break up the longer speech files of each speaker into smaller bits. The focused fricatives were later extracted from the participants' utterances by concentrating on the relevant acoustic properties of each word, especially because only some specific words in the participants' renditions were needed as data.

Using insights from the variationist framework (Labov, 2006), the sorted data were subjected to quantitative and qualitative analyses. With the aid of Daniel Jones's pronouncing dictionary, variant realisations of palato-alveolar fricatives of Nollywood English speakers were identified and described. The sorted data were further analysed acoustically using PRAAT speech software.

4.1 Data Analysis and Discussion of Findings

The data analysis showed that Nollywood English speakers articulated variant realisations of the palato-alveolar fricatives /ʃ/ and /ʒ/ in the sampled words that were extracted from their utterances. From the tables below, the data analysis presented the sampled words, their transcription, the variants realised by the selected actors and actresses and the precise film where the variants were realised.

Table 1: Sampled words and their BBC Transcription

S/N	Test Items for /ʃ/	BBC. Trans.	Test Items for /ʒ/	BBC. Trans.
	Should	/ʃʊd/	Version	/vɜ:ʃn/vɜ:ʒn/
	She	/ʃi:/	Provision	/prəʊvɪʒn/
	Sure	/ʃʊə/	Television	/telɪvɪʒn/
	Share	/ʃeə/	Usually	/ju:ʒəli/
	Shock	/ʃɒk/	Exposure	/ɪkspəʊʒr/
	Show	/ʃəʊ/	Decision	/dɪsɪʒn/
	Chef	/ʃef/	Closure	/kləʊʒə/
	Appreciate	/əpri:ʃeɪt/	Vision	/vɪʒn/
	Relationship	/rɪleɪʃnʃɪp/	Pleasure	/pleɪʒə/
	Ambitious	/æmbɪʃəs/	Occasionally	/əkeɪʒnəli/

Table 1 shows the tested words and their BBC transcriptions. In this table, each of the tested words had a single transcription except version, which had two different transcriptions, /vɜ:ʃn/ and /vɜ:ʒn/. This observation implies that language variation is bound in any existing language, as stated by Labov's (2006) variationist model. This observation leaves an open possibility of variant realisations that may be encountered in Nollywood English speakers' production of the palato-alveolar fricatives.

Table 2: Characters' Realisations of Sample Words in Movie 1, *Fame and Fury*

S/N	SEX	TEST ITEMS FOR /ʃ/	NOLLYWOOD REALISATION	TEST ITEMS FOR /ʒ/	NOLLYWOOD REALISATION
C1	M	Should	[ʃʊd]	Version	[vɜ:ʒn]
		She	[ʃi:]	Provision	[prəʊvɪʒn]
		Sure	[ʃʊə]	Television	[telɪvɪʒn]
		Share	[ʃeə]	Usually	[ju:ʒəli]
		Shock	[ʃɒk]	Exposure	[ɪkspəʊʒr]
		Show	[ʃəʊ]	Decision	[dɪsɪʒn]
		Chef	[tʃef]	Closure	[kləʊʒə]
		Appreciate	[əpri:ʃreɪt]	Vision	[vɪ:ʒn]
		Relationship	[rɪleɪʃnʃɪp]	Pleasure	[pleɪʒə]
		Ambitious	[æmbɪʃəs]	Occasionally	[əkeɪʒnəli]
C2	F	Should	[ʃʊd]	Version	[vɜ:ʒn]
		She	[ʃi:]	Provision	[prəʊvɪʒn]
		Sure	[ʃʊə]	Television	[telɪvɪʒn]
		Share	[ʃeə]	Usually	[ju:ʒəli]
		Shock	[ʃɒk]	Exposure	[ɪkspəʊʒr]
		Show	[ʃəʊ]	Decision	[dɪsɪʒn]
		Chef	[tʃef]	Closure	[kləʊʒə]
		Appreciate	[əpri:ʃreɪt]	Vision	[vɪʒn]
		Relationship	[rɪleɪʃnʃɪp]	Pleasure	[pleɪʒə]
		Ambitious	[æmbɪʃəs]	Occasionally	[əkeɪʒnəli]
C3	M	Should	[ʃʊd]	Version	[vɜ:ʃn]
		She	[ʃi:]	Provision	[prəʊvɪʒn]
		Sure	[ʃʊə]	Television	[telɪvɪʒn]
		Share	[ʃeə]	Usually	[ju:ʒəli]
		Shock	[ʃɒk]	Exposure	[ɪkspəʊʒr]
		Show	[ʃəʊ]	Decision	[dɪsɪʃn]
		Chef	[tʃef]	Closure	[kləʊʒə]
		Appreciate	[əpri:ʃreɪt]	Vision	[vɪʃn]
		Relationship	[rɪleɪʃnʃɪp]	Pleasure	[pleɪʒə]
		Ambitious	[æmbɪʃəs]	Occasionally	[əkeɪʒnəli]
C4	F	Should	[ʃʊd]	Version	[vɜ:ʒn]
		She	[ʃi:]	Provision	[prəʊvɪʒn]
		Sure	[ʃʊə]	Television	[telɪvɪʒn]
		Share	[ʃeə]	Usually	[ju:ʒəli]
		Shock	[ʃɒk]	Exposure	[ɪkspəʊʒr]
		Show	[ʃəʊ]	Decision	[dɪsɪʒn]
		Chef	[tʃef]	Closure	[kləʊʒə]
		Appreciate	[əpri:ʃreɪt]	Vision	[vɪʒn]
		Relationship	[rɪleɪʃnʃɪp]	Pleasure	[pleɪʒə]
		Ambitious	[æmbɪʃəs]	Occasionally	[əkeɪʒnəli]

Table 2 presents the characters' realisations of the voiceless palato-alveolar fricative /ʃ/ and voiced palato-alveolar fricative /ʒ/ in the selected words from Movie 1 (*Fame and Fury*). It was observed that, for the realisation of the voiceless palato-alveolar /ʃ/, the word *chef* /ʃef/ was realised differently as [tʃef]. This identified realisation is a typical feature of spelling pronunciation as observed in previous literature on pronunciation features of NigE (Akinyode, 2020; Akande and Fajobi, 2018). All other tested words for the realisation of the voiceless palato-alveolar fricative /ʃ/ were realised by the characters as those of the BBC pronunciations. Therefore, the two observed variants of the voiceless palato-alveolar fricative are the voiceless palato-alveolar fricative [ʃ] and the voiceless palato-alveolar affricate [tʃ].

It was further observed from the tested words with the voiced palato-alveolar fricative /ʒ/ that the words *decision* /dɪsɪʒ^ən/ was realised as [dɪsɪʃ^ən] and the word *vision* /vɪʒ^ən/ as [vɪʃ^ən]. This implies that /ʒ/ had two variant realisations: [ʒ] and [ʃ] in Movie 1. All other tested words with the voiced palato-alveolar fricative /ʒ/ were realised as those of the BBC pronunciations.

Table 3: Characters' Realisation of Sample Words in Movie 2, *Home Coming*

S/N	SEX	TEST ITEMS FOR /ʃ/	NOLLYWOOD REALISATION	TEST ITEMS FOR /ʒ/	NOLLYWOOD REALISATION
C1	F	Should	[ʃʊd]	Version	[vɜ:ʒʰn]
		She	[ʃi:]	Provision	[prəʊvɪʒʰn]
		Sure	[ʃʊə]	Television	[telɪvɪʒʰn]
		Share	[ʃeə]	Usually	[ju:ʒʊəli]
		Shock	[ʃɒk]	Exposure	[ɪkspəʊʒʰr]
		Show	[ʃəʊ]	Decision	[dɪsɪʒʰn]
		Chef	[ʃef]	Closure	[kləʊʒʰ]
		Appreciate	[æpri:ʃiət]	Vision	[vi:ʒʰn]
		Relationship	[rɪleɪʃnʃɪp]	Pleasure	[pleʒəʰ]
		Ambitious	[æmbɪʃəs]	Occasionally	[əkeɪʒʰnli]
C2	M	Should	[ʃʊd]	Version	[vɜ:ʒʰn]
		She	[ʃi:]	Provision	[prəʊvɪʃʰn]
		Sure	[ʃʊəʰ]	Television	[telɪvɪʃʰn]
		Share	[ʃeə]	Usually	[ju:ʒʊəli]
		Shock	[ʃɒk]	Exposure	[ɪkspəʊʒʰr]
		Show	[ʃəʊ]	Decision	[dɪsɪʃʰn]
		Chef	[tʃef]	Closure	[kləʊʒəʰ]
		Appreciate	[əpri:ʃiət]	Vision	[viʃʰn]
		Relationship	[rɪleɪʃnʃɪp]	Pleasure	[pleʒʰ]
		Ambitious	[æmbɪʃʰs]	Occasionally	[əkeɪʃʰnli]
C3	F	Should	[ʃʊd]	Version	[vɜ:ʒʰn]
		She	[ʃi:]	Provision	[prəʊvɪʒʰn]
		Sure	[ʃʊə]	Television	[telɪvɪʒʰn]
		Share	[ʃeə]	Usually	[ju:ʒʊəli]
		Shock	[ʃɒk]	Exposure	[ɪkspəʊʒʰ]
		Show	[ʃəʊ]	Decision	[dɪsɪʃʰn]
		Chef	[tʃef]	Closure	[kləʊʒʰ]
		Appreciate	[æpri:ʃiət]	Vision	[viʃʰn]
		Relationship	[rɪleɪʃnʃɪp]	Pleasure	[pleʒʰ]
		Ambitious	[æmbɪʃʰs]	Occasionally	[əkeɪʒʰnli]
C4	M	Should	[ʃʊd]	Version	[vɜ:ʒʰn]
		She	[ʃi:]	Provision	[prəʊvɪʒʰn]
		Sure	[ʃʊəʰ]	Television	[telɪvɪʒʰn]
		Share	[ʃeə]	Usually	[ju:ʒʊəli]
		Shock	[ʃɒk]	Exposure	[ɪkspəʊʒʰr]
		Show	[ʃəʊ]	Decision	[dɪsɪʒʰn]
		Chef	[ʃef]	Closure	[kləʊʒəʰ]
		Appreciate	[æpri:ʃiət]	Vision	[viʒʰn]
		Relationship	[rɪleɪʃnʃɪp]	Pleasure	[pleʒəʰ]
		Ambitious	[æmbɪʃəs]	Occasionally	[əkeɪʒʰnli]

Table 3 presents the characters' realisations of the voiceless palato-alveolar fricative /ʃ/ and the voiced palato-alveolar fricative /ʒ/ in Movie 2 (*Home Coming*). It was observed that, for voiceless palato-alveolar /ʃ/, the word *chef* /ʃef/ was realised differently from the BBC pronunciation as [tʃef] as identified in Movie 1 (*Fame and Fury*). Also, the word *appreciate* /æpri:ʃiət/

/ was realised as [əpri:ʃiət]. All other tested words for the voiceless palato-alveolar fricative /ʃ/ were realised as those of the BBC pronunciations. Hence, the voiceless palato-alveolar fricative /ʃ/ had three variant realisations [ʃ], [tʃ] and [s] from the characters' utterances.

It was further observed that voiced palato-alveolar fricative /ʒ/ had words like *decision* /dɪsɪʒən/, *provision* /prəʊvɪʒən/, *television* /telɪvɪʒən/, *vision* /vɪʒən/ and *occasionally* /əkeɪʒənəli/ realised as [dɪsɪʒən], [prəʊvɪʒən], [telɪvɪʒən], [vɪʒən] and [əkeɪʒənəli] respectively by some of the characters. However, all other tested words with the voiced palato-alveolar fricative /ʒ/ were realised as those of the BBC pronunciations by all the characters. Therefore, the two identified variant realisations for /ʒ/ from the characters' utterances are [ʒ] and [ʒ].

Table 4: Characters' Realisation of Sample Words in Movie 3, *Let's Exchange Wives*

S / N	Gender	Test Items for /ʃ/	Nollywood PRO	TRST items FOR /ʒ/	Nollywood PRO
C 1	M	Should She Sure Share Shock Show Chef Appreciate Relationship Ambitious	[ʃʊd] [ʃi:] [ʃʊə] [ʃeə] [ʃɒk] [ʃəʊ] [tʃef] [əpri:ʃreɪt] [rɪleɪʃnʃɪp] [æmbɪʃrʊs]	Version Provision Television Usually Exposure Decision Closure Vision Pleasure Occasionally	[vɜ:ʃən] [prəʊvɪʒən] [telɪvɪʒən] [ju:ʒʊəli] [ɪkspəʊʒər] [dɪsɪʒən] [kləʊʒə] [vɪʒən] [pleʒə] [əkeɪʒənəli]
C 2	F	Should She Sure Share Shock Show Chef Appreciate Relationship Ambitious	[ʃʊd] [ʃi:] [ʃʊə] [ʃeə] [ʃɒk] [ʃəʊ] [ʃef] [əpri:ʃreɪt] [rɪleɪʃnʃɪp] [æmbɪʃəs]	Version Provision Television Usually Exposure Decision Closure Vision Pleasure Occasionally	[vɜ:ʒən] [prəʊvɪʒən] [telɪvɪʒən] [ju:ʒəli] [ɪkspəʊʒər] [dɪsɪʒən] [kləʊʒə] [vɪʒən] [pleʒə] [əkeɪʒənəli]

C 3	F	Should	[ʃʊd]	Version	[vɜ:ʒəʊn]
		She	[ʃi:]	Provision	[prəʊvɪʒəʊn]
		Sure	[ʃʊə]	Television	[telɪvɪʒəʊn]
		Share	[ʃeə]	Usually	[ju:ʒʊəli]
		Shock	[ʃɒk]	Exposure	[ɪkspəʊʒər]
		Show	[ʃəʊ]	Decision	[dɪsɪʒəʊn]
		Chef	[tʃef]	Closure	[kləʊʒə]
		Appreciate	[əpri:ˈreɪt]	Vision	[vɪʒəʊn]
		Relationship	[rɪleɪʃənʃɪp]	Pleasure	[pleʒə]
		Ambitious	[æmˈbɪʃəs]	Occasionally	[əkeɪʒəʊnəlɪ]
C 4	M	Should	[ʃʊd]	Version	[vɜ:ʃəʊn]
		She	[ʃi:]	Provision	[prəʊvɪʃəʊn]
		Sure	[ʃʊ]	Television	[telɪvɪʃəʊn]
		Share	[ʃeə]	Usually	[ju:ʒʊəli]
		Shock	[ʃɒk]	Exposure	[ɪkspəʊʒər]
		Show	[ʃəʊ]	Decision	[dɪsɪʃəʊn]
		Chef	[ʃef]	Closure	[kləʊʒə]
		Appreciate	[əpri:ˈreɪt]	Vision	[vɪʃəʊn]
		Relationship	[rɪleɪʃənʃɪp]	Pleasure	[pleʒə]
		Ambitious	[æmˈbɪʃəs]	Occasionally	[əukeɪʃəʊnəlɪ]

Table 4 presents the characters' realisations of /ʃ/ and /ʒ/ in Movie 3 (*Let's Exchange Wives*). The two variants realised for the voiceless palate-alveolar fricative /ʃ/ are [ʃ] and [tʃ]. It was observed in this movie that only the word *chef* /ʃef/ was realised differently from the BBC pronunciation as [tʃef] as identified in Movie 1 (*Fame and Fury*) and Movie 2 (*Home Coming*).

Also, two variants [ʒ] and [ʃ] were realised for the voiced palato-alveolar fricative /ʒ/ in the characters' utterances. Words like *decision* /dɪsɪʒəʊn/, *provision* /prəʊvɪʒəʊn/, *television* /telɪvɪʒəʊn/, *vision* /vɪʒəʊn/ and *occasionally* /əkeɪʒəʊnəlɪ/ were realised as [dɪsɪʃəʊn], [prəʊvɪʃəʊn], [telɪvɪʃəʊn], [vɪʃəʊn] and [əukeɪʃəʊnəlɪ] by some of the characters as they were observed in Movie 2 (*Home Coming*). Furthermore, all other tested words with the voiced palato-alveolar fricative /ʒ/ were realised as those of the BBC pronunciations by all the characters.

Table 5: Characters' Realisation of Sample Words in Movie 4, *Love in Every Word*

S/N	Gender	Test Items for /ʃ/	Nollywood . Pro	Test Items For /ʒ/	Nollywood. Pro
C 1	F	Should She Sure Share Shock Show Chef Appreciate Relationship Ambitious	[ʃʊd] [ʃi:] [ʃʊə] [ʃeə] [ʃɒk] [ʃəʊ] [ʃef] [əpri:ʃreɪt] [rɪleɪʃnʃɪp] [æmbɪʃəs]	Version Provision Television Usually Exposure Decision Closure Vision Pleasure Occasionally	[vɜ:ʒən] [prəʊvɪʒən] [telɪvɪʒən] [ju:ʒəlɪ] [ɪkspəʊʒər] [dɪsɪʒən] [kləʊʒər] [vɪʒən] [pleʒər] [əkɪʒənəlɪ]
C 2	M	Should She Sure Share Shock Show Chef Appreciate Relationship Ambitious	[ʃʊd] [ʃi:] [ʃʊə] [ʃeə] [ʃɒk] [ʃəʊ] [tʃef] [əpri:ʃreɪt] [rɪleɪʃnʃɪp] [æmbɪʃəs]	Version Provision Television Usually Exposure Decision Closure Vision Pleasure Occasionally	[veʃən] [prɒvɪʃən] [telɪvɪʃən] [ju:ʃʊəlɪ] [eksɒpəʊ] [dɪsɪʃən] [klɒʃə] [vɪʃən] [pleʃə] [ɒkeɪʃənəlɪ]
C 3	F	Should She Sure Share Shock Show Chef Appreciate Relationship Ambitious	[ʃʊd] [ʃi:] [ʃʊə] [ʃeə] [ʃɒk] [ʃəʊ] [tʃef] [əpri:ʃreɪt] [rɪleɪʃnʃɪp] [æmbɪʃəs]	Version Provision Television Usually Exposure Decision Closure Vision Pleasure Occasionally	[vɜ:ʒən] [prəʊvɪʒən] [telɪvɪʒən] [ju:ʒʊəlɪ] [ɪkspəʊʒər] [dɪsɪʒən] [kləʊʒə] [vɪʒən] [pleʒər] [əʊkeɪʒənəlɪ]
C 4	M	Should She Sure Share Shock Show Chef Appreciate Relationship Ambitious	[ʃʊd] [ʃi:] [ʃʊə] [ʃeə] [ʃɒk] [ʃəʊ] [ʃef] [əpri:ʃreɪt] [rɪleɪʃnʃɪp] [æmbɪʃəs]	Version Provision Television Usually Exposure Decision Closure Vision Pleasure Occasionally	[vɜ:ʒn] [prəʊvɪʒən] [telɪvɪʒən] [ju:ʒʊəlɪ] [ɪkspəʊʃər] [dɪsɪʃən] [kləʊʒər] [vɪʃən] [pleʒər] [əkɪʒənəlɪ]

In Table 5 above, characters' realisations of the voiceless palato-alveolar fricative /ʃ/ in Movie 4 (*Love in every Word*) showed two variants: [ʃ] and [tʃ]. While all sampled words with the voiceless palato-alveolar fricative were realised as those of the BBC pronunciations, only the word *chef* /ʃef/ was realised differently as [tʃef]. For the voiced palato-alveolar fricative /ʒ/ in Movie 4, characters' realisations revealed two variants

[ʒ] and [ʃ]. Words like *usually* /ju:ʒuəli/, *exposure* /ɪkspəʊʒər/, *closure* /kləʊʒər/, *pleasure* /pleʒər/ *decision* /dɪsɪʒən /, *provision* /prəʊvɪʒən/, *television* /telɪvɪʒən/, *vision* /vɪʒən/ and *occasionally* /əkeɪʒənli/ were realised as [ju:ʃuəli], [ɛkspəʊʃ], [kləʊʃ], [pleʃ], [dɪsɪʃən], [prəʊvɪʃən], [telɪvɪʃən], [vɪʃən] and [əkeɪʃənli]. However, other tested words were realised as those found in the BBC pronunciation.

Table 6: Characters Realisation of Sample Words in Movie 5, *Last Straw*

S/N	GENDER	TEST ITEMS FOR /ʒ/	NOLLYWOOD. PRO	TEST ITEMS FOR /ʒ/	NOLLYWOOD . PRO
C1	M	Should She Sure Share Shock Show Chef Appreciate Relationship Ambitious	[ʃʊd] [ʃi:] [ʃʊər] [ʃeə] [ʃɒk] [ʃəʊ] [tʃef] [əpri:ʃiət] [rɪleɪʃnʃɪp] [æmbɪʃɪəs]	Version Provision Television Usually Exposure Decision Closure Vision Pleasure Occasionally	[vɜ:ʒən] [prəʊvɪʒən] [telɪvɪʒən] [ju:ʒəli] [ɪkspəʊʒər] [dɪsɪʒən] [kləʊʒər] [vɪʒən] [pleʒər] [əkeɪʒənli]
C2	F	Should She Sure Share Shock Show Chef Appreciate Relationship Ambitious	[ʃʊd] [ʃi:] [ʃʊər] [ʃeə] [ʃɒk] [ʃəʊ] [tʃef] [əpri:ʃiət] [rɪleɪʃnʃɪp] [æmbɪʃəs]	Version Provision Television Usually Exposure Decision Closure Vision Pleasure Occasionally	[vɜ:ʒən] [prəʊvɪʒən] [telɪvɪʒən] [ju:ʒəli] [ɪkspəʊʒər] [dɪsɪʒən] [kləʊʒər] [vɪʒən] [pleʒər] [əkeɪʒənli]
C3	M	Should She Sure Share Shock Show Chef Appreciate Relationship Ambitious	[ʃʊd] [ʃi:] [ʃʊə] [ʃeə] [ʃɒk] [ʃəʊ] [tʃef] [əpri:ʃiət] [rɪleɪʃnʃɪp] [æmbɪʃəs]	Version Provision Television Usually Exposure Decision Closure Vision Pleasure Occasionally	[vɜ:ʃɪn] [prəʊvɪʒən] [telɪvɪʒən] [ju:ʒəli] [ɛkspəʊʃər] [dɪsɪʃən] [kləʊʒər] [vɪʃən] [pleʒər] [əkeɪʒənli]
C4	F	Should She Sure Share Shock Show Chef Appreciate Relationship Ambitious	[ʃʊd] [ʃi:] [ʃʊər] [ʃeə] [ʃɒk] [ʃəʊ] [tʃef] [əpri:ʃiət] [rɪleɪʃnʃɪp] [æmbɪʃəs]	Version Provision Television Usually Exposure Decision Closure Vision Pleasure Occasionally	[vɜ:ʒən] [prəʊvɪʒən] [telɪvɪʒən] [ju:ʒəli] [ɪkspəʊʒər] [dɪsɪʒən] [kləʊʒər] [vɪʒən] [pleʒər] [əkeɪʒənli]

Table 6 above shows the characters' realisations of /ʃ/ and /ʒ/ in Movie 5 (*Last Straw*). The two variants realised for the voiceless palato-alveolar fricative /ʃ/ are [ʃ] and [tʃ]. It was observed in this movie that only *chef* /ʃef/ was realised differently from the BBC pronunciation as [tʃef], as identified in other movies.

Also, two variants [ʒ] and [ʒ̥] were realised for the voiced palato-alveolar fricative /ʒ/. Words like *decision* /dɪsɪʒ^ən/, *vision* /vɪʒ^ən/ and *exposure* /ɪkspəʊʒ^ər/ were realised as [dɪsɪʒ^ən], [vɪʒ^ən] and [ɪkspəʊʒ^ər] by some of the characters as they were observed in some other analysed movies. Furthermore, all other tested words with the voiced palato-alveolar fricative /ʒ/ were realised as those of the BBC pronunciation by all the characters.

Acoustic Representation of Variant Realisations of the Palato-alveolar Fricatives in the Tested Words

To affirm the auditory and perceptual analysis of the identified variants from the Nollywood characters' utterances, below are the selected acoustic representations of some of the spectrograms of the fricatives in the tested words. Therefore, this section shows some spectral waves, peak of frequency and the amplitude (+dB and -dB) readings of the two palato-alveolar fricatives in the tested words from both the BBC pronunciations (BBCP) and the Nollywood characters' variant realisations (NCVR). The four recurring variants [ʃ], [s], [tʃ] and [ʒ] would be shown in some of the tested words: *appreciate*, *chef*, *exposure* and *version*.

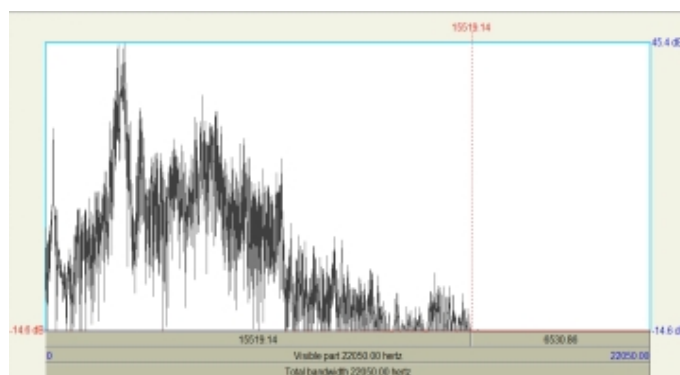


Fig 1. BBCP of [ʃ] in 'appreciate' [əpri:ʃiət]

Fig. 1 above presents the spectral waves of the BBC's production of [ʃ] in *appreciate* where the peak of frequency stood at 15519.14, +dB value stood at 45.4 and the -dB value was -14.6.

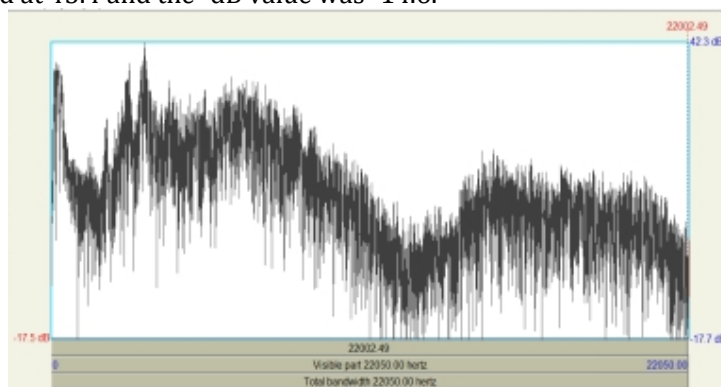


Fig 2. NCVR of [ʃ] in appreciate [æpri:ʃiət]

Fig. 2 above reveals the spectral waves of the Nollywood character's production of [ʃ] in *appreciate* with the peak of frequency reading 22002.49, +dB value stood at 42.3 and the -dB value was -17.7.

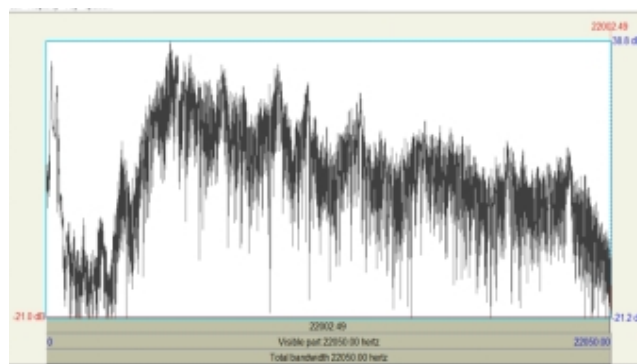


Fig 3. NCVR of [ʃ] in appreciate [æpri:ʃiət]

Fig. 3 above presents the spectral waves of the Nollywood character's production of [s] in *appreciate* with the peak of frequency reading 22002.49, +dB value stood at 38.8 and the -dB value was -21.2.

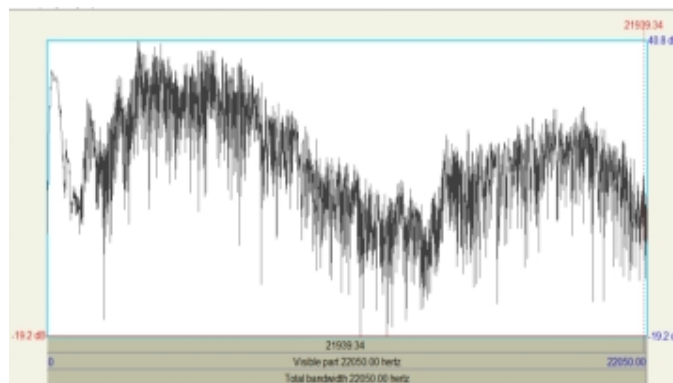


Fig 4. NCVR of [tʃ] in *chef* [tʃef]

Fig. 4 above reveals the spectral waves of the Nollywood character's production of [tʃ] in *chef* with the peak of frequency reading 21939.34, +dB value stood at 40.8 and the -dB value was -19.2.

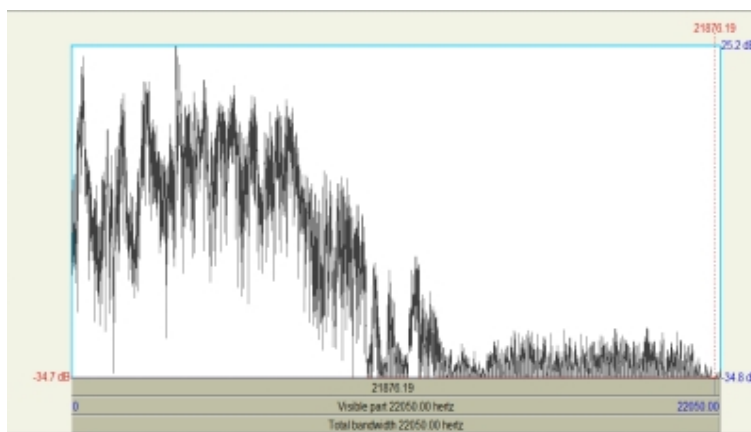


Fig 5. BBCP of [ʒ] in *exposure* [ɪkspəʒʊr]

Fig. 5 above reveals the spectral waves of the Nollywood character's production of [ʒ] in *exposure* with the peak of frequency reading 21876.19, +dB value stood at 25.2 and the -dB value was -34.8.

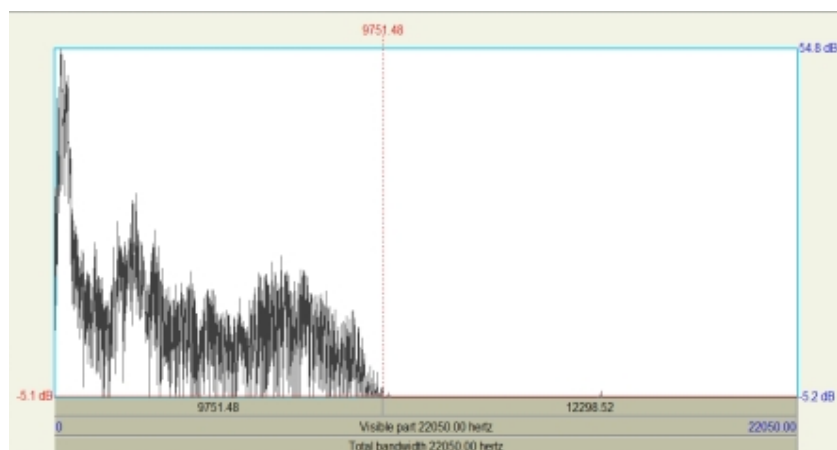


Fig 6. NCVR of [ʒ] in *exposure* [ekspəʒ³r]

Fig. 6 above reveals the spectral waves of the Nollywood character's production of [ʒ] in *exposure* with the peak of frequency reading 9751.48, +dB value stood at 54.8 and the -dB value was -52.

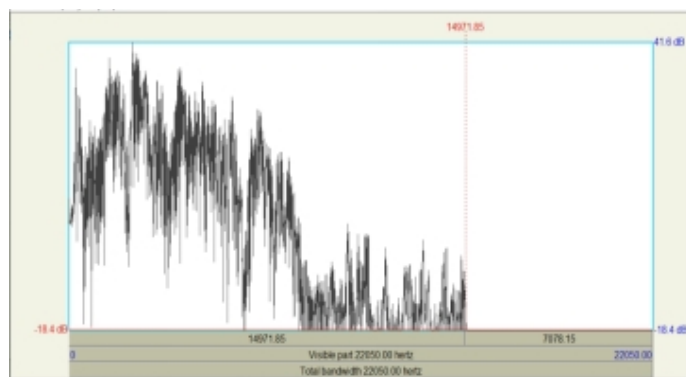


Fig 7. NCVR of [ʒ] in *version* [vɜ:ʒ³n]

Fig. 10 above shows the spectral waves of the Nollywood character's production of [ʒ] in *version* with the peak of frequency reading 14971.85, +dB value stood at 41.6 and the -dB value was -18.4

From the acoustic analysis above, spectrograms were shown for the four recurring variants [ʃ], [s], [tʃ] and [ʒ] in some of the tested words:

appreciate, chef, exposure and *version* as observed from the NVCR productions in comparison with the BBC productions. A closer look at the readings of the spectral waves shows variations in both the BBC's productions and the NCVRs' productions of the tested fricatives. The NCVR productions had different peaks of frequency and dB values when compared with those of the BBC's production and vice versa. It was further observed that the spectrogram waves are also different in shape, height and colour. These observations confirm variations in the loudness (amplitude dB) of their productions of the fricatives. It further showed that, despite the fact that Nollywood characters can approximate BBC productions in some cases, there is a possibility of the existence of variants in their renditions.

In summary, these acoustic findings confirm earlier studies of Jolayemi and Adebayo (2023), Akinola and Oladipupo (2019), among others, who had earlier submitted that some forms of variability exist in the production of palato-alveolar fricatives in Nigerian English. These observations, according to Labov's (2006) variationist framework, affirm the existence of variations in language use by different language users. This implies that, even while the characters spoke the same language in their interactions, there exist obvious pronunciation differences, even though these differences were not so projected because of how polished their conversation mode is. It is these differences that are of interest to linguistic heterogeneity (Ammour, 2012). According to this view, language not only varies but also does so systematically and in line with the social trait that its speakers possess. In this case, the English speakers are Nollywood characters. Therefore, it becomes more understandable why the observed characters have language variations which did not happen accidentally. Instead, the variations were systematically inherent, especially because of their job choice, which requires them to be spontaneous and at the same time emotive and pronounce as appropriately as possible. In this situation, for the systematicity to thrive, variant choices of language use were considered because of the fact that speakers of English speak differently; hence, their variations.

Table 7: Summary of Variant Realisations by Gender

MV1	R		C1/M	C2/F	C3/M	C4/F
		/ʃ/	9	10	9	10
		/z/	10	10	8	10
Sub-Total			19	20	17	20
MV2	R		C1/F	C2/M	C3/F	C4/M
		/ʃ/	10	8	9	10
		/z/	10	5	8	10
Sub-Total			20	13	17	20
MV3	R		C1/M	C2/F	C3/F	C4/M
		/ʃ/	9	10	9	10
		/z/	7	10	10	5
Sub-Total			16	20	19	15
MV4	R		C1/F	C2/M	C3/F	C4/M
		/ʃ/	10	9	9	10
		/z/	10	1	10	7
Sub-Total			20	10	19	17
MV5	R		C1/M	C2/F	C3/M	C4/F
		/ʃ/	10	10	9	10
		/z/	10	10	7	10
Sub-Total			20	20	16	20
			/ʃ/	/z/		
MALE			93	70	163	
FEMALE			97	98	195	
TOTAL			190	168	358	

A large number of studies on NigE varieties of spoken English have similar reports that speakers prefer to use close substitutes of their mother tongue inventory (MTI) in place of English speech sounds that are not present in their MTI. While this belief may be conceded, it will not be so in totality because the data analysed in this present study revealed that the Nollywood characters are very familiar with both the voiceless fricative /ʃ/ and voiced palato-alveolar fricative /z/, even though only the voiceless counterpart /ʃ/ is present in their MTI.

For instance, results from Table 7 show the outcome scores of the Nollywood characters' realisations by gender (male/female). Out of the total token of 400 realisations from 20 characters in five movies, 200 tokens are for the voiceless palato-alveolar fricative /ʃ/, while the remaining 200 tokens are for the voiced palato-alveolar fricative /ʒ/. The scores presented in the rows and columns represented the number of appropriate realisations from the characters' renditions after their outputs were painstakingly analysed auditorily and perceptually in comparison with the BBC pronunciations. Transcriptions from Daniel Jones Cambridge English Pronouncing Dictionary were used as a guide. The total score of 80 was ascribed to each movie: 40 for each gender and for each of the represented English fricatives. On the last three rows and columns towards the lower part of the table, the total score of males for /ʃ/ recorded 93, while females recorded 97. For /ʒ/, the total score of males is 70, while that of females is 98. While a 163 total score was recorded for males, a 195 total score was recorded for females. Therefore, out of 400 total score, 358 was the appropriate rendition recorded for both genders.

This result implies that obvious differences exist in the renditions of the characters. Gender has an impact on the realisation /ʃ/ and /ʒ/ in Nollywood characters' renditions. In addition, despite the fact that /ʒ/ is an absent fricative in the MTI of both genders, the total score of 168 revealed that the profession of the investigated Nollywood characters had a positive impact on their familiarisation with the voiced palato-alveolar fricative. Their constant rehearsal, reading of scripts and pronunciation drills while on set and before acting influenced their eventual output. This finding aligns with the impact of exposure and constant pronunciation drills as observed by Afolarin (2016), Akindele (2020) and Akinyode (2020), among others. A further implication of this result borders on variations in the functionality of language use. While many of the characters were able to articulate /ʃ/, which is present in the MTI of the characters, this voiceless palato-alveolar fricative was not articulated by some characters. This finding is in tandem with earlier findings of Afolarin (2016), Jolayemi & Adebayo (2023) and Oladipupo & Akinola (2019), among others, who had earlier discovered that the voiceless palato-alveolar fricative /ʃ/ remains challenging for some NigE speakers. However, the female subjects seem to express more preference for realising /ʃ/ than their male counterparts. The same thing

is applicable for /ʒ/, the female characters expressed a preference for realising it as /ʒ/ more than their male counterpart.

5.0 Conclusion

Pronunciations are sometimes significantly affected by sociolinguistic factors such as gender, either in careful or in spontaneous conversations, as observed in this study. Our findings have indicated that despite the obvious standard observed in the output of the Nollywood characters, the male gender tends more towards NigE variants, while the female gender tends more towards the BBC pronunciation in their renditions of the tested words. Many of the male characters displayed the feature of spelling pronunciation, especially when saying *chef* /ʃef/ as [tʃef]. Also, it was statistically confirmed that some Nigerian English speakers still find it challenging to articulate the voiceless palato-alveolar fricative /ʃ/ despite its presence in their MTI. It was also confirmed that exposure to English words and constant pronunciation drilling during rehearsals significantly impacted the productivity of the characters' rendition of the voiced palato-alveolar fricative /ʒ/, which many of them interestingly find easy to articulate. Similarly, the results confirmed gender differentiation in the Nollywood articulation of palato-alveolar fricatives in English words. This sociolinguistic factor (gender) has been reported as a factor that can be used to assess the similarities and differences that may exist between native and non-native speakers of English. Acoustically, this study revealed that different readings were noted in the realisations of the palato-alveolar fricatives of both the BBCP and the NCVR, even where they had similar realisations. And of course, where they had different realisations, different readings were noted. Our study has also revealed that three recurring variants were observed in the Nollywood productions of the palato-alveolar fricatives. In conclusion, the socio-phonological study of the palato-alveolar fricatives /ʃ/ and /ʒ/ in this study demonstrated that, indeed, variant realisations are expected of language users irrespective of the social background or realities.

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A Phonopragmatic Analysis of Selected Skits of McEdopikin

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Abstract

Skit makers carve a niche for themselves to pull crowds on social media with different intonations and communicative patterns while passing across messages to their followers. This research considers a phonopragmatic analysis of McEdopikin's selected skits with a view to pinpointing the way his characteristic intonation espouses his intended meaning. A qualitative descriptive method was employed to interrogate three thematically related short skits of McEdopikin downloaded from YouTube, and transcribed to identify the prosodic features engaged by the skit actor. The analysis was hinged on Mey's pragmatic acts and Brazil's model of discourse intonation towards highlighting and understanding the function of the intended/hidden messages as embedded in the intonation choice of the speaker. Findings revealed that McEdopikin strategically manipulates different prosodic features like pitch rise and fall, fast tempo with abrupt pauses, voice modulation, comic exaggeration of alliteration, and code alternation to construct a contrastive ironic argument that aligns the audience's stance while delivering humour. The findings also revealed the effectiveness of intonation in providing information and convincing hearers. These phonological cues enrich humour, enhance character portrayal, and facilitate audience engagement. It is suggested that future work should combine acoustic measurement to investigate phonological patterns in other skits of McEdopikin.

Keywords: Instagram, intonation, McEdopikin, phonopragmatic analysis, skits, social media

1.0 Introduction

Skit making is a short humorous display which is intended to amuse, inform and educate people. It is fast becoming a big social media enterprise, particularly in Nigeria. According to Usoro (2022) in a report downloaded online, skit-making has been ranked as "the third largest entertainment industry in Nigeria with a net worth of over N50 billion". While this is by no means unexpected, the poor social-economic realities

bedevilling the Nigerian nation in recent times can be explained to be part of the reasons for its upsurge. This poor condition in which people find themselves has not only taken its toll on the mental health of the people, it has also rendered the majority of people jobless. While a lot of people have found skit-making as an alternative source of income, their laughter-trigger productions have also been used as a therapeutic intervention for relieving stress, and for dousing mental challenges. Ibe et al (2025) corroborate this when they confirm that “online skit-making has become a lucrative form of entertainment, resonating with audiences across the globe and providing a platform for addressing societal issues through humour”.

The digital technologies have no doubt aided skit actors to utilise the social medial platforms such as Facebook, YouTube, Instagram, and TikTok to commercialise jokes/humour. Consequently, skit making and its actors have constituted an object of research endeavours from different linguistic orientations. Filani and Adeoti (2022) examined a discourse analysis of the representations of women in selected Nigerian skits. Sun (2020) has also done a study of semantic clash in skit-humour within the framework of co-selection while, recently, Okhuosi (2023) has explored the phonological jokes in Maryam Apaokagi’s selected comedy skits. This means that studies have generally examined skits of selected actors/producers and have been approached from discourse analysis, pragmatics and phonology. Gbadosi Agbonjo Jonathan (McEdopikin) is another skit maker with at least 3,703 followers. His skits are popular with offering definitions of two related concepts to clarify them. However, it is observed that McEdopikin’s skits are still lacking in the literature, especially from a phonopragmatic perspective.

Phonopragmatics is a budding linguistic field which studies the way a speaker uses phonetic and prosodic elements to communicate context-bound meaning, feelings, and emotions. In other words, it is a linguistic enterprise of using sound (phonology) for communicative intent (pragmatics) with the aim of clarifying a speaker’s intended message through acoustic variations. It is as a result of filling this lacuna that this research considers a phonopragmatic analysis of selected skits of McEdopikin with a view to identifying the phonological features he uses in comedic timing and character delivery. The study aims to analyse how these phonological features serve pragmatic functions, such as signalling dominance, negligence, irony, or relational stance. This will extend the frontiers of the research to illustrate the interplay between

phonology and pragmatics in African digital comedic performance as well as pinpointing the way McEdopikin's characteristic intonation promotes his popularity and intended meaning.

2.0 Literature Review

Phonopragmatics is a morphological blend involving phonology and pragmatics. It will therefore be logical to first conceptualise the term for the sake of clarity. Phonology, as defined by Yule (2010:54), involves the study of "the systems and patterns of speech sounds in a language", where focus is more on the aspects of abstract sounds than the physical sounds. The concept relies on the mental representation of linguistic knowledge and the description of the said knowledge. Anytime we are saddled with the responsibility of studying systematic sound patterns of human language, we are talking about phonology.

On the other hand, pragmatics studies the language in use. It is that aspect of linguistics that studies how speakers and hearers engage language and the role of context in the pragmatic equation. Put differently, Thomas (1995: 226) explains pragmatics as "how utterances communicate meaning in a context". That shows that pragmatics entails how context influences language. Stalnaker (1999) argues that pragmatics is "a science that is concerned with indexical expressions". That means that pragmatics describes the way language is employed to communicate a speaker's intention rather than the syntactic formation of the language. Corroborating Leech (1983:6), pragmatics is a triadic phenomenon that situates itself in the assemblage of the speaker, hearer and the context of situation. However, Leech (2016) avers that pragmatics is the study of meaning and its relation to speech situations. An example of speech situation referred to is skit, which is the focus of this study.

Phonopragmatic analysis studies the relation between the characteristics of certain sounds and the meaning of items they encode; that is, the coordination between sound and the meaning it encodes. As an intersection of phonetics and pragmatics, it offers an analytical lens to investigate how intonation, rhythm, timing, stress and other phonological features contribute to pragmatic meaning, comedic effect, and also convey subtleties like irony, affect, or speaker positioning. The focus of this study is to investigate the prosodic features manifested in the skits/comedy of McEdopikin, by paying attention to the

phonopragmatic elements in the variation of sounds used by the comedian as they convey different meanings during performance.

Comedy skits represent a rich domain where language performance, beyond content, relies heavily on prosodic and phonetic variation. Research on humour often foregrounds semantics and discourse, with less emphasis on phonopragmatic aspects. However, the prosodic role in humour has been studied. For instance, Attardo & Raskin (1991) emphasised how prosodic signals (tone of voice, pitch) cue punchlines and humour detection. Likewise, Raskin (1985) highlighted timing and rhythm in joke delivery. However, in the Nigerian context, studies on digital comedic content are yet to explore phonopragmatic mechanisms deeply. Phonopragmatics as an emerging field study how phonetic cues such as pitch rise and tempo encode pragmatic meaning such as sarcasm or emphasis. This paper focuses on McEdopikin, a prominent Nigerian skit maker known for his sharp wit and situated humour. It explores how his phonological choices interact with pragmatic intent to generate comedic impact.

The framework adopted in this research is a combination of phonological and pragmatic concepts. Phonopragmatics is a novel approach in the field of pragmatics and phonology, which studies the interrelationship between phonological aspects and meaning in a particular context or situation. Sperti (2017:72) defines phonopragmatics as “the intentional use of phonological elements to express illocutionary acts and influence a listener’s interpretation of meaning”. By this, he opines that phonopragmatics can be seen as how illocutionary acts are intentionally articulated through phonological features to affect meaning on the part of the listener. The prosodic features such as pitch, loudness, tone, intonation, coda and contours all come together to accentuate speaker’s intended meaning. These prosodic features play a special role in altering meaning of a speaker’s utterance partially or totally. The highlighted features of prosody engaged by a speaker can pragmatically mark the use of language in a skit or comedy performance. In a study such as this, phonopragmatics is only concerned with paralinguistic information which is related to the speaker’s attitude, intention and sociolect.

Mey’s Pragmatic Acts

This theory was developed by Jacob Mey in 2001. Pragmatic Act Theory is a theory which situates speech acts in the appropriate sociocultural

contexts. Mey posits that, in order for speech acts to be effective, they have to be situated. Therefore, the focus is not on conditions and rules for an individual speech act but on describing a pragmeme which is a general situational prototype that can be performed in a situation. According to Mey, pragmeme is divided into activity and textual aspects. The activity aspect includes those acts that can be performed by interlocutors in a communicative context and this includes speech acts, indirect speech acts, conversational (dialogue) acts, psychological acts, prosodic acts and physical acts. The textual aspect, which is about the context of communication, includes inference which is represented as INF; reference represented as REF; relevance as REL; voice as VCE; shared situation knowledge as SSK; metaphor as MPH; and metapragmatic as M. However, it is the prosodic acts of the activity aspect which have been found relevant to this research. Prosodic acts *consider such components as intonation, stress, tempo and pause. These components become useful in interrogating the selected skits of McEdopikin in order to signal listeners' interpretation of his message.*

Brazil's Model of Discourse Intonation

Brazil's (1980) model of Discourse Intonation deals with how a speaker's use of pitch can be used to signal shared, communicative knowledge in real-time context. In other words, discourse intonation can be regarded as the way a speaker varies the pitch and the prominence over a stretch of speech based on the state of understanding between them and the hearer. Consequently, Brazil postulated four systems of choice that a speaker can pick from; these are prominence, key, termination and tone. While ***prominence*** draws attention to the most significant lexical choices, with the final prominent syllable acting as the tonic syllable, tone focuses on whether the pitch is fall or rise or fall-rise. Key can also indicate whether the pitch level is high or mid or low, and this can be used to determine the speaker's attitude to the information. Termination deals with the pitch level of the final syllable in a tone unit, which manages the conversational flow. All these aspects of Brazil's Discourse Intonation are germane in this research and will be explored to signal communicative intent of the skit actor.

3.0 Methodology

Three thematically related skits of McEdopikin were purposively selected for the study. The selected skits are: *What is the difference*

between lie and scam? What is the difference between 419 and fraudsters? and *What is the difference between stealing and robbery?* The skits were first of all downloaded from YouTube, listened to courteously, transcribed into texts and then, the deployment of intonation patterns of the skit actor determined, taking cognisance of the prosodic features such as the use of falling and rising tones as well as different changes in pitch. The transcription adopted is that of International Phonetic Alphabet (IPA) transcription. The identified phonopragmatic elements constituted the data used for the analysis. The data were analysed qualitatively using the eclectic frameworks of Mey's pragmatic acts and Brazil's model of discourse intonation.

4.0 Data Analysis

To set the analysis in the proper perspective, extracted lines from the purposively selected three skits are presented on different tables with their transcriptions, juxtaposing the prosodic features with their pragmatic functions. The extracted lines were indiscriminately sampled from the skits. Each table is grouped into five columns with the headings, skit (indicating title of skit and the exact time in the skit thread), orthographic line (the sampled expression in the skit), IPA transcription (narrow), prosodic features in the expression, and the pragmatic functions performed by the identified prosodic features. Against that background, four extracts from Skit One *Lie vs Scam* are presented on Table 1. Table 2 contains five extracted expressions from another skit, titled *419 vs Fraudsters* while Table 3 displays five extracts from *Stealing vs Robbery* skit. Having presented the data table by table, a discussion of the analysis follows in subsequent paragraphs to succinctly interpret or explain the implications of the phonopragmatic variables.

Table 1 Showing Phonopragmatic Transcriptions of *Lie vs Scam* Skit

Skit	Orthographic line	IPA transcription (narrow)	Prosodic features	Pragmatic function
Lie vs Scam (00:00–00:07)	A lie... is when you just say something that is not true.	/ə 'laɪ_ ɪz wɛn ju: ɖ̥ɔst se: 'sɔmtɪŋ ɖat ɪz nɒt tru:/'	Falling-rising contour on 'lie' ['laɪ_ɾ]; vowel lengthening on 'say' [se:]; casual [ɖ] for 'that'.	Frames 'lie' neutrally; sets up later humorous contrast.
Lie vs Scam (00:08–00:14)	But a scam... ehn, is when you package the lie!	/'bɒt ə 'skam_ ɛ̃ ɪz wɛn ju: 'pakiɖ̥ɔ ɖə 'laɪ:/'	Stress + low pitch on 'scam'; nasalised, lengthened 'ehn'; hyperarticulated 'package'; final vowel lengthening in 'lie'.	Prosody signals reinterpretation; punchline triggers laughter.
Lie vs Scam (00:15–00:22)	Somebody wey wan scam you, go talk sweet sweet...	/'sɔmbɔdi wei wan 'skam ju: go tɔk swit swit/'	Pidgin phonology; reduplication 'sweet sweet' [swit swit] with high pitch + fast tempo.	Creates scammer persona; indexes solidarity through Pidgin.
Lie vs Scam (00:30–00:36)	Lie na ordinary, but scam na investment!	/laɪ na 'ɔɖinari bɒt 'skam na m'vestment/'	Quick tempo + falling tone on 'ordinary'; elongated stress on 'investment' [m'vestment].	Juxtaposes trivial vs serious; parody of economic register.

Table 2 Showing Phonopragmatic Transcriptions of 419 vs *Fraudsters* Skit

Skit	Orthographic line	IPA transcription (narrow)	Prosodic features	Pragmatic function
419 vs Fraudsters (00:00–00:06)	419... na local level!	/fɔːwanˈnam na ˈlɔkəl ˈlevəl/	Slow, rhythmic articulation of numerals; falling tone on ‘nine’; stress on ‘local’.	Frames 419 as familiar, “ordinary” scam.
419 vs Fraudsters (00:07–00:14)	But fraudsters... they get international level!	/bət ˈfrɔdstas de get mtaˈnɑfənəl ˈlevəl/	Rising contour on ‘fraudsters’; heavy stress on ‘na’ in ‘international’; elongated ‘level’.	Portrays fraudsters as “upgraded” scammers; mock sophistication.
419 vs Fraudsters (00:15–00:22)	419 go tell you, ‘bros, make we run small thing...’	/fɔːwanˈnam go tɛl ju bɾɔs mek wi rən smɔl tɪŋ/	Switch to Pidgin; vocative ‘bros’ with falling tone; clipped tempo in ‘run small thing’.	Mimics street-level persuasion; indexes grassroots scam.
419 vs Fraudsters (00:23–00:32)	Fraudster go send you email... in Queen’s English!	/ˈfrɔdstas go send juː ˈiːmeɪl ɪn kwiːnz ˈɪŋɡlɪʃ/	Stressed, lengthened ‘email’; hyperarticulated ‘Queen’s English’.	Parody of educated/global scammer persona.
419 vs Fraudsters (00:33–00:40)	419 na street hustle, fraudster na corporate job!	/fɔːwanˈnam na stɪt ˈhɔst ˈfrɔdstas na ˈkɔpɪrɪt ˈdʒɔb/	Clipped, fast ‘street hustle’; slowed, stressed ‘corporate job’.	Contrasts “hustle” vs “professionalisation”; ridicules scam hierarchy.

Table 3 Showing Phonopragmatic Transcriptions of *Stealing vs Robbery* Skit

Skit	Orthographic line	IPA transcription (narrow)	Prosodic features	Pragmatic function
Stealing vs Robbery (00:00–00:06)	Stealing... na when you take something quietly.	/ˈsti:lin na wɛn ju: tek ˈsɔmtɪŋ ˈkwaɪətli/	Falling-rising tone on ‘stealing’ [ˈsti:ɹ̩ʔ]; soft, lowered pitch on ‘quietly’ [ˈkwaɪətli↓].	Defines stealing as secretive; humour from understatement.
Stealing vs Robbery (00:07–00:13)	But robbery... is when you carry gun, shout, and collect!	/bɒt ˈrɒbi ɪz wɛn ju: ˈkari ɡɒn ʃaʊt an kɔˈlekt/	Strong stress on ‘robbery’; burst of intensity on ‘shout’ [ʃaʊtʔ!]; lengthening of ‘collect’ [kɔˈlekt]	Contrasts robbery with violent force; dramatization triggers laughter.
Stealing vs Robbery (00:14–00:21)	Stealer go tiptoe... thief go hide for corner.	/ˈsti:la go tipˈto: tif go haɪd fɔ ˈkɔnna/	Pidgin phonology; exaggerated lengthening on ‘tiptoe’; falling contour on ‘corner’.	Comic enactment of sneaking persona; indexes petty theft.
Stealing vs Robbery (00:22–00:29)	But robber... go block road, say, ‘Everybody lie down!’	/bɒt ˈrɒba go blɒk rɔ:d se ˈɛvɪbɒdi laɪ daʊn/	Heavy stress on ‘robber’; elongated ‘road’; imperative ‘lie down’ shouted with clipped force.	Performs violence of robbery; exaggeration creates comic relief.

Based on Table 1, 2, and 3 presented above, it becomes obvious that the selected skits of McEdopikin are characterised by copious phonopragmatic features such as pitch rise and fall, fast tempo, lowered volume delivery and repetitions of same consonantal sounds, and code

variation to communicate meanings. These phonopragmatic features are explained in subsequent paragraphs.

4.1 Pitch rise and fall

One of the prominent phonopragmatic identities of McEdopikin is the skillful use of two intonations simultaneously in utterances. He characteristically blends the pitch rise and fall together to create dramatic emphasis and cueing of the comedic revelations. He raises pitch when contrasting words to deliberately create contrastive comic emphasis. For example, in Table 1 presented above, looking at the extract from *'lie' vs 'scam'*, there is falling-rising contour on 'lie' ['laɪ↘ʌ], vowel lengthening on 'say' [se:] and casual [d] for 'that' in order to frame 'lie' neutrally and later set up humorous contrast. Similarly, pitch rise and fall is used in *'419' vs 'fraudsters'* (Table 2) where a rising contour is inserted on 'fraudsters' with heavy stress on 'na' of "international" and elongated 'level' to portray fraudsters as 'upgraded' scammers and to mock their level of sophistication. Also in Table 3, 'stealing' /'sti:lɪŋ/ versus 'robbery' /'rɒ.bri/, McEdopikin shortens the vowels in 'robbery' → /'rɒbri/ while intentionally reducing the syllables to become weaker than in British English as in 'secretly' /'si:kɹətli/ instead of /'si:krətli/. The vowel in 'stealing' is elongated to dramatise secrecy while 'robbery' is clipped, fast, and strong to reflect boldness. Thus, McEdopikin uses sound not only to **pronounce words** but also to bring **meaning**. He also raises pitch on 'stealing' and lowers it on 'robbery', mapping sound to the semantic contrast between 'hidden' and 'open'.

4.2 Fast Tempo with Abrupt Pauses

In addition, it is customary of McEdopikin to deliberately engage fast tempo with intermittent pauses in his delivery. While the fast tempo is deployed to heighten audience anticipation, the pause is injected occasionally to allow the reaction of the audience. For example, in *Lie vs Scam*, /laɪ na 'ɔdɪnari/ is articulated with rapid tempo to juxtapose trivial vs serious. Also in *Stealing vs Robbery*, 'stealing' is said slowly to mimic sneakiness while 'robbery' is rapid and loud to mimic force. Pauses are usually introduced strategically before key words. For instance, "*Stealing is... (pause) ...when you take it secretly*"). This strategy is deployed by McEdopikin to build suspense and heighten comic release in the listeners.

4.3 Volume Baixo

According to Brazil (1980), lowered volume means ‘volume baixo’, a term in Portuguese. In the course of the spontaneous delivery, it is also common for McEdopikin to suddenly ‘*baixar o volume*’, to express it as ***Brazil puts it, or*** lower his volume/voice at some points in a way to suggest a hushed voice/whisper that certain persons must not hear. An example can be found in the skit, *Stealing vs Robbery* (see Table 3), where the line ‘stealing na secret operation... robbery na broadcast!’ /'sti:lin na 'sikɪət ɔpə'le:ʃən | 'rɔb.i na 'brɔdkast/ is whispered in hushed tone with low pitch on ‘secret operation’ and loud rising-falling contour on ‘broadcast’. This strategy is deployed for various reasons. One is to function as irony and another is to signal and trigger humour. Humour arises from secrecy vs publicity contrast and this indicates ironic punch line in the skit.

4.4 Comic Exaggeration of Alliteration

Alliterated sounds are usually exaggerated and repeated in McEdopikin’s skits with the intention of creating comic effect. Here are some examples drawn from the sampled skits to illustrate this point:

A lie... is when you just say something that is not true. *Lie vs Scam* (00:00–00:07)

Somebody wey wan scam you, go talk sweet sweet... *Lie vs Scam* (00:00–00:07)

Stealing na when you take something secretly. *Stealing vs Robbery* (00:00–00:06)

In the above extracts from the sampled skits, alliterated sounds have been underlined for emphasis. For example, consonant /s/ is alliterated in ‘say’ /sei/ and ‘something’ /'sʌmθɪŋ/, /w/ in ‘wey’ /wei/ and ‘wan’ /wan/, /s/ in ‘stealing’ /sti:lɪŋ/, ‘something’ /'sʌmθɪŋ/, and ‘secretly’ /'si:kɪrtli/. McEdopikin deployed those alliterations to reverberate rhythmical effect on his spurious ventilation. Therefore, the attention of the listeners is copiously drawn to the deliberate voicing of the lexical items which become initialed by the repetitive consonant sounds in a way that mimics a teacher explaining to students. This phonetic idiosyncrasy is a subtle way to satirise the Nigerian educational style of defining concepts and for note taking.

Code-mixing, Pragmatic Indexing and Audience Alignment

Linguistically, the skit maker employs a mixture of Nigerian English and Nigerian Pidgin. However, code alternation is not random. McEdopikin tends to use pidgin forms most often when expressing shared cultural maxim or moral evaluation like sarcastic admonition while more 'standard' English is used in mock-formal descriptions. This alternation acts pragmatically to build in-group solidarity and ethical positioning. Pidgin indexes local solidarity and shared common sense while English indexes mock-legitimate categories (legal vs everyday morality). For example:

Somebody wey wan scam you, go talk sweet sweet... *Lie vs Scam* (00:15–00:22)
419 go tell you, 'bros, make we run small thing... *419 vs Fraudsters* (00:33–00:40)
Stealing na secret operation... robbery na broadcast.
Stealing vs Robbery (00:30–00:37)

In the first example, switching on to pidgin is a way to index solidarity with the listeners who share linguistic identity. The second example is to mimic street-level persuasion and to index grassroots scam while the third use of pidgin grounds abstract definitions in a familiar code. Prior work on code selection in Nigerian comedy shows this alternation is central to how comedians create humour and manage audience stance.

5.0 Conclusion

The study has found that McEdopikin's skits use an integrated set of phonopragmatic devices such as pitch rise and fall, fast tempo with abrupt pauses, voice modulation, comic exaggeration of alliteration and code alternation, to construct a contrastive ironic argument that aligns the audience stance while delivering humour. These findings underscore the importance of prosodic analysis in humour studies and suggest that digital skit creators in Nigeria intuitively employ phonopragmatic tools to enrich their performances. Future research may expand across a broader corpus or compare with other comedians to generalise patterns.

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Interpretation of Tones of English Intonation by Nigerians

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Abstract

Interpretation of tones of English intonation is a major challenge to non-native speakers such as Nigerians, who frequently misinterpret the intonation patterns in native speakers' speech. The objective of the study, therefore, is to ascertain whether or not Nigerian users of English correctly interpret the intonation patterns in English native speakers' speech, and measure the extent to which the acoustic quality of the native speakers' intonation patterns is in agreement with the analyses/interpretation of Nigerian English users. Fifty (50) final year students of the Department of English and Literary Studies from the Federal University of Lafia constitute the population. The data were elicited through interpretation tests conducted in the language laboratory using Wells' audio CD transcribed into 233 IPs. Eight of the English natives serve as the exponents for the test conducted. The study has as its main framework, Well's (2006) three Ts (Tonality, Tonicity and Tone) model. The findings reveal that participants had difficulty interpreting English intonation Patterns because they lacked knowledge of the tonality principles of the number of IPs and their boundaries. The study also discovers that participants avoided the use of intonation patterns because they were unable to perceive and interpret the speech of native English speakers.

Keywords: Intonation, Tones, Pattern, Interpretation, Perception.

1.0 Introduction

English is used as a Second Language in Nigeria. Therefore, to learn and master the language, it is important to understand both the spoken and written aspects of the language. One of the spoken aspects is English intonation. Intonation has rich linguistic resources that are often neglected by non-native speakers of English which depends heavily on sound modulation for the conveyance of meaning. One can utter, "*I'll see you tomorrow.*" as a statement or a question or a directive depending on the intonation contour. This is why spoken English by native speakers, as noted by Wells (2006), is richer in information content than written English. In view of this,

Jowitt (1991, p.100), notes that “it appears, however, that the rich intonational resources of native English speakers are neglected by the majority of Nigerian users. The neglect means that communication is not as informative as it might be...”. This implies that English as a language makes more elaborate use of intonation in spoken discourse. Wells further observes that, “This is also why some non-native speakers, not attuned to English intonation and what it means, may fail to catch a substantial part of the overall meaning of something spoken by a native speaker” (2006, p.5).

Gimson (1989) acknowledges that tones have meanings. Intonation languages use tones to show meaning of an entire stretch of utterance like a whole sentence or even a single word. Therefore, the decision on which tone to use in order to convey a particular message depends largely on the speaker’s decision on what he intends conveying to the listener. The tone is what makes intonation to be a relevant and important field of study in English. The crux of the research is the interpretation of these tones by non-native speakers of English and the hitches they normally encountered. Several empirical researches are geared toward the production and perception of intonation patterns. But this work is majored on the interpretation of the tones of English intonation by non-native speakers of English.

2.0 Literature of Review

Non-native speaker of English, such as Nigerians experience challenges with English intonation due to its elusiveness. Many Nigerians that have cause to travel to United Kingdom, United States, Canada or Australia (these countries are often referred to as native speakers of English) (Jowitt, 1991) for further studies normally return with a story to tell about the difficulties they faced attuning their ears to perceive and interpret correctly the instructions the native lecturers gave. This implies that, we cannot shy away from this reality even though it may not be a generalised situation. This is not only peculiar to Nigerians but is also a problem for non- native speakers of English in other parts of the world where English is being used as a second language or foreign language

Crop of researchers such as Amayo (1981), Atoye (1989, 1999, 2005), Jowitt (1991, 2000), Gut (2001), Udofot (2003), Akinjobi (2004), and Akinjobi and Oladipupo (2005, 2010) have

done notable works in the direction of non-native use of English intonation. These works have given insights into the fact that non-native users of English intonation normally adopt avoidance strategies or more simplified methods when faced with the task of using English intonation. These scholars seem to unanimously agree that intonation is usually put to restricted use by non-native speakers of English. Thus, a valuable amount of information is normally lost due to difficulty in both perception and interpretation of intonation of native English speakers' speech. Most of the studies in this direction are generally centred on the production of intonation and not on the perception and interpretation. Therefore, this research was carried out to ascertain by empirical means, whether interpretation of various tones of English intonation is problematic to non-native users of English or not. Means of overcoming these challenges are also offered to help Nigerians grasp the principles associated with English intonation and how best to harness it for effective communicative interactions with the native speakers of English and enhance international intelligibility.

Nigerians encounter English spoken by native speakers through various media: movies, news, travelling, interpersonal interaction, etc. By these they have to perceive and interpret native speakers' speech. Therefore, perception and interpretation are critical in any communication process because they determine and indicate whether communication has taken place or not. Furthermore, they indicate whether the interlocutors understand each other and whether a message or information is understood as it ought to be. In this case, the perception and interpretation of English intonation by Nigerian users of English becomes necessary because English intonation is used to signal meaning. Wells (2006) maintains that in a conversational situation, many a non-native speaker may fail to understand some or all of that part of the native speaker's message that is conveyed by intonation patterns.

In the view of (Atoye, 2005), the perception and the interpretation of English intonation are highly problematic, amongst both phoneticians and even the native speakers of the language. He observes that non-native speakers of English are understandably at a loss when faced with the task of using intonation in their English speech, or of interpreting when they hear it from native-speakers' speech (Atoye, 2005, p.29). He however,

points to the fact that “they avoid the use of intonation, resorting instead to paraphrasing through syntactic expansion or some other simplification processes to disambiguate their potentially ambiguous utterances in order to make their meaning clear” (Atoye, 2005, p.30).

In the same vein, Cruz-Ferreira (1987) notes that, “in everyday communication, both natives and non-natives are unaware of most misperceptions and misinterpretations, which therefore remain uncorrected”. She therefore maintains that “a faulty perception of intonation will also determine difficulties in production (1987, p.2). This view explains her argument that research into perception difficulties should receive more attention than production difficulties. In contrast to this claim as stressed by Cruz-Ferreira, undue attention has been accorded by scholars to the production, while interpretation and perception have been neglected.

Also acknowledging the fact that perception and interpretation should be given more attention, Grau (2014) notes that “it is necessary to consider that these difficulties apply not only to the production of English intonation by L2 learners but also to the perception patterns in interactional encounters between native and non-native speakers of English”. (Underhill, cited in Al-Riyahi 2015) also remarks that in addition to its important role in speech production, intonation plays a vital role in perception, because inappropriate intonation can at times give rise not just to obscuration of the message, but to the reception of a quite different message.

3.0 Methodology

The population of this study comprised fifty (50) final year undergraduate students of the Department of English and Literary Studies, Federal University of Lafia. In drawing the primary data for analysis, the voice recording of eight English native speakers including Wells himself from the CD that accompanied his book titled, *English Intonation: An Introduction*, all of British nationality was transcribed into two hundred and thirty-three intonation phrases (IPs), using Wells’ tonality principle as the criterion for the chunking into IPs. Subsequently, the 233 IPs were subjected to purposive sampling to make a deliberate selection of the tone-units

that have various intonation patterns that fit into the phenomena under investigation. Only ten (10) sentences/utterances containing thirty (30) IPs (tone-units) with various intonation contours were purposively selected to constitute the test items. This model of test agrees with Cruz-Ferriera's (1998) and Atoye's (2005) studies that required their subjects to perceive the different intonation contrasts that were used in their experiments and attempt interpretation of tones.

Wells' audio CD accompanying his book was played back from the computer system named "interactive machine/consult X class" and perceived by the respondents through the headphones. Each of the respondents listened with his/her headphones using a PCquirer/Macquirer on a computer system that has the capacity to bring out clearly the recorded voices of the native speakers for the respondents to perceive and interpret. A sound-proof language laboratory was used to eliminate noise interference. The respondents were given answer sheets containing the same information they had listened to through their various headphones with the test sentences/utterances arranged in pairs. Commas and other intra-sentence punctuation marks were also avoided so as not to give away the intonation contours of the sentences/utterances. The respondents had, therefore, to rely absolutely on their auditory perception of the intonation contours from the audio CD played back to them to perform the task.

The responses of the respondents in the test sheets were reduced to figures and tables and scored accordingly using simple percentage for easy statistical interpretation and analysis. Praat software for speech processing by Boersman and Weenick (2007) was used to assess the level of compliance of the respondents' interpretation of intonation tones.

4.0 Data Presentation and Analysis

Table 1: Interpretation Test on Sentence-by-Sentence Interpretation of Intonation Tones

S/N	Potential word	Potential Tone	Frequency	University of Lafia					
				Actual Score					
				A		B		C	
No.	%	No.	%	No.	%				
S1	(c) Definite	Fall	50	9	18	14	28	27	54
S2	(c) doubtful	Rise	50	21	42	15	30	14	28
S3	(a) Tactful	Fall-rise	50	20	40	24	48	6	12
S4	(a) Reserved	Fall-rise	50	14	28	16	32	20	40
S5	(b) the place is not far, it is track able	Fall-rise	50	5	10	37	74	8	16
S6	(a) implicit	Fall-rise	50	18	36	12	24	20	40
S7	(b) sure and definite	Fall	50	2	4	43	86	5	10
S8	(a) threatening	Fall	50	26	52	14	28	10	20
S9	(b) surprise	Rise	50	28	56	8	16	14	28
S10	(c) angry	Rise	50	38	76	6	12	6	12
Mean				41.6 %					

Sentence by Sentence Lineal Analysis of the Interpretation

Test

S1

Because I `say so



A: You can't go. B: Why not. A: Because I say so. The fall tone is a commonly used tone by native speakers of English. The default meaning of the fall tone tends to signal finality of what has been said, completeness, and that what is said is with confidence, definiteness and unreservedness. In the interpretation of S1, more than half of the respondents interpreted the sentence correctly. "Because I `say so" with a fall on 'say' connotes the definiteness of the speaker over what is saying. Probably what made some of the respondents to get

the correct interpretation is that the statement was actually a response to speaker B who asked the question, "why not?"

46 respondents interpreted the sentence as uncertain or the speaker being angry. Though the number (46) that interpreted the sentence incorrectly is quite significant this proved that even though the falling tone is often claimed by scholars as the simplest and less-problematic tone for non-native English speakers, the respondents' performance reflects their poor knowledge of this tone and its meanings. Therefore, it should not be assumed that non-native English speakers can correctly interpret the falling tone without any difficulties.

S2

She is reading the \Times. The /Times?



The rising tone here on the 'time' indicates doubtfulness. The tone-unit, "Times" with a low rise expresses a doubtful state of the speaker. 15 of the respondents proved to be successful in the interpretation of the tone. Majority of the respondents 34 interpreted the statement as a surprise, while the remaining subjects believed the speaker sounds contemptuous. This emphasises the idea that foreign learners of English usually relate the rising tone to surprise, probably because the voice of the speaker is step-up or high.

S3

Well she \works very hard




This conversation consisted of a question followed by a response. It was said with an FR on the response. The speaker here has reservations on the question she is asked to respond to. Therefore, she was tactful and indirect in her response. Only 14 respondents correctly interpreted the FR tone. The remaining 36 subjects failed the interpretation test by assuming the speaker's response was either explicit or unfriendly. With reference to this result, only few

of the subjects have a fair understanding of the function of the FR tone.

This, therefore, agrees with Jowitt's findings that Nigerians do not necessarily have difficulty in either perceiving or producing the FR as such, (Jowitt, 2007, p.16). However, he noted that the Nigerian English under-uses the FR and the usage "do not express the local or attitudinal Meanings of the FR in native speaker usage nor does it have a discursal referring function" (2007, p. 19). Therefore, it is not a surprise that the majority of the respondents were unable to give the right interpretation to the FR as used in the S3 test.

S4

Well, I |know her ↘face



Who's that? Followed by the response, 'Well I know her face'. with a FR on 'face'. This, no doubt, is typical of a FR tone. The speaker implies something without necessarily putting it into words. Or implies something further to be said, but yet unsaid. In this case, it might be;

Well I know her face but I can't remember her name.

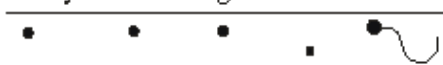
The speaker, through the use of an FR signals a hint of further implication to what has been said which portrays one of a very typical meaning of FR tone which is non-finality, suggesting the speaker has not yet reached the end of what he or she wants to say.

From the table, the score shows that only 12 of the subjects were correct and interpreted the speaker's response to mean reservation. This is contrary to the interpretation of 38 respondents whose understanding of the speaker's response means unfriendliness or not sure. The respondents' poor achievement reflects their perception and interpretation of the FR here as a fall to mean confidence, definiteness or finality. i.e. 'Well I know her |face| her name is \Joyce'. This further confirms that the FR is a problematic tone to non-native speakers of English when it comes to especially interpretation. But for the English native speakers, it is a significant tone that is often used to prompt further discussion or

give the listener an invitation to ask further questions. Therefore, FR is used deliberately to imply things without actually saying them.

S5

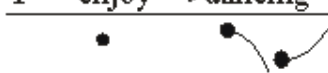
They could go on ↘foot



The possible interpretative (meaning) options to the above sentence were not summed up in a single word like others. They are clauses/sentences which probably could be responsible for the high performance of the respondents. In other words, may be the options were informative enough to help bring out the interpretation, as 37 of them correctly interpreted the FR tone on the word 'foot', when the speaker says: 'They could go on ↘foot'. The implicational FR enables a speaker to imply things without actually saying them. It makes it possible for the speaker to be tactful, politely indirect, hypocritical and devious. For instance, the speaker was hypocritical, though the speaker did not categorically state that the people concerned should not go on car, but that is actually what he was implying, that the place is a trek able distance.

S6


I enjoy ↘dancing



This sentence is said on an FR tone. Majority of the respondents 33 failed to know the right interpretation of the sentence. They were ignorant of the significant meaning of the FR tone on the verb 'dancing'. 20 of them interpreted the sentence to mean the speaker is happy, while 12 of them interpreted the sentence as an exclamation. Only 18 of them correctly interpreted the sentence to be implicit. The speaker only implied being happy, but there is more to that. For instance, the speaker is probably saying: I enjoy dancing |but I don't like the music. Therefore, the speaker couldn't have been expressing happiness or making an exclamatory statement about her interest in dancing. Based on the performance of the respondents, it is obvious that the FR tone proved to be a problematic tone for non-native learners or speakers of English. The

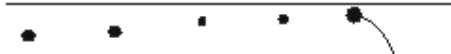
respondents' performance reflects their poor knowledge of this tone and its meanings.

S7

| This is a \ pen


This sentence scored the highest correct responses in the interpretation test. 43 subjects correctly perceived and interpreted the falling tone of the sentence to mean the speaker is sure and definite that this is a pen, with a fall on the 'pen'. This further emphasises the fact that non-native speakers of English have little or no problem with the falling tone, especially when the tonic syllable occurs on the lexical word in the tone unit, like the example above. While the majority of the respondents correctly believe the speaker is certain of his information, the remaining respondents failed to perceive the correct meaning of the sentence. 2 out of the remaining respondents said the speaker is unsure, while the rest, 4 are of the view that the speaker's use of a fall tone on 'pen' connotes surprise.


S8

Did you take the \ money?



This sentence consists of a statement followed by a question tag. It is said with a falling tone on the last lexical item of the statement. It is an example of yes/no question that, under normal circumstances, has a rise or is referred to as yes/no rise.

Many of the respondents 24, probably because of their previous knowledge of the yes/no questions that are accompanied with a default rise, wrongly interpreted the sentence to either mean the speaker was angry or is an emphasis question. However, 26 of the respondents chose the correct option, which portrays the speaker sounding 'threatening'. Wells (2006) notes that "it is possible for a yes \no question to be said with a fall. This makes the question more insistent, more serious or perhaps more

threatening". This clearly shows that when non-native speakers have already associated a particular function or meaning to a tone, they get stuck to it, not minding or learning some exceptional rules attached to it.

S9
I m thinking of taking a break. Are /you?


The response of B to A's statement is an example of an elliptical question which is a way of reacting to a statement made by another speaker with a short independent question. B's response 'Are you?' connotes a surprise. Probably the first speaker just returned from a break, so contemplating another one was a surprise to the second speaker. Only 8 of the 50 subjects got the interpretation correctly by interpreting the rising tone as a surprise on the part of the second speaker. The other subjects 42 wrongly interpreted the question to mean the second speaker is either wondering or uncertain why the first speaker is considering taking a break. The subjects seem to be at a loss on the interpretation of a rise tone, as the performance is very low compared to their performance in the falling tone. This poor result reflects the respondents' ignorance of the rising English tones and their importance in signaling meaning.

S10
You want to talk to /who


The speaker is asking if the listener wants to talk to who, with a step-down rise on 'who'. The sentence also collected a poor number of correct interpretations. Only 6 respondents were successful interpreting the tone pattern of this sentence by admitting that the speaker was angry. The sentence gathered 44 incorrect responses. 38 of the respondents interpreted the sentence as interrogative probably because the speaker asked a question. On the other hand, 6 of the respondents believe the speaker rather sounds polite. This result is not too different from other performances of a rise tone. Majority of the respondents base their interpretation of the

sentence, not on the tone pattern but on the speaker's question. Even though the question mark was deliberately omitted in the written test sheets, the subjects were still able to know that the sentence was a question, thus, based their interpretation on that, rather than depending on the tone. This is typical of non-native speaker of English, as noted by Cruz-Ferreira that "they will tend to assign to sentences displaying such patterns interpretations, corresponding to the 'Literal' meaning of sentences without taking intonation into account" (2005, p, 107). This point obviously could be responsible for some of the incorrect interpretations given by the respondents in this experiment.

Acoustic Analysis of selected Interpretation Test

S2



Fig 1: She was reading the times. The times?'

In fig. 1. above, the second part of the statement is our main concern. An upward movement of the intonation contour can be seen. This is a rise that serves in conveying the second speaker's doubt about what the first speaker expressed. But because the response ends with a question mark, which conventionally could suggest anger or surprise, majority of the subjects failed in their interpretation of the tone to mean the speaker is annoyed or surprised.

S3

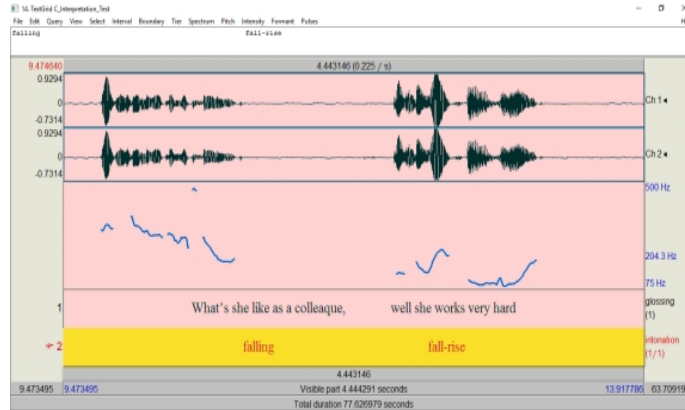


Fig 2: 'What's she like as a colleague? Well she works very hard'.

In fig. 2 above, the response of the second speaker has an FR on the word 'works', with the blue curve falling and then rising on the entire word leaving the listener with an unspoken implication. The unspoken implication might be something uncomplimentary about her colleague. With the use of an FR, the speaker is being tactful and not explicit unlike a typical Nigerian or other non-natives would have chosen to be by using more words than necessary.

S4

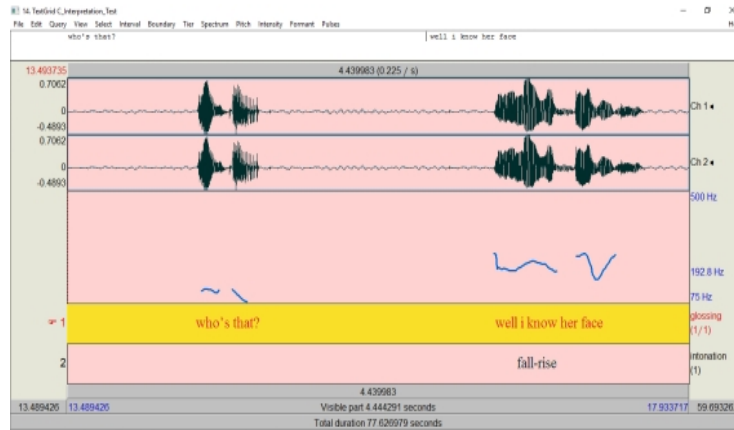


Fig 3: 'Who's that? Well I know her face'

In fig.3 above, the spectrum is similar to the last example in the intonation contour, as can be seen falling and rising particularly on the word 'face'. Probably because the word 'know' was also accented before the tonic word 'face', only 26% of the entire subjects got the correct interpretation that the speaker is being reserved. The majority of the subjects believed the speaker is unsure, while very few indicated that the speaker is unfriendly in her response. As noted under discussion of the data, the FR is typical with non-finality in expressing meaning, showing the speaker has not reached the end of what he or she wants to say.

S6



Fig 4: 'I enjoy dancing'

In Fig. 4, the high pitch spread on 'dancing', showing a movement of a falling and rising of the pitch contour. This suggests that the words, if written with the necessary punctuation marks, might have been unexceptionable; but as spoken, the intonation implied something different. About 64 % of the respondents were unaware of this; hence, they overwhelmingly believed the speaker implied that she was happy and enjoyed dancing. Only a few (26%) interpreted the FR correctly to mean the speaker implied something else.

S7

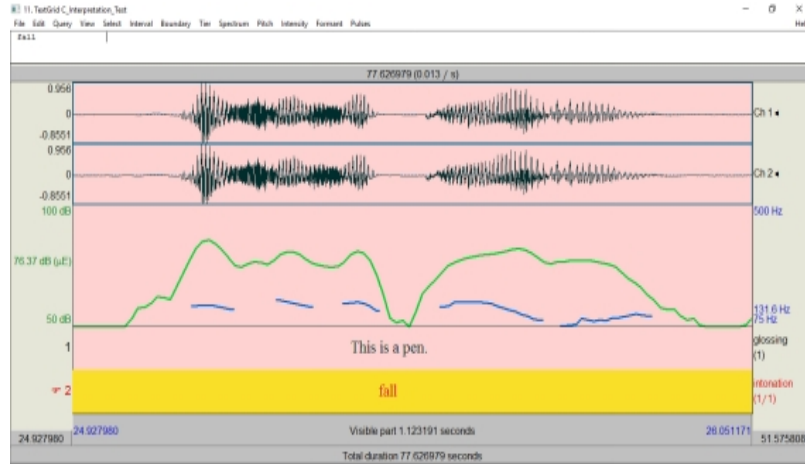


Fig 5: 'This is a pen'

Fig. 5 illustrates a fall, with both the intensity and pitch contour curve showing a spread fall on 'pen'. It is only in exceptional cases; otherwise, a statement with a fall, like the example above, indicates completeness, confidence and definiteness of what is said. Also, as noted under the discussion of data, a fall tone tends to signal finality. The majority of the respondents 88% had a correct interpretation of this tone.

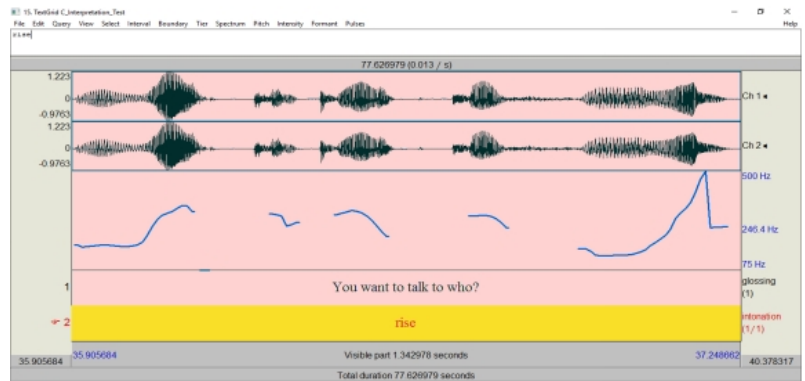


Fig 6: 'You want to talk to who?'

Fig. 21 above is a step-down rise in pitch from the beginning of the tonic word. The rise, as can be seen illustrated by the curve started slowly on the last word in the IP. But such must not be mistaken for a fall because the nuclear commences with a down-rise spreading over the nuclear word 'who'. Obviously, because of this technicality of step-down rise and also the use of the conventional question mark to mark off the end of a question, 78% of the respondents were misled and interpreted the statement as interrogative. Only 22% gave a correct interpretation, showing the speaker is actually angry.

Summary of Findings

This research was conducted to investigate the interpretation of English intonation patterns by some selected students of the Federal University of Lafia in Nigeria. The investigation clearly shows that:

1. Nigerians and by extension, non-native speakers lack the ability to correctly interpret the native speakers' speech due to their lack of knowledge of the English intonation patterns. This implies that Nigerian learners of English lack the appropriate knowledge of English intonation in spite of their exposure to its structural analysis in the classroom.
2. Another significant finding is that the respondents relied more on grammatical arrangement and lexical clues for their interpretation of meanings than on the perception of tones. It is obvious that most of the utterances interpreted lack (in the Nigerian context) sufficient information and rather depend on lexical or grammatical clues. Therefore, the interpretations were characterised by mostly wrong or incorrect meanings contrary to the speaker's intentions or reasons for employing a particular tone.
3. Also, in the interpretation test, the respondents' general achievements in the test show an inconsistency between their perception and interpretation of the intonation patterns.

Conclusion

This study has carefully analysed data on English intonation patterns derived from the speech of native English speakers and subjected to interpretation tests using Nigerian undergraduate students of English in their final year drawn from the Federal University of Lafia as subjects with a view to ascertaining their difficulties in perceiving and interpreting the English intonation patterns of native speakers' speech. The findings provide insights into the difficulties the non- native speakers encounter in their use of intonation.

Based on the findings, the study concludes that Nigerians and by extension non-native speakers of English lack the ability to correctly interpret the native speakers' speech as manifested in their lack of knowledge of the English intonation patterns, inability to identify IP boundaries or to employ the principles of chunking to divide utterances into intonation phrases, poor perception of the tonic syllables, and differences in tone contrasts, among others. This implies that Nigerian learners of English lack the ability to interpret English intonation in actual communicative situations in spite of their exposure to its structural analysis in the classroom. Thus, there is the tendency to rely on the grammatical arrangement of words, lexical clues and even avoidance strategy for the interpretation of utterance meaning more than on the perception of tones. The implication is that their interpretation of utterances goes contrary to the speaker's intended meaning in most cases.

As a result of misperception and misinterpretation on the part of Nigerian English users, evident in the findings, a valuable amount of information could be lost in spoken interaction between native and non-native English users. Therefore, non- native speaker of English certainly needs more exposure beyond the classroom teaching and learning to have a full grasp of English intonation and how it operates. This is important because the non-native speakers need to understand not only the simple tones such as: fall or rise but even complex tones like the fall rise or rise fall in order to interpret shades of meaning in native speakers' speech.

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Narrative Functions of Sociophonetic Variation in Nigerian English: A Comparative Study of *Season of Crimson Blossoms*, *My Sister, the Serial Killer*, and *The Fishermen*

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Abstract

Nigerian English shows significant phonological diversity influenced by indigenous languages, yet its sociophonetic features in literature remain underexplored. This study examines orthographically marked phonological variation and its narrative functions in three Nigerian novels representing major regions: *Season of Crimson Blossoms* (Northern), *My Sister, the Serial Killer* (Western), and *The Fishermen* (Eastern). Using qualitative textual analysis informed by Discourse Phonology (Coupland, 2007) and Phonological Stylistics (Leech & Short, 2007), the research codes and examines the graphological markers of segmental, suprasegmental, and prosodic features preserved in the selected narratives. Findings reveal systematic regional phonological variation in Nigerian English, with significant substrate influences on the narrative patterns in these novels. This comparative analysis establishes methodological approaches for analysing orthographically-represented phonological variation in literary texts and contributes empirical evidence of Nigerian English phonological diversity serving narrative functions across regional varieties.

Keywords: Nigerian English, Sociophonetics, Ethnolectal variation, Discourse Phonology

1.0 Introduction

The study of language variation, a central pillar of sociolinguistics, has long provided important insights into the interplay between linguistic structure and social meaning in speech forms (Aminu et al., 2022; Amoniyah, 2025). While the historical trajectory of this field has emphasised quantitative acoustic analysis of spoken data (Fagyal & Davidson, 2021; Zhang, 2024), a rich yet less systematically-explored environment for linguistic inquiry resides within prose fiction. This is particularly pertinent for New Englishes, where the written form often becomes a contested space for linguistic representation and authenticity. In this context, attention turns to Nigerian English (NE),

which this paper, in agreement with Jowitt & Ugwuanyi (2025), Okhuosi (2023), and Bamgboṣe et al. (1995), projects as a dynamic and diverse postcolonial variety marked by considerable phonological diversity at segmental, suprasegmental, and prosodic levels.

The linguistic structure of Nigerian English is systematically expressed through ethnolects, which are regional or ethnic-specific varieties that modify the phonemic and phonetic inventory of languages (Agbo & Plag, 2020; Amoniyan, 2025). Studies on the intersection of sociolinguistics and phonetics, which Strelluf (2023) and Zhang (2024) referred to as sociophonetics, have documented variations in the spoken space. Some of these research reveal systematic shifts in phonological structure across speakers from various ethno-regional backgrounds (Isiaka, 2019), or the realisation of connected speech features as variables of regional origin (Oladipupo & Akinola, 2015).

Literary prose serves as a valuable laboratory for analysing these sociophonetic dynamics textually. Authors employ creative orthographic markers signalling deviations from standard English spelling, strategically deploy diacritics for tone marking, and the integration of phonologically marked vernacular forms to represent the phonetic reality of their characters' speech (Baranowski, 2013). These literary representations function as a deliberate semiotic system providing target readers with phonological cues that index a character's ethnicity, regional origin, and linguistic background while simultaneously serving narrative purposes. This makes the novel a valuable repository for studying how phonological variation operates narratively in postcolonial literary contexts (Kaur et al., 2025).

Despite the recognised importance of phonological stylistics in literary analysis (Hassan, 2024; Leech & Short, 2007) and the robust body of empirical sociophonetic work on English language within and outside Nigeria, a notable lacuna remains in qualitative research that systematically examines how textual sociophonetic variation functions narratively across diverse regional literature. Although stylistic analyses have addressed code-switching and lexical appropriations in Nigerian literature, a focused analysis of how orthographically represented phonological variation operates as a crucial narrative mechanism across regional varieties is conspicuously limited. Most sociophonetic research continues to prioritise audio-based empirical data collection, often neglecting the role of orthography as a primary medium for representing phonological variation in literary texts. The current body of scholarship

has yet to fully explore how authors' orthographic representation of NE's ethnolectal phonological diversity, specifically those features documented by Oladipupo and Akinola (2022), actively shapes characterisation and regional authentication in prose fiction. The absence of such comprehensive, comparative research across novels representing the major geopolitical regions of Nigeria constitutes a significant gap, particularly in clarifying how authors navigate the challenge of representing a shared yet phonologically heterogeneous linguistic reality through written narrative.

The research examines the sociophonetic variation and its narrative functions in three contemporary Nigerian novels, each representing one of the three major geopolitical regions (Northern, Western, and Eastern): Abubakar Adam Ibrahim's *Season of Crimson Blossoms*, Oyinkan Braithwaite's *My Sister, the Serial Killer*, and Chigozie Obioma's *The Fishermen*. Through qualitative textual analysis centred on Coupland's Discourse Phonology and Leech & Short's Phonological Stylistics theories, the work examines the deliberate narrative strategy adopted by the Nigerian authors to integrate phonological documentation with literary purposes in their novels. This study argues that textual sociophonetic variation is a primary and conscious narrative tool used by Nigerian authors to construct ethnolinguistically authentic characters and settings, examining how the sounds of Nigerian English are represented orthographically and deployed narratively in contemporary Nigerian literature.

2.0 Literature Review

2.1 Sociophonetic and Phonological Variation in Nigerian Literature

Research on Nigerian English has expanded considerably, moving beyond traditional linguistic description to embrace its sociophonetic dimensions within broader sociolinguistic frameworks. Sociophonetics, an interdisciplinary field combining phonetics and sociolinguistics, investigates how acoustic and articulatory features carry social meaning in both spoken and textual representations (Strelluf, 2023). Jowitt & Ugwuanyi (2025) provide a comprehensive historical review spanning five decades, challenging claims of insufficient study and emphasising a growing focus on phonological and discourse-related aspects. Their work firmly establishes NE as a distinct and richly documented variety in global English studies. This longitudinal perspective demonstrates that scholarly attention to NE has been sustained and methodologically

diverse, contradicting earlier assertions of marginalisation within World Englishes research. The synthesis offered by Jowitt and Ugwuanyi (2025) reveals patterns of increasing empirical rigour and theoretical sophistication across successive research generations.

Recent scholarship highlights rhythm, tone, and vowel shifts as core sociophonetic features of NE. For example, Amoniyani (2025) examines formant structure variations across Western Nigerian English (WNigE) lexical sets such as TRAP/BATH and FLEECE/GOOSE, revealing ethno-regional differences shaped by indigenous phonologies linked to Hausa-Fulani (North), Yoruba (West), and Igbo (East) influences. Isiaka (2019) explores high vowel realisations as phono-ethnic markers, showing the influence of ethnic affiliation on speech production. Furthermore, Okhuosi (2023) illustrates the role of phonological humour in cultural expression through stylistic phonetic variation in popular comedy, supporting NE's sociocultural resonance both locally and globally. These works align with international trends emphasising acoustic analysis to decode socially-embedded linguistic meanings. The acoustic evidence presented demonstrates quantifiable distinctions that correspond to speaker ethnolinguistic backgrounds, reinforcing the notion that phonetic variation in NE functions is an indexical resource for social categorisation and identity negotiation.

Comparative perspectives further situate NE within global phonological variation research. Aminu et al. (2022) identify commonalities and divergences in phonological evolution across regions. Fagyal and Davidson (2021) explore NE within sociophonetics frameworks; whereas Mavengano and Mhute (2025) illustrate how sociolinguistic conflicts and cultural shifts manifest in textual portrayals, positioning NE within ongoing pan-African discourses on identity and language legitimacy. Cross-regional analyses reveal that certain phonetic processes mirror patterns observed in other postcolonial varieties, others remain distinctively Nigerian, shaped by substrate influence and local sociolinguistic ecologies. These comparative studies highlight the necessity of examining NE through both language-internal phonological structures and language-external sociocultural factors that govern its deployment in diverse communicative contexts.

2.2 Sociolinguistic and Sociophonetic Variation in Nigerian English Fiction

Sociophonetics examines how acoustic and articulatory features carry social meaning, indexing speakers' ethnic, regional, and linguistic identities (Strelluf, 2023); and literary sociolinguistics offers robust tools for analysing NE's deployment in prose fiction. Gardner-Chloros and Weston (2015) provide a foundational framework for understanding how multilingualism and code-switching add semantic complexity and reflect sociolinguistic realities in literature. Akabuike (2022) demonstrates how the lexical and phonological traits of Nigerian English function stylistically to mark identity in novels. Uwen and Nta (2021) apply similar approaches to Wole Soyinka's *The Beatification of Area Boy*, showing how NE foregrounds social dynamics within literary narratives. Despite advances in lexical and translational studies, detailed analyses of phonological variation in Nigerian prose remain sparse.

Qualitative stylistic approaches increasingly probe NE vocabulary, discourse, and narrative organisation. Ejie and Ikupa (2024) explore Nigerianisms as tools for textual hybridity and cultural assertion. Kaur et al. (2025), focusing on postcolonial literature, reveal how linguistic power relations reclaim identity through discourse analysis. These Nigerian-specific studies align with global research emphasising the interpretive value of phonological and prosodic features in fiction (Burke, 2023; Jeffries & McIntyre, 2025). Such methodologies illuminate the complex interplay between language variation and social meaning in literary texts.

However, critical gaps persist. Prior research largely emphasises transliteration, lexical innovations, and stylistic use of Nigerianisms while neglecting systematic examination of ethnolectal phonological variation in prose. The scarcity is most notable in cross-regional, qualitative analyses focusing on how specific phonological markers function narratively within Nigerian literary traditions. While previous stylistic approaches have catalogued variation, they rarely investigate the narrative motivations behind such linguistic depiction across Nigeria's major regional literatures. This study seeks to fill this gap by integrating the social indexicality of Discourse Phonology with the narrative purpose of Phonological Stylistics, demonstrating how phonological variation is used not merely for realism but as a conscious artistic strategy in Nigerian prose fiction.

3.0 Theoretical Framework

This study integrates two complementary approaches, Discourse Phonology and Phonological Stylistics, in order to move the analysis beyond the phonetic form of variation towards its social and narrative functions within fictional texts.

Discourse Phonology, as developed by Coupland (2007), interprets phonological variation in text as social action, viewing phonetic choices as contextualisation cues that signal social identity, stance, and positioning within discourse. Orthographic representations of phonological features (such as written markers of vowel reduction or non-standard consonant forms) operate as discourse signals indexing ethnolinguistic identities (e.g., Hausa-Fulani, Yoruba, Igbo), as documented by Amoniyani (2025). This framework elucidates why specific phonological features carry social significance in Nigerian English discourse and links these linguistic details to the characters' constructed social realities within the narrative (Coupland, 2007).

While Discourse Phonology addresses the social meaning embedded in speech variation, Phonological Stylistics, drawing from Leech and Short (2007), focuses on its narrative purpose in writing. This perspective treats phonological variation as a deliberate stylistic resource that conveys class, regional background, personality, or psychological states through dialogue and free indirect discourse. Authors strategically embed non-standard phonological markers to modulate narrative distance between narrator and characters, managing reader perception and narrative authority (Leech & Short, 2007; Simpson, 2025).

Together, these approaches bridge the social reality of Nigerian English variation and its aesthetic and ideological deployment in literature, framing the textual representation of sociophonetic variation as a conscious stylistic choice that shapes the ideological and cultural landscape of the narrative.

4.0 Methodology

4.1 Research Design

This study adopts a qualitative, text-based sociophonetic analysis focusing on orthographic representations of speech rather than audio data. The design draws on Discourse Phonology, which interprets phonological features as social and interactional cues (Coupland, 2007), and Phonological Stylistics, which treats such features as deliberate

authorial tools for characterisation and narrative function (Leech & Short, 2007). The primary objective is interpretative: to determine why authors deploy particular sociophonetic markers ethnolectally within each narrative context and how these marked deviations from global Standard English encode social meaning. Nigerian English (NE) is approached here as a standard regional variety of English widely used across Nigeria in both spoken and written forms (Bamgbose, Banjo, & Thomas, 1995; Jowitt & Ugwuanyi, 2025; Thomas, 2025). This focus on NE is justified because it reflects authentic linguistic practices of diverse Nigerian communities and is a significant medium in contemporary Nigerian literature, where it conveys identity and social realities.

4.2 Text Selection

The primary corpus comprises Abubakar Adam Ibrahim's *Season of Crimson Blossoms* (2015), Oyinkan Braithwaite's *My Sister, the Serial Killer* (2018), and Chigozie Obioma's *The Fishermen* (2015). The selection represents Nigeria's major ethno-regional divisions: Northern (Hausa-Fulani), Western (Yoruba), and Eastern (Igbo) sections. It captures cross-regional sociophonetic diversity. Each novel offers a distinct linguistic ecology: *Season of Crimson Blossoms* reflects Hausa substrate influence; *My Sister, the Serial Killer* showcases Yoruba phonolexical features; and *The Fishermen* illustrates Igbo phonological interference within English. The sampling unit consists of dialogic segments and free indirect discourse where authors intentionally employ non-standard orthography, punctuation, or lexical choice to suggest phonological deviation. This approach follows and adapts the frameworks of Oladipupo and Akinola (2022), Akabuike (2022), Gardner-Chloros and Weston (2015), and Uwen and Nta (2021).

4.3 Data Identification and Coding

Data were manually identified and coded for orthographic markers of phonological variation, including vowel substitutions, consonant cluster reduction or substitution, and tonal or rhythmic cues grounded in NE sociophonetic research (Oladipupo & Akinola, 2022). Lucida Sans Unicode was used to maintain transcription consistency.

4.4 Analytical Procedure, Reflexivity, and Ethics

Thematic analysis connected coded sociophonetic markers to narrative functions, following the frameworks of Phonological Stylistics and

Discourse Phonology (Leech & Short, 2007; Coupland, 2007). Cross-text comparison highlighted how regional language variation encodes identity, power, and culture. Reflexively, the study acknowledges that orthographic representations are mediated by authors rather than direct speech recordings. Non-standard orthographic features are treated as meaningful narrative strategies, avoiding judgements of linguistic correctness and respecting the cultural importance of regional variation. To ethically ensure data reliability and the accuracy of translations involving indigenous terms and concepts from Hausa, Yoruba, and Igbo, the researcher consulted with linguistic experts and language scholars from reputable university departments.

5.0 Analysis and Findings

The three novels deploy orthographically-marked phonological features to establish regional Nigerian English varieties and construct ethnolinguistically authentic character voices. This section examines consonantal, vocalic, and prosodic features across Northern (*Season of Crimson Blossoms*), Western (*My Sister, the Serial Killer*), and Eastern (*The Fishermen*) Nigerian English, demonstrating how phonological variation functions narratively in all three texts.

5.1 Phonological Features across Regional Varieties

5.1.1 Consonant Patterns

Region-specific consonantal features distinguish the three Nigerian English varieties. Ibrahim's *Season of Crimson Blossoms* preserves Hausa implosive consonants /ɓ/ and /ɗ/, which are voiceless stops produced with ingressive airflow. The phrase "Allah ya tsine ma, tsohon mazinaci//Sai na badda ka" (*Season of Crimson Blossoms* 158) exhibits these features in "badda" /bàd̥:à/ with implosive /ɓ/ and geminated /ɗ:/. The voiceless alveolar ejective affricate /ts'/ appears in "tsine" /ts'í:nè:/, produced with glottalic egressive airflow which is characteristic of Hausa phonology. These consonants are a core feature of Northern Hausa-Fulani ethnicity and help the author to establish regional phonological authenticity in the novel. Arabic-derived religious terms maintain distinctive features: "wallahi" /wal:ahi/ exhibits geminated lateral /l:/, a phonemic length distinction in both Arabic and Hausa. The greeting "Sannun ku da aiki" (*Season of Crimson Blossoms* 158) shows geminated nasal /n:/ in "sannun" /sàn:ún/, where length distinguishes meaning in Hausa phonology.

Yoruba-influenced Western Nigerian English in Braithwaite's novel maintains consonants absent from English while exhibiting distinct substitution patterns. The term "Pèlé" (sorry/gently) in:

"Pèlé," Mother told me in her soothing voice. I coughed again. "Go and drink water." I coughed once more. Nothing. (*My Sister, the Serial Killer* 143)

illustrates, in the written Yoruba, while the letter 'p' is used, it is not pronounced as the English /p/ (a voiceless bilabial plosive). Rather, it is aspirated as a voiceless labial-velar plosive, which is represented in the International Phonetic Alphabet (IPA) as /k̟p/. Also, the fricative /v/ in "vex" in "Oga, no vex. It was a mistake. E no go happen again" (*My Sister, the Serial Killer* 29) contrasts with some Nigerian English varieties where there is substitution of /b/ for /v/.

Obioma's *The Fishermen* reflects Igbo phonotactic constraints prohibiting consonant clusters, leading to systematic simplification. "Aministration" /ámínísté:ʃón/ (*The Fishermen* 29) from "administration" /əd,mɪnɪ'streɪʃən/ shows cluster reduction and epenthetic vowel insertion creating CV syllable structure. Igbo preserves the palatal nasal /ɲ/, absent from English, in the proverb "Anya nke na akwa nna ya emo" /áɲá ńké nā ákwā ń:á já èmó/ (*The Fishermen* 25).

5.1.2 Vowel Systems and Quality

The three regional substrates exhibit distinct vowel inventories that surface in Nigerian English. Hausa operates a five-vowel system /i, e, a, o, u/ without phonemic vowel length but with allophonic variation. This system appears in Ibrahim's orthography through consistent word-final /ɑ/ in "yan iska" /jan íská/ (*Season of Crimson Blossoms* 14), "wallahi" /wal:ahi/ (*Season of Crimson Blossoms* 134), and "lafia ko?" /lāfijá kó/ in "Mallama Umma, kin wuni lafiya?//Lafiya lau" (*Season of Crimson Blossoms* 103). These spellings preserve the Hausa vowel quality rather than reducing to the English schwa /ə/ in unstressed positions.

Yoruba operates a seven-vowel system with oral/nasal pairs: /i, ĩ, e, ě, a, ǎ, o, ɔ, u, ũ/, plus the distinction between [+ATR] vowels /i, e, o, u/ and [-ATR] vowels /ĩ, ɛ, ɔ, ʊ/. ATR (Advanced Tongue Root) refers to a phonological feature where the tongue root is pushed forward [+ATR] or pulled back [-ATR], creating acoustic differences that are phonemic in languages like Yoruba and Igbo but allophonic in English. Braithwaite's

orthography preserves these distinctions through diacritics: "gèlè" /gèlè/ (*My Sister, the Serial Killer* 25) as well as "Èfó" in

"What are we making again?"

Seriously?

"Èfó," the house girl replies. (*My Sister, the Serial Killer* 38)

maintains essential tonal patterns. "Èfó" (*My Sister, the Serial Killer* 38) shows the [-ATR] vowel /ɛ̃/ and nasal vowel /ɔ̃/.

The particle "o" /ó/ in "You try o!" /jú.tráj.ó/ (*My Sister, the Serial Killer* 38) preserves Yoruba sentence-final particles carrying specific tonal patterns, creating rhythmic patterns reflecting the syllable-timed nature of Yoruba rather than English stress-timing. "Okro" /ò.krò/ (*My Sister, the Serial Killer* 48) exhibits the [-ATR] vowel /ò/ with low tone on both syllables, contrasting with Standard English "okra" /'oukrə/ which shows diphthong and schwa. The term "àgbálùmò" (*My Sister, the Serial Killer* 134) shows the nasal vowel /ò̃/ in the final syllable alongside complex tonal patterns.

Igbo employs an eight-vowel system organised by ATR harmony: [+ATR] vowels /i, e, o, u/ and [-ATR] vowels /ɪ, a, ɔ, ʊ/. Within words, vowels must harmonise for the ATR feature. Obioma's "Chinekem" /tʃínékém/ (*The Fishermen* 53) shows [+ATR] vowel /e/ repeated throughout, demonstrating vowel harmony. The proverb "Jiri ire gi ghuo onu gi onu" /dʒìrì írè gì g^hùò ónù gì ónù/ (*The Fishermen* 37) exhibits vowel purity with no diphthongs: the vowel sequence /i i i e i u o o u i o u/ maintains monophthongal quality throughout. The exclamation "Gracious-me!" (*The Fishermen* 31) shows hyphens marking syllable boundaries, highlighting the CV structure preference and monophthongisation.

Diphthong monophthongisation operates pan-Nigerian, reflecting substrate influence from the preference for pure vowels of all three languages. The phrase "Whe pis lak a rifa ateent ma so" /wé pís lák á rífá áté:nt ma só/ (*The Fishermen* 191) systematically simplifies Standard English diphthongs: /eɪ/ → /e/, /aɪ/ → /a/, producing "lak" (like) with monophthong /a/.

5.1.3 Tone and Prosodic Features

Tone operates phonemically in both Yoruba and Igbo but not in Hausa, which usually uses pitch accent. Braithwaite systematically marks

Yoruba tones through diacritics, preserving the three-level system: high /á/, mid /ā/, low /à/. "Pèlé" /pèlé/ (*My Sister, the Serial Killer* 143) exhibits low-high tonal pattern across identical vowel quality. The code-switch "È gbà mí o! Š'o fẹ́ b'alé mi jé?" (*My Sister, the Serial Killer* 92) maintains full Yoruba tone marking (È, mí, fẹ́, jé), demonstrating tonal preservation during intra-sentential switching. Moreover, the particle "abi" /ā.bì/ shows mid-low tone pattern characteristic of Yoruba question formation.

Igbo tonal patterns appear in Obioma's proverbs. "Anya nke na akwa nna ya emo" (*The Fishermen* 25) preserves high and low tone alternations characteristic of Igbo, where tone distinguishes lexical meaning. The song "Iyoghogho Iyogho Iyoghogho, Ka'nyi je na nke Bishopu" (*The Fishermen* 235) exhibits regular tonal alternation patterns.

Syllable-timing characterises all three varieties, contrasting with English stress-timing. For instance, the Hausa phrase "ko ba haka ba ne?" /kó bā háká bā né/ (*Season of Crimson Blossoms* 83, 149) exhibit relatively equal timing across syllables regardless of stress. This prosodic pattern functions narratively to establish Nigerian rhythm patterns distinct from the standard English variety.

5.2 Regional Ethnolectal Patterns and Narrative Functions in the Novels

5.2.1 Northern Nigerian English

Ibrahim's *Season of Crimson Blossoms* systematically deploys Hausa phonological features to mark Northern characters and establish regional authenticity. The term "dan uban mutum" /dān úbān mútùm/ (*Season of Crimson Blossoms* 57) indicates word-final nasal vowel nasalisation in /mútùm/, a Hausa phonological process. Religious terms borrowed from Arabic maintain Classical Arabic phonology: "Inna lillahi wa inna ilaihi raji'un" /ʔín:á l:íl:á:hí wá ʔín:á ʔílájhí rá:dʒíʔú:n/ (*Season of Crimson Blossoms* 43) exhibits pharyngealised consonants, geminated laterals /l:/, and consistent /a/ vowel quality, resisting adaptation to Standard English norms. This phonological preservation indexes Islamic religious identity narratively.

Code-switching preserves Hausa connected speech processes. "Ka yi mana" surfaces as /kàjìmàná/ (*Season of Crimson Blossoms* 118), showing vowel reduction from underlying /ká jí mánà/. The plea "saboda Allah mana" /sábódá ʔál:á mánà/ (*Season of Crimson Blossoms*

221) exhibits glottal stop /ʔ/ in "Allah" and maintains word-final /ɑ/ throughout. These phonological features mirror the Northern ethnolinguistic context and reflect broader sociocultural realities in the novel like power, gender, religious issues.

5.2.2 Western Nigerian English

Braithwaite's systematic tone marking distinguishes Western Nigerian ethnolect. Beyond individual lexical items, the code-switch demonstrates full phonological maintenance:

"È gbà mí o! S'o fẹ b'alé mi jẹ? S'o fẹ yí mi lórí ni? Olúwa k'ojú sí mi!" (*My Sister, the Serial Killer* 92)

preserves nasalised vowels /ɛ̃/ and /ɔ̃/ alongside tonal diacritics. The question tag "abi" /ā.bì/ as used in "Abi, has he already given you money?" (*My Sister, the Serial Killer* 148) preserves Yoruba's open syllable structure while serving as an interrogation marker.

The address term "Oga" /ógá/ exhibits high tone on both syllables reflecting Yoruba tonal phonology in the Nigerian Pidgin scenario: "Oga, no vex. It was a mistake. E no go happen again" (*My Sister, the Serial Killer* 29). These features construct register shifts narratively while indexing the multilingual context of the ever-busy Lagos landscape.

5.2.3 Eastern Nigerian English

Obioma's *The Fishermen* exhibits dense Igbo phonological marking across character speech. The proverb "Jiri ire gi ghuo onu gi onu" /dʒìrì írè gí g^hùò ónú gí ónú/ (*The Fishermen* 37) illustrates Igbo phonotactic constraints: no consonant clusters, consistent CV syllable structure, and vowel purity without diphthongs. The vowel sequence shows monophthongs /i i i e i u o o u i o u/ throughout. Another proverb exhibits similar patterns: "Anya nke na akwa nna ya emo, nke neleda ina nne ya nti, ugulu-oma nke ndagwurugwu ga'ghuputa ya, umu-ugo ga'eri kwa ya" (*The Fishermen* 25) preserves the palatal nasal /ɲ/ in "Anya" /áɲá/ and maintains Igbo tonal patterns.

The song "Bi otiwu o ki o Jo, ki o ja, Ati mu o, o male lo mo" /bí òtíwù ó kí ó dʒó kí ó dʒá átí mú ó ó málé ló mó/ (*The Fishermen* 19) reveals systematic consonant adaptation and vowel lengthening for prosodic emphasis. Here, Igbo's palatal consonants surface differently:

/dʒ/ appears in "Jo" and "ja" /dʒó/, /dʒá/, reflecting Igbo phonological adaptation. To add to this, the fishermen's chant "Iyoghogho Iyogho Iyoghogho, Ka'nyi je na nke Bishopu" /ìjógóyó òjógó òjógóyó kâní dʒé nā ríké bíḡpù/ (*The Fishermen* 235) shows equal syllable timing and regular tonal alternation regardless of English stress patterns.

Furthermore, ATR vowel harmony operates systematically in Igbo borrowings. "Chinekem" /tʃínékém/ (*The Fishermen* 53) exhibits [+ATR] vowel /e/ repeated, alongside nasal consonant cluster /kém/. The consistent application of these phonotactic constraints across diverse contexts functions narratively to establish the boys' immersion in Igbo linguistic environment, contrasting with their father's phonologically unmarked Standard Nigerian English.

6.0 Discussion

6.1 Theoretical Integration

The study shows how Discourse Phonology and Phonological Stylistics integrate to analyse orthographic representations of phonological variation and their narrative functions in Nigerian English fiction. This framework recognises double-layered indexicality operating simultaneously. At the bottom-up level, phonological indexicality operates through grapho-phonological cues that preserve substrate phonological features (consonants, vowels, tone, prosody) from Hausa, Yoruba, and Igbo, thereby indexing regional and ethnic identities. At the top-down level, authorial indexicality shapes how Nigerian English phonology is represented textually through strategic orthographic choices that distinguish characters, establish settings, and construct ethnolinguistic authenticity narratively. The meaning of written ethnolects thus emerges as a function of both linguistic structure and literary deployment within narratives, ensuring that orthographic representations reflect established phonological realities while simultaneously functioning as deliberate narrative tools (Jowitt, 2022; Oladipupo & Akinola, 2022).

6.2 Regional Phonological Variation and Narrative Differentiation

The comparative analysis reveals systematic differences in how Northern, Western, and Eastern Nigerian ethnolects manifest phonologically in literary texts, functioning narratively to establish regional settings and distinguish the backgrounds of the characters. Ibrahim's Northern ethnolect preserves Hausa consonantal features

including implosives (/b, d/), ejectives (/ts'/), and geminated consonants (/ll/ in "wallahi"), alongside the maintenance of the vowel system with consistent word-final /a/ instead of schwa of Hausa. These phonological features mark the characters as Northern Nigerians (or persons who grew up in the North). It also mirrors their religious affinity, further contributing to regional and religious authenticity within the narrative. Braithwaite's Western ethnolect systematically marks Yoruba tonal patterns through diacritics (Pèlé /kpèlé/, àgbálùmò) and preserves vowel quality distinctions characteristic of the vowel system of Yoruba. The consistent use of tone marks in orthography supports Yoruba tone as a lexical distinction maintained even in English-dominant discourse, functioning narratively to authenticate the Lagos setting and establish the Yoruba ethnolinguistic context. Obioma's Eastern ethnolect exhibits dense phonological marking, including Igbo vowel harmony systems where vowels within words must agree in Advanced Tongue Root (ATR) specification, consonant cluster simplification reflecting the preference for the CV syllable structure in Igbo, and preservation of distinctive Igbo consonants, including the palatal nasal /ɲ/ and aspirated voiced velar fricative /ɣ/. These phonological features contribute to the characterisation of the boys as embedded within the Igbo linguistic and cultural context.

6.3 Pan-Nigerian Phonological Features and Narrative Unity

Despite regional variation, the three novels reveal shared phonological features that distinguish Nigerian English collectively from metropolitan varieties while establishing pan-Nigerian narrative authenticity. Fricative substitution and diphthong monophthongisation occur systematically across all three regional varieties. The consistent deployment of these features across all three novels establishes Nigerian English phonology as a unified system distinct from Standard English, contributing to the assertion of Nigerian English as an autonomous variety in the text.

6.4 Orthographic Strategies for Representing Sociophonetic Variation

The authors employ systematic orthographic strategies to represent Nigerian English phonology textually, creating written conventions that document phonological features while serving narrative functions. Tone marking through diacritics (Yoruba: È, mí, fẹ́, jẹ́; Igbo: tone patterns in

proverbs) preserves suprasegmental features that would be neutralised under Standard English spelling conventions, enabling representation of tonal distinctions crucial to character voice and ethnic marking. Modified spellings document consonantal features sometimes unavailable in English: gemination ("wallahi," "sannun"), implosives (represented through doubled consonants: "badda" for /bɗɑ/), and ejectives ("tsine" for /ts'ine/). These orthographic innovations function narratively to mark the ethnolinguistic backgrounds of characters and establish regional authenticity textually.

Additionally, phonetically-informed orthography for vowel quality includes consistent word-final /ɑ/ spellings contrasting with English schwa tendencies, preservation of nasalised vowels through diacritics (Yoruba /ò/), and vowel harmony marking in Igbo terms. These orthographic choices function as phonological documentation while simultaneously serving narrative purposes. The systematic nature of these representations demonstrates conscious authorial attention to phonological detail, establishing written conventions for representing Nigerian English phonology distinct from both Standard English spelling and indigenous language orthographies. This orthographic innovation contributes to the literary validation of Nigerian English as a distinct variety with legitimate phonological norms worthy of systematic textual representation.

6.5 Regional Diversity and Narrative Implications

The comparative analysis reveals not a monolithic Nigerian English phonology but rather a complex ecology of regional varieties shaped by distinct substrate influences (Jowitt & Ugwuanyi, 2025), with significant implications in the storytelling process. Hausa-influenced Northern Nigerian English exhibits distinctive implosive consonants (/ɓ, ɗ/), five-vowel monophthongal systems without diphthongs, geminated consonants as phonemic contrasts, and syllable-timed prosody with relatively equal stress distribution. These features function narratively to mark Northern characters and settings, particularly indexing Muslim religious identity through Arabic phonological preservation. Yoruba-influenced Western Nigerian English demonstrates lexical tone distinctions where pitch patterns differentiate word meanings, seven-vowel systems with ATR harmony, preservation of nasal vowels, and syllable-timed rhythm with open syllable preferences (CV structure). These phonological features establish Lagos urban context and

distinguish Yoruba-speaking characters narratively. Igbo-influenced Eastern Nigerian English exhibits consonant cluster simplification reflecting Igbo phonotactic constraints, seven-vowel harmony systems operating within morphological domains, preservation of distinctive consonants, including palatal nasals and aspirated voiced stops, and consistent CV syllable structure avoiding closed syllables. These features contribute to characterisation and establish Igbo ethnolinguistic immersion within the narrative.

7.0 Conclusion

This study offers a comparative analysis of sociophonetic variation and its narrative functions in three canonical Nigerian novels: *Season of Crimson Blossoms*, *My Sister*, *the Serial Killer*, and *The Fishermen*. Through systematic examination of orthographically marked phonological features, the research demonstrates how phonetic variation functions narratively to establish regional settings, distinguish characters ethnolinguistically, and construct textual authenticity in Nigerian English fiction.

The integration of Discourse Phonology (Coupland, 2007) and Phonological Stylistics (Leech & Short, 2007) reveals that phonological variation operates at multiple levels to serve narrative purposes beyond surface-level discourse in all three novels (Mavengano & Mhute, 2025). The study strengthens the methodological bridge between empirical sociophonetics and literary stylistics by revealing a double-layered indexicality. At the bottom-up level, phonological markers preserve substrate features by indexing regional and ethnic identities. At the top-down level, authorial orthographic choices strategically deploy these features for narrative purposes including character voice construction, setting establishment, and ethnolinguistic authentication. Also, the comparative analysis establishes that Nigerian English encompasses both regional phonological diversity and pan-Nigerian features. Despite their ethnolectal differences, all three regional varieties share pan-Nigerian phonological features including fricative substitution (/θ/ → /t/, /ð/ → /d/), diphthong monophthongisation, and syllable-timed rhythmic patterns, distinguishing Nigerian English collectively from metropolitan varieties at the same time maintaining internal regional diversity. The authors' orthographic representation of this phonological complexity through tone diacritics, modified consonant spellings, and vowel quality preservation creates written conventions that document

Nigerian English phonology while serving narrative functions of regional differentiation and character authentication.

The study contributes methodologically by establishing approaches for analysing orthographically represented phonological variation in literary texts, demonstrating that written representations of speech provide valuable data for sociophonetic research when analysed through frameworks attending to both linguistic structure and narrative function. The findings contribute empirically to the documentation of Nigerian English regional phonological diversity, providing textual evidence of systematic substrate influence from Hausa, Yoruba, and Igbo on consonantal, vocalic, tonal, and prosodic features. Future research might examine how phonological variation functions narratively in other Nigerian literary genres, including drama and poetry, explore orthographic representation of phonological features in digital Nigerian English writing, or conduct comparative analyses with other African Englishes to identify regional patterns in textual phonological representation. Additionally, studies combining textual analysis with reader response research could examine how orthographically marked phonological features affect readers' perceptions of character authenticity and regional identity.

In sum, sociophonetic variation in these novels functions as a deliberate narrative strategy that integrates phonological documentation with literary purposes. Through systematic attention to phonological detail in orthographic representation, Ibrahim, Braithwaite, and Obioma establish Nigerian English as a linguistically legitimate variety with rich regional phonological diversity, contributing to the literary validation of Nigerian English while advancing narrative artistry through phonologically informed stylistic choices.

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Contrastive Study of Phonetic Properties and Articulatory Mechanisms of Problematic Consonants in Kano Variety of Hausa and English

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Abstract

This paper explores the similarities and differences in the phonological structure of consonants in the Kano variety of Hausa English. The study adopted contrastive analysis as its theoretical framework to identify potential areas of differences and similarities in the linguistic structures of the two languages. The study also identified the consonants that are problematic to Kano Hausa speakers of English and analyses them to bring out the potential consonant-related problems in both languages. The research employed a qualitative approach and data on problematic consonants were systematically collected from the natives of Kano who speak English. As the people of Kano constituted the population for the study, a hundred (100) people were sampled for the effectiveness of the work. This study focused on various components of the consonants, such as the phonetic properties, articulatory mechanisms, including substitution and replacement. The study examined how these elements are structured across the two languages. The analysis revealed that, while there are some structural similarities, there are also significant differences, particularly in consonant substitution and replacement, between the two languages. These differences are attributed to the distinct sounds governing consonant construction in the Kano Hausa variety of English and Standard English.

Keywords: Articulatory Mechanism, Problematic Consonant, Phonetics, Phonology and Substitution.

1.0 Introduction

Language has been an essential element of our daily existence. Humans rely heavily on language to communicate, make decisions, form opinions, and reach self-actualisation while reducing dependence. Sapir (1921: p.7) views language as the most effective tool for communication, and it is viewed as a purely human and non-instinctive method of communicating ideas, emotions, and desires through voluntarily-produced symbols. Through language, humans communicate with one another, share experiences, and express their emotions. Language is also used for conveying information, allowing messages to be passed from

one individual to another. Also, language is studied as a universal and recognisable part of human faculties. It is an essential capability for human life as it is one of the most far-reaching human capabilities concerning the whole span of humankind's achievements (Yahaya, 2023: p.11).

In addition, language is a fascinating aspect of human culture, serving as a tool for communication and expression across diverse communities worldwide. Hence, it is a phenomenon that is associated with humans. It is a social element within societies. The existence of more than one language in a given society is high in the case of Nigeria. By implication, Nigeria is settled to be a bilingual society or its citizens are said to be mostly bilingual. It is the presence of more than a language in individuals or societies that calls for the investigation of linguistic issues such as interference, code switching and mixing, idiolect/dialect, and even the ongoing study on the phonological problem at the level of consonant sounds of English. Thus, for this research to aim at exhuming the speakers of English, it presupposes the existence of the two languages (the English language and the Hausa language) in the said community of Hausa speakers.

Within the realm of linguistics, the study of phonetics and phonology delves into the intricate sounds and structures that comprise languages. In this research, we embark on a contrastive exploration of consonant sounds in two distinct linguistic systems: the Kano variety of Hausa and English.

2.0 Literature Review

2.1 A Brief History and Linguistic Background of Kano Hausa Variety (Kananci)

The historical background of the variety of Hausa spoken in Kano is deeply intertwined with the rich cultural and linguistic heritage of the Hausa people, one of the largest ethnic groups in West Africa. Kano, located in present-day Nigeria, serves as a major cultural, economic, and political centre within the Hausa-speaking region (Adamu, 2022: p.22). Also, Hausa is classified as a member of the Chadic branch of the Afro-Asiatic family of languages. It is the best known and most important member of the Chadic branch. It is the most widely used in the fields of education and it lays claim to a significant body of literature. By way of number, it is spoken by an estimated 40 to 50 million people as a first

and a second language. Thus, it is believed to be one of the most commonly-spoken African languages (Adamu, 2022: p.18).

Most Hausa speakers live in Northern Nigeria and the Southern Republic of Niger. In Nigeria, the Hausa-speaking area encompasses the historical emirates of Kano, Katsina, Daura, Zaria and Gobir, all of which were incorporated into the Sokoto caliphate following the Fulani Jihad led by Usman Shehu Danfodio in the early 19th century. Hausa is also spoken in the diaspora by traders, scholars and immigrants in urban areas of West Africa; for example, southern and central Nigeria, Benin Republic, Burkina Faso, Cameroon, Ghana, Togo as well as Chad and the Blue Nile Province and western region of the Sudan (Yahaya, 2023: p.11). Meanwhile, Hausa has a number of geographical dialects, marked by differences in pronunciation and vocabulary. In some instances, one can notice the variation between eastern dialects on the one hand (e.g., Kano; and areas to the south (Zaria), southeast (Bauchi), with (Daura)) and western dialects on the other (e.g. Sokoto, Gobir, and northwards into Niger). The dialect of Standard Hausa is coined within the Hausa eastern dialect. It is based on "Kananci," the dialect of Kano, an enormous Hausa commercial centre located in Northern Nigeria. Standard Hausa has been recognised as the norm for the written language as contained in books and newspapers and also for broadcast in radio and television. This variety is used as a subject and course as well as a language of instruction in schools, colleges and universities, including Humboldt University Berlin, Germany. It is pertinent to mention that dialects of the Hausa language are mutually intelligible (Sani, 1989: p.44).

However, the phonemic inventory of Hausa consists of consonant and vowel sounds. There are 34 consonant sounds in Standard Hausa. The vowel sounds are 13, comprising five short vowels, five corresponding long vowels and three diphthongs (Sani, 1989:24). In the inventory, some consonant sounds are not found in English. Most common of these are the hooked letters, *ɓ*, *ɗ*, *ƙ* and the semi vowel *ɣ*, which are entirely different from the corresponding plain letters b, d, k and y (Sani, 1989:24).

Examples of both plain and hooked consonant sounds, along with the semi-vowel *ɣ* are:

/b/ *barii* (to leave/to stop); /ɓ/ *barii* (shivering);
/d/ *daidai* (correct/exact); /ɗ/ *ɗaidai* (one by one);
/k/ *bàakii* (mouth); /ƙ/ *bàakii* (guests);

/y/ yaayaa? (How?); /`y/ `yaa`yaa (children/sons/daughters/fruits) and so on.

Furthermore, Hausa has a literary tradition dating back to several centuries before contact with Western culture. Hausa was first written in an Arabic script known as *Ajami*. Today, this representation of the language has been superseded for most purposes by the Roman script.

This paper reviews a number of research conducted by many scholars on varieties of the Hausa language, particularly, Sokoto, Katsina and even Kano Hausa variety, which are all varieties of Hausa spoken in Northern parts of Nigeria at the syntactic and morphological levels. The inspiration to carry out the current study was the need to provide literature that will fill a gap in the study of the linguistic phonology of the Kano Hausa variety and the English language. That is why one key aspect of this paper pertains to the examination of phonological differences and similarities between the consonants of the Kano Hausa variety and those of English. By exploring the structural differences and similarities in the phonetic properties and articulatory mechanisms of the problematic consonants of the Kano Hausa variety and the English language, this study will elucidate the fundamental principles that govern consonant formation and structure in the Kano Hausa variety, in contrast to what exists in English. Furthermore, this paper will address the functional roles served by consonant sounds in the Kano Hausa variety and English. The study will further show how consonant sounds contribute to phonological structures and the roles they perform in such a coherent string of language. At the same time, it will uncover the underlying semantic roles of language structure in speech.

2.2 Research Objectives

The primary aim of this research is to contrastively analyse some of the phonetic properties and articulatory mechanisms of problematic consonant sounds in the Kano Hausa variety and the English language. The specific objectives of the research are to:

- i. examine how the phonetic properties of problematic consonant sounds affect the meaning and comprehension of utterances in English; and

- ii. find out how the articulatory mechanisms of problematic consonant sounds affect the meaning and comprehension of utterances in English.

2.3 Concept of Phonology

Phonology is the study of sounds used in speech within a particular language and how they are organised and used systematically. It focuses on the abstract, cognitive aspects of sounds rather than the physical production of speech sounds, which is the domain of phonetics. Katamba (2006: p.4) opines that phonology is the branch of linguistics concerned with the abstract, cognitive aspects of sounds used in the production of speech. It is primarily concerned with how sounds function in a particular language or languages and how they pattern and combine to convey meaning. Also, phonology is the study of the abstract, mental representations and mental computations underlying the systematic organisation of sound structure in human languages (Kenstowicz, 2006: p.3). Furthermore, Goldsmith (2013: p.3) sees phonology as the study of the sound patterns of human language. It investigates the ways in which speech sounds interact and how they are organised in natural languages.

These definitions highlight the central focus of phonology on the abstract mental representations of sounds and their systematic organisation within languages. Therefore, phonology can be said to be the branch of linguistics that is concerned with the abstract grammatical characteristics of systems of sounds or signs. It is the systematic organisation of sounds in languages. Traditionally, it focuses largely on the study of the systems of phonetics in particular language and therefore used to be called phonemics or phonematics. However, it is interesting to note that the field also covers any linguistic analysis either at a level beneath the word (including syllable, onset and rhyme) or at all levels of language where sound is considered to be structured for conveying linguistic meaning (Alagbe, 2016: p.3).

Phonetics and phonology are two distinct but inseparable fields of linguistics that help to understand and produce speech sounds. While the former deals with the study of speech sounds in a language, the latter is concerned with systematic arrangement of sounds and the accompanying prosodic features can convey meaning in a language. Thus, understanding the sounds of a language and how they are combined to form acceptable string will go a long way in aiding intelligible communication (Alagbe, 2016: p.1).

Phonetics can be said to be that branch of linguistics that is concerned with studying the sounds used in a language. It deals with how the speaker produces these sounds, how these sounds travel to the listener and how the listener eventually hears and understands the speech (Anagbogu et al, 2011: p.43). They further argue that phonetics studies the mechanism for speech sound production; the characteristics, classification, and accurate transcription of speech sounds; the transmission of speech sounds through the medium (such as the air) to the listener, and the physiology of hearing. Phonology, on the other hand, is concerned with the description of a sequence of sounds and the accompanying prosodic features that can convey meaning in a language (Anogbogu et al, 2011: p.96). They see phonology as an area or field of study that deals with the study of how sounds are patterned in a particular language.

2.4 Segmental Phonology

Segmental phonology is a crucial aspect of linguistics that deals with the study of individual speech sounds, known as phonemes, and their systematic organisation within a language. This field explores the various properties of phonemes, including their articulatory, acoustic, and perceptual features, as well as their distributional patterns within linguistic units such as syllables, words, and sentences. One of the fundamental principles in segmental phonology is the concept of contrastive features. As noted by Ladefoged and Johnson (2010: p.21), "the sounds of language are organised in systems of contrasts so that the way in which each sound differs from every other sound is linguistically significant." This implies that phonemes are distinguished from one another based on specific phonetic properties, such as voicing, place of articulation, and manner of articulation.

Furthermore, segmental phonology examines the rules governing the combination and sequencing of phonemes in a given language. These rules, known as phonotactic constraints, determine the permissible arrangements of phonemes within syllables and words. As noted by Hayes (2009: p.209), "phonotactics restrict the set of possible syllables and words in a language." Moreover, segmental phonology also encompasses the study of phonological processes, which are systematic patterns of sound alternation or modification that occur in specific linguistic contexts. For example, assimilation, where a sound becomes more like a neighbouring sound, and deletion, where a sound is omitted

in certain phonological environments, are common phonological processes. Segmental phonology is closely related to the broader field of phonetics, which deals with the physical properties of speech sounds, such as their acoustic characteristics and articulatory mechanisms. However, while phonetics focuses on the physical realisation of speech sounds, segmental phonology is concerned with the abstract mental representations of phonemes and their organisation within a linguistic system. This is to say that segmental phonology is a fundamental aspect of linguistics that investigates the structure and organisation of individual speech sounds within a language. Through the analysis of contrastive features, phonotactic constraints, and phonological processes, segmental phonology provides insights into the systematic patterns of sound variation and distribution across different linguistic contexts.

Both English and Hausa use speech sounds to communicate. Consonant and vowel sounds in present English as they are also in the Hausa language. The sounds only differ slightly in usage. The two languages use Roman letters in writing. Therefore, speech sounds refer to the distinct units of sounds that are produced by the human vocal tract during the articulation of words and sentences in all languages. These sounds are classified based on their phonetic properties, including place, manner of articulation, voicing, and airstream mechanism (Ladefoged, 2010, p. 9). Also, speech sounds are the individual, distinguishable units of sound, each representing a specific phoneme or combination of phonemes. Examples of speech sounds include: /p/, /t/, /k/ (consonants) and /i/, /a/, /u/ (vowels). These sounds are the building blocks of spoken language, contributing to the intelligibility and meaning of words (Rouch, 2000: p 1). From the foregoing, it is clear that all languages use speech sounds to produce meaningful utterances with the aid of the human organs of speech.

Collins' Dictionary (2018: p,123) defines a consonant sound as a speech sound that is produced by the partial or complete obstruction of air by the lips, teeth, tongue or throat. Also, it provides such examples of consonant sounds such as /p/, /f/, /n/, or /t/, which you pronounce by stopping the air from flowing freely through your mouth. Again, consonant sounds are articulated with some level of constriction or closure in the vocal tract (Ladefoged and Johnson, 2010: p.201). Voicing refers to the vibration of the vocal cords during sound production. The emphasis is on the obstruction of the air from one or more organs of

speech. Moreover, these obstructions are the determining factors that distinguish consonant sounds from the vowel sounds.

There are 24 consonants in English. Their classification involves the consideration of their manner of articulation, their place of articulation, and voicing. The manner of articulation pertains to how airflow is obstructed or modified, while the place of articulation indicates the location of constriction within the vocal tract. Voicing refers to the vibration of the vocal cords during sound production. The twenty-four (24) English consonant sounds are shown according to the place, manner and state of the glottis below:

Table 1: English Consonants Chart

Manner of Articulation	State of Glottis		Place of Articulation
	Voiceless		
	Voiced		
Plosives	p t k	b d g	Bilabial Alveolar Velar
Nasals		m n ŋ	Bilabial Alveolar Velar
Fricatives	f θ s ʃ h	v ð z ʒ	Labio-dental Dental Alveolar Post-alveolar Glottal
Affricate	tʃ	dʒ	Post Alveolar
Semi-Vowels/Approximants	Lateral Trill/Liquid	l r	Alveolar Alveolar
		w j	Bilabial Palatal

Source: Omachonu (2000: p.61)

With reference to Omachonu's consonant table, under the place of articulation,; bilabial are /b/, /p/, /m/ and /w/; dental are /θ/ and /ð/; Labio-dental are /f/ and /v/; alveolar are /t/, /d/, /s/, /z/, /n/, /r/ and /l/; post alveolar are /ʃ/, /ʒ/, /tʃ/, and /dʒ/; palatal is /j/; velar are /k/, /g/ and /ŋ/; and glottal /h/. According to the manner of articulation, plosives are /p/, /b/, /t/, /d/, /k/, and /g/; fricatives are /f/, /v/, /θ/,

/ð/, /s/, /z/, /ʃ/, /ʒ/, and /h/; affricates are /tʃ/ and /dʒ/; nasals are /m/, /n/, and /ŋ/; lateral is /l/ while liquid is /r/; semi-vowels/approximants are /j/ and /w/. According to voicing or the state of the glottis, voiceless are /p/, /t/, /k/, /f/, /θ/, /s/, /ʃ/, /h/ and /tʃ/ while voiced are /b/, /d/, /g/, /m/, /n/, /v/, /ŋ/, /ð/, /z/, /ʒ/, /dʒ/, /l/, /r/, /w/ and /j/.

Mohammed's (2020: p.3) research, titled "A Comparative Analysis of Phonological Features in Kano Hausa and Standard Hausa, undertook a meticulous comparison of phonological attributes between the Kano Hausa dialect and the standard variety of the Hausa language. The research aimed at identifying some of the phonological features of the Kano Hausa variety and Standard Hausa. Mohammed's study was rooted in the comparative phonology framework, aiming to discern and elucidate the disparities in consonant pronunciation by speakers of Kano Hausa in contrast to the standard form of the language. In this systematic examination of phonological features, Mohammed observed notable distinctions in consonant pronunciation between Kano Hausa and the standard Hausa variety. The findings underscored the dynamic nature of language and the influence of regional dialects on phonetic patterns within a linguistic community. By highlighting these differences, Mohammed's work contributed to a deeper understanding of the phonological diversity present within the Hausa language. The study found that there are significant similarities in the Kano Hausa variety in consonants like /t/, /k/, /l/ and differences in consonants like /h/, /n/ and /tʃ/.

Ibrahim's (2019) study, titled "The Acquisition of English Consonants by Hausa Speakers," delved into the challenges encountered by Hausa speakers when acquiring English consonant sounds. Ibrahim's research was grounded in the field of second language acquisition, aiming to uncover the specific obstacles and difficulties faced by Hausa speakers as they endeavour to master the pronunciation of English consonant sounds. The objectives of the study were to examine how Hausa speakers use consonants and how the English consonants interfere with the Hausa consonant sounds in speech production.

Embarking on a thorough examination of language acquisition processes, Ibrahim identified common errors and difficulties experienced by Hausa speakers when attempting to pronounce some English consonant sounds. The findings shed light on the intricate phonetic differences between the Hausa and the English sound systems,

highlighting areas where transfer effects and phonological interference may impede successful acquisition.

Lastly, all the literature reviewed above addressed one aspect of the research at hand and left a lot of gaps, which this research intends to fill. Some of the literature relates to the current research in terms of scope (Kano Hausa variety), language (Hausa), content (consonant sounds) and so on. However, none of the above literature attempted to investigate the problematic and non-problematic consonant sounds in the Kano Hausa variety and English. This wide vacuum left is what is to be filled by this research.

3.0 Theoretical Framework and Methodology

The study uses Contrastive Analysis Hypothesis (CAH) as propounded by Ado in the late 1950s. Contrastive analysis (CA) is an investigative approach based on the distinctive elements of two competing languages. The theory is adopted for the analysis of this study as the study involves two different languages, Hausa and English. CAH begins by selecting certain features in both languages and then juxtaposing them based on translation equivalence, as determined by bilingual informants. The goal is to identify similarities and differences between the two systems and predict potential errors in learners' inter-language. This approach relies heavily on linguistic factors and assumes a hierarchy of difficulty in language learning. For instance, at the phonological level, which is the centre of this study, it predicts why typical Kano Hausa speakers of English pronounce words such as film /fɪlm/ as /pɪm/, think /θɪŋk/ as /sɪnk/ or /tɪnk/, voice /vɔɪs/ as /bɔɪs/, measure /meʒə(r)/ as /mejo/ and so on as if they are the same in the speech production in the target language.

This study employs a qualitative research design to contrast the phonetic properties and articulatory mechanisms of problematic consonant sounds in the Kano Hausa variety and the English language. The population of this study is the entire people of Kano Hausa-speaking communities. They are about 15,462,200 (NPC, 2022). The sampled communities are within the Kano speech communities that speak the same Hausa variety. This study centres mostly on four different locations of Kano: Kano Metropolis (Dala, Kano Municipal and Nassarawa Local Government); focusing on institutions of learning in Kano (Bayero University, Kano, Maitama Sule University, Kano; and Kano Federal College of Education, Kabuga); a commercial centre

(Abubakar Rimi Market) and gathering of elites (Association of Nigerian Authors (ANA, Kano Chapter). Hence, a total of one hundred (100) words were collected in the following manner: twenty (20) from the elites, thirty (30) from the commercial centre, thirty (30) from the institutions of learning, and twenty (20) from Kano Metropolis. One hundred (100) words were collected and analysed descriptively to bring out the areas of convergence and divergence between the two languages. Data were collected through observation, unstructured interviews and recording of native speakers' speeches during their discussions to identify the problematic consonant sounds and the phonetic and articulatory mechanisms that affect comprehension. The data collected were analysed descriptively and structured around the principles of contrastive analysis and structural theory for effectiveness.

4.0 Data Presentation and Analysis

Table 1: Data on Phonetic Properties and articulatory Mechanisms of Problematic consonants

Phonetic Properties		Articulatory Mechanisms	Examples
S/ N	Substitution		
1	/P/ → /f/	/p/ — bilabial for labio-dental → /f/	Parent /'peərənt/ as /ferent/, pure /pjuə/ as /fjuə/, happily /'hæpili/ as /hæfili/.
2	/f/ → /p/	/f/ — labio-dental for bilabial → /p/	four /fɔ:/ as /pɔ:/, five /faive/ as /paiv/, first /fɜ:st/ as /pɜ:st/, fiction /fikʃən as /pikʃən/.
3	/v/ → /b/	/v/ — labio-dental for bilabial — /b/	Average /'ævəriɔ:/ as /æbəriɔ:/, voice /vɔis/ as /bɔis/, five /faiv/ as /faib/, every /'evri/ as /ebri/
4	/dʒ/ → /j/	/dʒ/ — palato-alveolar for palatal — /j/	Judge /dʒʌdʒ/ as /jʌj/, general /dʒenərəl/ as /jenərəl/, justice /'dʒʌstis/ as /jʌstis/, gender /dʒendə/ as /jendə/.

5	/ʒ/ → /ʃ/	/ʒ/—voiced palato-alveolar for voiceless palate-alveolar— /ʃ/	Measure/'meʒə/ as /mefə; -jə/, vision/ viʒən/ as /vijən/, television/'teliviʒən/ as /telivijən/.
6	/ŋ/ → /n/	/ŋ/ — velar for alveolar — /n/	King/kiŋ/ as /king/, bank/bæŋk/ as /bænk, ring/riŋ/ as /ring/, etc.
7	/z/ → /s/	/z/ — voiced alveolar for voiceless alveolar — /s/	Us/ʌz/ as /ʌs/, is/iz/ as /is/, use/ju:z/ as /ju:s/, days/deiz/ as /deis/.
8	/k/ → /kw/	/k/ — velar for labio-velar - /kw/	Commissioner /kə'miʃənə/ as /kwəmiʃənə/, commission/kə'miʃən/ as /kwəmiʃən/, contract /'kɒntrækt / as /kwɒntrækt/, college/'kɒliɔːʒ/ as /kwɒliɔːʒ/, committee/kə'mi:ti:/ as /kwəmi:ti:/, course/kɔ:z/ as kwa:z/.
9	/g/ → /gw/	/g/ — velar for labio-velar - /gw/	Gone /gən/ as /gwən/, governor /'gʌvənə/ as /gwəmnə/, google/gɒgəl/ as /'gwɒgəl/, gold /gəʊld/ as /gwal/, golf /gɒlf/ as /gwɒlf/.
Sound Replacement			
10	/ð/ → z, /d/	/ð/— dental for alveolar — /z/ and /d/	that/ðæt/ as /dæt/ or /zæt/, mother/'mʌðə/ as /mʌdə/ or /mʌzə/, those/ðəuz/ as /dəuz/ or /zəuz/, other/'ʌðə/ as /ʌdə/ or /ʌzə/.

11	/θ/ → /s, t/	/θ/— alveolar for dental — /s and t/	Thank /θæŋk/ as /tæŋk/ or /sæŋk/, without/wiθaut/ as /θitaut/ or /wisaut/, think/θiŋk/ as /tiŋk/ or /siŋk/, method/meθəd/ as /metəd/ or /mesod/.
12	/ʃ/ → /h/	/ʃ/— glottal for palate-alveolar — /h/	Social/'səʊfəl/ as /səuhəl/, she/ʃi:/ as /hi:/, shal/ʃel/ as /hel/.

Here, the study unravels the intricacies of the phonetic properties and articulatory mechanisms of the problematic consonant sounds of the Kano Hausa variety and the English language. Therefore, the analysis is in accordance with the data presented in Table 1 above. Through the application of contrastive theory, the research explored the nuances between English and the Kano Hausa variety.

The table above presents the phonetic properties and the articulatory mechanisms of problematic consonant sounds. As shown in the table, the phonetic properties of the problematic consonants are *substitution* and sound *replacement*. The following consonant sounds are affected by substitutions: /p/ → /f/, /f/ → /p/, /v/ → /b/, /dʒ/ → /j/, /ʒ/ → /ʃ/, /ŋ/ → / and /z/ → /s/. On the other hand, the following consonant sounds are also affected by sound replacement: z → /ð/, /s/ → θ, and /h/ → /ʃ/.

1. /p/ → /f/: The consonant /f/ by articulatory mechanism is labio-dental but is substituted with the bilabial /p/ by Kano Hausa speakers of the English language. This affects the semantic aspect of the target language. Examples include: pure /pjuə/ as /fjuə/, happily /'hæpili/ as /hæfili/.
2. /f/ → /p/: The articulatory mechanism of /f/ is labio-dental, while the /p/ is bilabial. The consonant /f/ is substituted with /p/ by Kano Hausa speakers of English. Hence, the following words are pronounced differently: five /faive/ as /paiv/, first /fɜ:st/ as /pɜ:st/, fiction /fikʃən as /pikʃən/.
3. /v/ → /b/: The consonant /v/ by articulatory mechanism is labio-dental but substituted with the bilabial /b/ by Kano Hausa speakers of English. For example: average/'ævəriðʒ/ is pronounced as /æbəriðʒ/, voice /vɔis/ as /bɔis/, five /faiv/ as /faib/, every /'evri/ as /ebri/.

4. /dʒ/ → /j/: The consonant /dʒ/ by articulatory mechanism is post-alveolar but it is substituted with the palatal consonant /j/ by Kano Hausa speakers of the English language. The substitution creates problematic meanings as judge /dʒʌdʒ/ is pronounced as /jʌj/, general /dʒenərəl/ as /jenərəl/, justice /'dʒʌstis/ as /jʌstis/, gender /dʒendə/ as /jendə/.
5. /ʒ/ → /ʃ/: The articulatory mechanism of the consonant /ʒ/ is post-alveolar and it is often substituted by Kano Hausa speakers of English with another post-alveolar consonant /ʃ/. In the process, the words below are affected: measure /'meʒə/ is pronounced as /'mefə; -jə/, vision /'viʒən/ as /'viʃən/, television /'teliviʒən/ as /'teliviʃən/.
6. /ŋ/ → /n/: The articulatory mechanism of the consonant /ŋ/ is velar. The sound is usually substituted with the alveolar consonant /n/. For example: king /kiŋ/ is pronounced as /kin/, bank /bæŋk/ as /bænk/, ring /riŋ/ as /ring/.
7. /z/ → /s/: The articulatory mechanism for the consonant /z/ is alveolar. The sound is generally substituted with another alveolar /s/ by Kano Hausa speakers of English. Although the two consonant sounds appear in both English and Hausa. In contrast, in the English language, /z/ appears in the initial, medial and end of words; in Hausa, /z/ only takes the initial and medial position of words. The sound that takes the end position of a word is /s/. Hence, all categories of Kano Hausa speakers of the English language substitute the /z/ with /s/. Examples: us /ʌz/ is pronounced as /ʌs/, is /iz/ as /is/, use /ju:z/ as /ju:s/, days /deiz/ as /deis/.
8. /g/ → /gw/: The articulatory mechanism of the consonant /g/ is velar. The consonant is substituted by Kano Hausa speakers of English with the transitional or double consonant /gw/, especially at the initial position of a word. Example: governor /'gʌvənə/ is pronounced as /'gwʌmnə/, google /gu:gəl/ as /'gwʌgəl/, gold /gəʊld/ as /gwəl/, golf /gɒlf/ as /gwɒlf/.
9. /k/ → /kw/: The articulatory mechanism of the single consonant /k/ is velar. The consonant is substituted by Kano Hausa speakers of English with the double consonant /kw/, which only exists in the Hausa speech culture. These are the cases in the following examples: commissioner /kə'miʃənə/ is pronounced as /kwɒmiʃənə/, contract /'kɒntrækt/ as /kwɒntrækt/, college

/'kɔlɪdʒ/ as /kwɔlɪdʒ/, committee /kɔmɪti:/ as /kwɔmɪti:/, course /kɔ:z/ as kwa:s/.

Sound Replacement

10. /ð/ → /z/, /d/: The articulatory mechanism /ð/ is dental. The consonant is replaced with the alveolar consonant sounds /z/ and /d/. The two consonant sounds are used to replace the sound /ð/ by Kano Hausa speakers of English. Examples: mother */'mʌðə/* is pronounced as */mʌdə/* or */mʌzə/*, those */ðəʊz/* as */dəʊz/* or */zəʊz/*, other */'ʌðə/* as */ʌdə/* or */ʌzə/*, etc.
11. /θ/ → /s/, /t/: The articulatory mechanism of the consonant /θ/ is dental. Again, the sound is replaced by Kano Hausa speakers of English with the alveolar sounds /t/ and /s/. For example: thank */θæŋk/* is pronounced as */tæŋk/* or */sæŋk/*, think */θɪŋk/* as */tɪŋk/* or */sɪŋk/*, method */meθəd/* as */metəd/* or */mesəd/*.
12. /ʃ/ → /h/: The articulatory mechanism of the consonant /ʃ/ is palato-alveolar. The consonant is replaced with the glottal consonant /h/ by Kano Hausa speakers of English. Example: social */'səʊʃəl/* is pronounced as */səʊhəl/*, she */ʃi:/* as */hi:/*, shall */ʃel/* as */hel/*.

4.2 Discussion of Findings

The analysis of the phonetic properties and articulatory mechanisms of the problematic consonants in Kano Hausa variety and English above reveals some differences in the phonological structures of Kano Hausa variety and English consonant sounds. The English language often exhibits a more flexible consonant order at the initial, medial and end of words. The English language frequently uses consonant structure based on the context of appearance in a word. Hence, /p/, /f/, /v/, /ð/, /θ/, /ʃ/, /ʒ/, /dʒ/, /ŋ/, /g/, /k/ and /z/ appear problematic to Kano Hausa speakers of English as presented in the Table 1 above. This is simply because the consonant sounds, unlike those of Hausa, do not use a predictable format. On the other hand, the Hausa language relies on a fixed consonant order to convey meaning clearly. The consonant sounds do not change in a word structure as they do in English. These differences highlight the unique phonological features of the English language in contrast to the more rigid consonant structures of Hausa.

In both Kano Hausa variety and English, consonant sounds serve similar fundamental functions. For instance, in both languages,

consonant sounds are used with vowel sounds for communication purposes; consonant sounds are the part of the structure in a word and the two linguistic specimens use phonetic and articulatory mechanism. In English, we see a letter changing in realisation as in “s” being realised as /s/ in see /si:/ and /z/ in use /ju:z/ while Kano Hausa variety uses similar structure to mean different sound, such as “zo” and “soso”. The preceding differences lead to consonant transfer as they use the phoneme “s” for both /s/ and /z/; thus, use /ju:z/ for /ju:s/ and is /iz/ for /is/. Therefore, the preceding complexity is what leads to problematic consonant sounds between the two languages. Also, consonant sounds in both languages are used in the orthographic representation of their speeches, with the presence of some consonant sounds in English while they are absent in Kano Hausa variety and vice versa. Also, this paper reveals how phonetic properties and articulatory mechanisms affect the meaning of words and leads to the misinterpretation of a given concept. However, the difference is on how the two languages host the presence of certain consonant sounds and absence of some in the consonant structure of the two languages. The English consonant sounds /ð/, /θ/, /ʃ/, /ʒ/, /dʒ/ and /ŋ/ are absent in the Kano Hausa consonant inventory. Therefore, the consonants are replaced with /t, z/, /s, d/, /h/, /j/ and /n/ respectively. Meanwhile, the Kano Hausa variety has the following consonant sounds: /kw/, /gw/, /f?/, /gy/ that replace consonant sounds such as /k/, /g/ and so on in English. For instance, that /ðæt/ is realised as /dæt/ or /zæt/, mother /'mʌðə/ as /mʌdə/ or /mʌzə/, those /ðəuz/ as /dəuz/ or /zəuz/; thank /θæŋk/ as /tæŋk/ or /sæŋk/, /θiŋk / as /tink/; vision /vɪzən/ as /vɪfən/, television /'telɪvɪzən/ as /telɪvɪfən/; gone /gən/ as /gwən/, governor /'gʌvənə/ as /gwəmənə/.

Conclusion

The contrastive analysis of the phonetic properties and articulatory mechanisms of problematic consonants in Kano Hausa variety and the English language reveals the possibility of problematic consonants in English and Kano Hausa variety. Hence, the presence and absence of a given consonant in the two languages heightens the problem as it offers the possibility for consonant transfer from Hausa to English and vice versa. Consequently, the problem affects the phonological structure and semantic interpretation of many English words as the speakers mispronounce some English words due to consonant interference, which affects the meaning of such words.

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Moraic Analysis of the Phonological Weight of Long Vowels in Acrolectal Nigerian English

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Abstract

This study investigated the speeches of the educated Nigerian English users, particularly with regard to weight distinction. It examined instances of shortening or lengthening of vowel segments in words and utterances, adopting the Moraic Theory (MT). Eighty (80) educated Nigerians (following Banjo, 1971 model), mainly graduates and final year undergraduates, were used as respondents. The Stratified Random Sampling Technique (SRST) was used and the samples were divided into four sociolinguistic groups, namely: Hausa, Yoruba, Igbo and the Southern minority languages. Questionnaire, interviews, and perceptual and acoustic approaches were adopted. Findings indicate that SNE has some variant forms of weight, which are basically different from the Standard British English at both the underlying and surface levels. For instance, the respondents' total durational performance in the long vowels accounted for forty-one percent (41%). Again, three long monophthongs, namely, /ɑ:/, /i:/ and /ɜ:/ signified light segments in SNE. Observably, these light or weightless segments were realised as lighter in certain phonological environments. Thirdly, a change in the vowel quality did not necessarily affect its weight, as the change in vowel quantity or length is characteristic of the conventional moraic analysis. The study then concluded that SNE lacks appropriate vowel weight distinction.

Keywords: Phonological weight, vowel quality and quantity, Standard or acrolectal Nigerian English, Acoustic analysis and Moraic Theory

1.0 Introduction

English is the official language of communication in Nigeria. As an official language, it is the medium for instruction in schools as well as for conducting business in the public and private sectors. It is also the language used in politics, commerce, religion and the media. The peculiarity in the usage of the English language in the country has led to

the indigenisation or acculturation of the language resulting in what is termed, "Nigerian English", which is found to have transfers of "phonological, lexical, syntactic and semantic" features of Nigerian indigenous languages into English. From the foregoing, the term, Nigerian English is, therefore, no longer a matter of deliberation as scholars have come to the point of agreement that there is a variety of English that is distinctively Nigerian (cf. Jowitt, 1991; 2019; Gut, 2002).

Nigeria, as a nation, is a society with heterogeneous cultures and languages. Thus, the country is usually regarded as a multilingual society. At present, about five hundred and thirteen (513) languages and dialects have been recorded for the country (Bamgbose, 1978, cited in Eka, 2000). Different other linguistic accounts in this respect are cited by other scholars (cf. Emenanjo, 1990; Josiah, 2014, among numerous others). It is in such a setting that English functions as a second language. Nigerian English is not as distinct in the written form as it is in its spoken form. The peculiarity of the latter cuts across different phonological aspects, including the segmental and non-segmental domains. Specifically, the vowel systems in Spoken Nigerian English acquire certain characteristics that require some form of investigation. In this work, the phonological weight of long vowels (monophthongs) in Standard Nigerian English (SNE) is of primary consideration. The SNE and Acrolectal or educated Nigerian English will be used interchangeably in this work.

Carr (1999; p.20) states: "vowels are voiced (sounds) and are articulated with a constriction of open approximation". The meaning of vowels is easy to understand but complexity arises when it comes to their phonological functions in the syllable, one of which is the distinction between syllable weight or length of segments. Although the length of vowels is not seen to be given much attention by speakers of the English language, yet it can lead to distortion in the meaning of words and expressions if not well differentiated. An illustration of this may be seen in pairs such as sick/seek, bid/bead, bit/beat, cot/court, sit/seat, pot/port, pull/pool, cat/cart and many more. This study is interested in carrying out a systematic analysis of the vowel segments within the syllable structure using a relevant, theoretically framed model, the "Moraic Theory" (MT).

Statement of the Research Problem

Some studies have been conducted on the duration or length of vowels. A few of such studies include: Campbell and Isard (1991), Eka (2001), Kreidler (2004), Oostendorp (2005), Akpan (2010), Ryan (2011), Windmann, Simko and Wagner (2015), Utuk (2017), among others. These studies have treated some complexities that relate to vowel duration, but, to the best of our knowledge, none of these studies has adopted the moraic theory to find out the range of variations of the vocalic systems in the spoken English of educated Nigerians. The present work, therefore, sets out to use the moraic theory to investigate the durational variations of the vowel systems in SNE. Specifically, the term, vowel weight, as used in this context, refers to the distinction between monomoraic (or light) and bimoraic (or heavy) vowels, or as the case may be.

Objectives of the Study: The objectives of this study are to:

- i. investigate the surface weight of long vowels in SNE in comparison to the surface weight of Standard British English (SBE) using the moraic theory (MT);
- ii. examine the weight criteria of long vowels in SNE using the MT;
- iii. identify and verify the correlation that may exist between vowel weight and the meaning of words and utterances.

1.4 Scope/Delimitation of the Study

The present study concentrates on the moraic weight of vowels, specifically long pure vowels. The work does not concentrate on the phonetic components of consonant sounds (except where it becomes inevitable), but on weight criteria of long vowels as observed among Nigerian speakers used as exponents. Again, the phonological component of long vowels is the major consideration in this study.

2.1 Literature Review

Of the numerous existing literature on the Nigerian English (NE) variety, a few studies related to variety differentiation and, in particular, those on the vocalic systems shall be reviewed here. The Nigerian English variety is one of the nativised varieties of world Englishes that has developed through years of contact with Nigerian indigenous languages. It has, therefore, acquired features of the new environment, some of

which have been codified (Banjo, 1971; Jowitt, 1991; Banjo, 1995; Udofot, 2007). Thus, NE as a linguistic reality implies, “a variety of world Englishes spoken by Nigerians who are born and brought up in the Nigerian environment” (Eka, 2000; p.15).

For a clearer understanding of the term Nigerian English, there is a need to refer to some classifications carried out by some renowned scholars. Concentration will be on the aspect of the weight or length distinction of vowels occurring in the spoken variety. First is the work of Banjo (1971). The work is an attempt to define Standard Spoken Nigerian English (SSNE). In it, Banjo identifies four varieties of spoken English in Nigeria as follows: “Variety I is identified as the form that exhibits a great deal of mother tongue transfers; “Variety II is identified as that which is characterised by some phonological negative transfers from first language acquisition (L1), passable syntactic constraints and lack of vital phonemic distinctions; “Variety III is the type used by fewer Nigerian English speakers (the acrolectal speakers) - it is spoken by those Nigerians whose speeches make necessary phonemic distinctions, who largely represent the educated speakers of English, those who have greater exposure to a standard variety of the language, basically through education or other forms of exposure”; and, “Variety IV, the near-native or Afro-Saxon’s Variety, whose speakers use English as their first language or have had specialist training or a lot of years of exposure to the language”. The present study makes use of Variety Three, which is regarded as the Standard (educated or acrolectal) variety, as exemplified in Jowitt (1991; 2019). This variety is spoken by educated Nigerians who are mainly graduates as well as final-year undergraduates.

Many other scholars have worked on classifying the varieties of NE (Banjo, 1971; Jowitt, 1991; Banjo, 1995; Eka, 2000; Udofot, 2007). Banjo’s (1995) model, cited in Jowitt (1991), is based more on linguistic parameters. The varieties are distinguished based on the degree of deviations from the Standard British English (SBE). They are further based on the extent of mother tongue transfer and approximation to a monolithic, exonormative standard variety (Banjo, 1995), which, observably, appears nonexistent. Again, four isolatable standards modelled after Banjo’s (1971) norm are replicated with slight modifications.

Eka (2000) classifies the varieties of Spoken Nigerian English into four: the non-standard (often associated with the performance of the beginners); the basic (which is the general); the standard (the

educated form) and the sophisticated (ambilingual or near native) variety. The source also notes that the spoken output of the non-standard and basic varieties mainly manifests some phonological features of the L1 into English. The standard and sophisticated varieties, which are used by newscasters and those trained in the language, show evidence of “appropriate segmental and non-segmental distinctions and can be understood and accepted both nationally and internationally”. The present study tries to determine and affirm the “appropriate segmental and non-segmental distinctions” and from the findings made, it could be stated that the segmental and non-segmental distinctions are rather “inappropriate”.

The basic outstanding features in the various classifications show that there are no vowel weight distinctions in Varieties I and II, but there are in Varieties III and IV. From the present study, it is assumed that weight distinction is still a significant challenge in SNE. Bamgbose (1971) summarises that, “English in Nigeria is not just that it is different from British or American, rather, it is that there are several varieties of English ranging from something very near Standard English to the patois of the market place”.

As pointed out earlier, the present study centres on the acrolectal or educated variety, which, according to Yule (1996), “is a creole that is closer to the external standard model (for example British English)”. The source goes further to identify other varieties such as the basilect (a type of creole that is closer to pidgin); the mesolect (a type of creole that contains both features of the basilect and the acrolect) and the acrolect. These three varieties could be associated with Banjo's varieties one, two and three respectively.

The English vowels are made up mainly of monophthongs, diphthongs and triphthongs. Monophthongs consist of both short and long pure vowels. Five out of the twelve monophthongs are long, while the remaining seven are short. The present study dwells mainly on the five long monophthongs. To illustrate briefly, the short monophthongs are “/ ɪ, e, æ, ɔ, ʊ, ʌ, ə/”, the long ones are “/ i:, ɑ:, ɔ:, u:, ɜ:/” (Eka and Udofot 1996; p.90 – 91), while the diphthongs are: “/ɪə, ʊə, eə, aʊ, əʊ, eɪ, aɪ, ɔɪ /” (p.93). Triphthongs are: /aɪə, eɪə, aʊə, əʊə, ɔɪə/ (p.94). Long monophthongs are obtainable in the following words:

/i:/ - seat
/ɑ:/ - father

/ɔ:/ - call
/u:/ - too
/ɜ:/ - nurse

Winkler (2012) recognises two levels of vowel length, such as, “tense and lax vowels”. Tense vowels are the long vowels and they are five in number, as has already been indicated, while the lax vowels are the short vowels and are seven in number. The study notes that for speakers of languages with only five cardinal “vowels / a, e, ɪ, o, u/, the length distinction is particularly hard to hear”. An example of such a language is Spanish. Therefore, it will be very common for Ibibio or Spanish speakers, for instance, learning to speak English to encounter length differentiation challenges in the language. The length distinction is presented in the following word pairs:

bit /ɪ/ beat /i:/
bed /e/ bird /ɜ:/
cot /ɔ/ court /ɔ:/
full /ʊ/ fool /u:/
pat /æ/ part /ɑ:/

The difference in the above word pairs is one of quantity and not a quality difference. Vowel quality refers to the nature of the sound that we hear. It is the name given to the combined auditory effect of the three principal parameters of variation – the unique backness – openness – rounding combination (Ashby, 2011). This underlies why some phoneticians have acknowledged the complexity of the English vowel system (Udofot 2007, Cruttenden 2008).

In terms of vowel quantity, English phonology traditionally makes the distinction between tense and lax vowels. Tense vowels are known to occur freely at the end of one-syllable words. Such words include: bee, bay, too, law and many others. On the other hand, lax vowels occur in one-syllable words only if they end in a consonant. Examples include: bit, bet, put, bat, but and similar other words. According to some sources (Crittenden 2008, Konzorcium 2006), lax vowels are also referred to as weak vowels and are also shorter than tense vowels. Again, all other things being equal, a tense vowel is longer than a lax vowel of similar height.

Eka (2001) studies the duration of vowels in three distinct varieties of English: British, American and Nigerian. The study examines the general duration of vowels and consonants in natural languages, inherent duration, resultant duration and specific phonological as well as idiosyncratic constraints leading to durational adjustments on the vowels and consonants in Educated Nigerian English (ENE). The study admits that, from the viewpoint of duration, the Educated British English (EBE) is not significantly different from ENE, and that ENE does not regularly show duration as a contrastive index between it and EBE, particularly at normal conversational speed. The present study dwells on vowel length in SNE using the moraic theory.

The intrinsic duration of vowels may be compared with the underlying representation of segments. Odden (2005; p.10) notes that the underlying form is "the output of the morphological component, which is the input to the phonology, while the surface representation is "the phonetically more-or-less fully specified representation of a word or a longer sequence, often especially when this is contrasted with its phonologically (underlying) form" (Trask 1996; p.344).

Finally, Melefa and Okenmuo (2023) is also an acoustic study that describes the pattern that characterises stress assignment to words in the context of connected speech. Fifty English language teachers in Anambra State were used for the study. Analysis shows that the teachers expressed variant patterns in the assignment of stress to words in connected speeches. Since stress is connected to vowel weight, it could be concluded here that the selected teachers failed to pronounce words with long and short vowels appropriately. All these remarks provide the insights on which the present study intends to probe and make further contributions.

2.2 Theoretical Framework

Mora (or sometimes, moracity) is the most germane concept that recurs in the discussions of length within and among varieties of different theoretical frameworks (Fox, 2000). It is the weight-bearing property of segments usually designated as "a phonological unit larger than a single segment, but typically smaller than a syllable" (Trask 1996; p.226). It is "a sub-syllabic, prosodic constituent or 'timing unit' that generally consists of a vowel, or vowel plus following consonant" (Clark, Yallop and Fletcher, 2007, p.340). Thus, a mora is regarded as a unit of timing (Ladefoged and Johnson 2011, p.251). It is also found in some American

structuralist treatments of length. For Leonard or Bloomfield, the mora is not a unit as such, but rather a measure of the length of a unit (Fox, 2000).

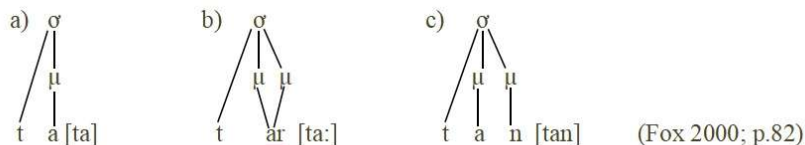
Hayes (1989) writes extensively on the Moraic Theory (MT). The concept of MT has the following generalisations: (i) short vowels have one mora (ii) long vowels have two moras. MT posits partly language-specific prosodic structures, which vary according to languages. Hayes (1989) also recognises super-heavy syllables such as CVVC and CVCC as being trimoraic. He further states that "in a language like Latin, CVV and CVC syllables count as heavy and CV as light". He also notes that, "in languages with contrastive vowel length, long vowels have two moras, short vowels have one.

In terms of consonants, Hayes (1989) does not attach mora to onset consonants; only coda consonants are assigned moras by what he refers to as "weight by position", and it is based on language specific rules. Hayes (1989) also treats some coda consonants as having their separate moras, while some are made to share a mora in a super-heavy syllable. In this work, "light" or voiceless coda consonants are made to share a mora with the nucleus mora, while "heavy" or voiced consonants are assigned their separate mora. This is also in consonance with the following generalisations. Weister and Milekie (2000; p.51), for instance, generated a rule which states: "the basic generalisation is that vowels located before voiced sounds are lengthened". Other things being equal, a given vowel is longest in an open syllable, next longest is a syllable closed by a voiced consonant, and shortest is a syllable closed by a voiceless consonant. Ladefoged and Johnson (2011; p.251) also states:

In most varieties of English, variations in lengths are completely allophonic. For example, the vowel in 'bad' is predictably longer than vowel in 'bat' because, other things being equal, vowels are always longer before voiced consonants than before voiceless consonants". Another important principle in Hayes (1989) MT is that, the moraic theory must carry out two tasks: representation of segment length and of syllable weight (p.260).

Hayes (1989) developed a theory in which the mora is represented directly as the Greek letter "μ" (Hayes 1989; p.254, Hogg

1992 as cited in Majid 2021; p.348), so that light and heavy syllables are represented as illustrated in Figures 2.1a, b and c below:



Figures 2.1a, b and c: MT showing light and weight syllables

The present study adopts Hayes (1989) MT. In Hayes (1989) MT, elements or segments in the rhyme are dominated by mora; onset consonants are not, while coda consonants carry mora by the process described as “weight by position”. Since the present study is investigating the phonological weight of long vowels in English, it assigns appropriate moras to the weight-bearing units within the syllable. Light syllables such as CV (cho) and V (a) are assigned a mora, and heavy syllables such as CVV (core) and CVC (can) are assigned two moras. Super-heavy syllable types include CVVC (soon) and CVCC (hand). Super-heavy syllables are trimoraic. This means that super-heavy syllables are assigned three moras at the underlying representation or level, but variations abound at the surface representation.

3.1 Research Methodology

The present study adopts a descriptive survey design. This work is designed for Nigerian graduates from different disciplines, as well as final year undergraduate students studying English and its related courses such as Linguistics, Mass Communication and Theatre Arts. Out of the entire population for the study, a sample size of eighty respondents who could speak SNE and also their indigenous languages was selected for the study. The next set of informants is the Control. The Control consists of a native English speaker. His performance serves as the native baseline.

The Stratified Random Sampling Technique is adopted for the selection of the respondents. The sub-populations comprise mainly final year undergraduate students from the University of Uyo, as well as

National Youth Service Corps (NYSC) members within Akwa Ibom State, comprising twenty respondents per stratum.

The questionnaire and face-to-face interview are the two instruments used for data collection. It comprises four sections: A, B, C and D. Section A requires some demographic details, Section B comprises the general test items of thirty sentences. Section C contains an average of sixty-five words extracted from the sentences, and Section D comprises a few topics for the respondents to make a one-minute spontaneous speech on any of the given topics.

Respondents also read both the sentences and the words in Sections B and C aloud twice into an audio recording device. The respondents of this study are classified under five groups viz: A – the Control; B – Speakers of the Southern minority languages; C – Igbo speakers from the East; D – Yoruba speakers from the West and E – Hausa speakers from the North. The theoretical analysis involves the adoption of MT for a theoretical model and Praat, a software programme for the analysis of acoustic speech signals in phonetics, is used for the acoustic analysis. Praat was designed and continually updated by Paul Boersma and David Weenink of the University of Amsterdam (Boersma, 2001). The statistical analyses are presented in tables and figures.

3.2.1 Spectrograms of Selected Respondents and some Sounds in Words

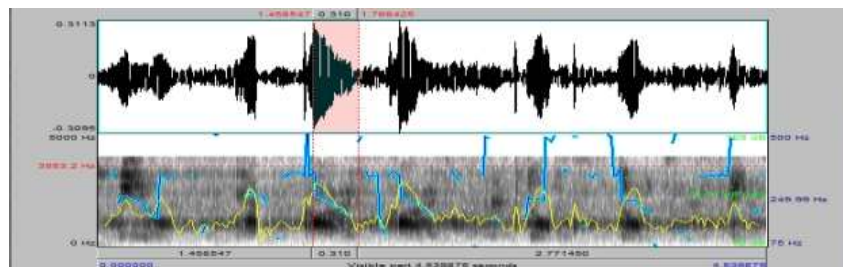


Figure 3.2.2: Control's Production of the Vowel /a:/ in "card"

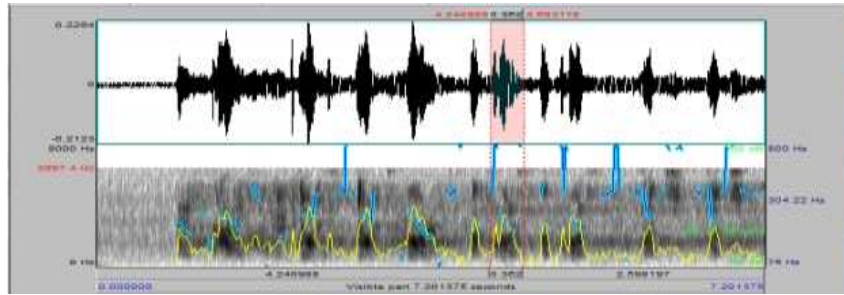


Figure 3.2.3: Control's Production of the Vowel /ɔ:/ in "course"

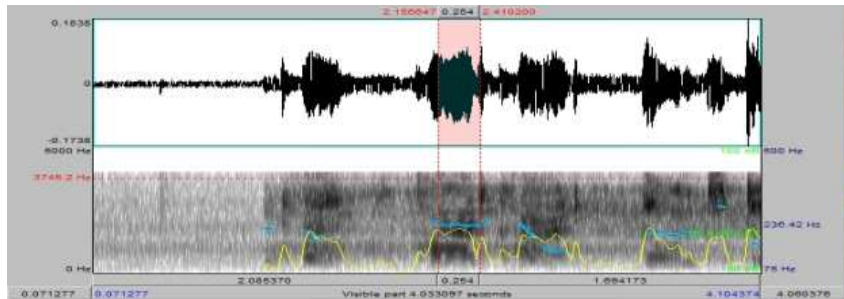


Figure 3.2.4: Production of the Vowel /a:/ in "card" by Ibibio (Southern) Respondent

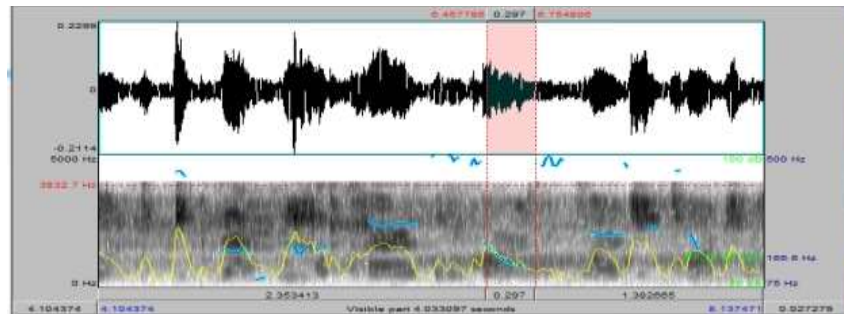


Figure 3.2.5: Production of the Vowel /ɔ:/ in "course" by Ibibio Respondent

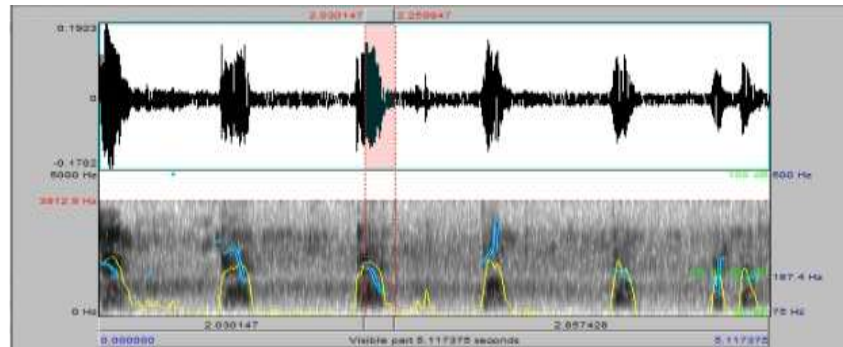


Figure 3.2.6: Production of the vowel /a:/ in “card” by Igbo (Eastern) Respondent at 229ms

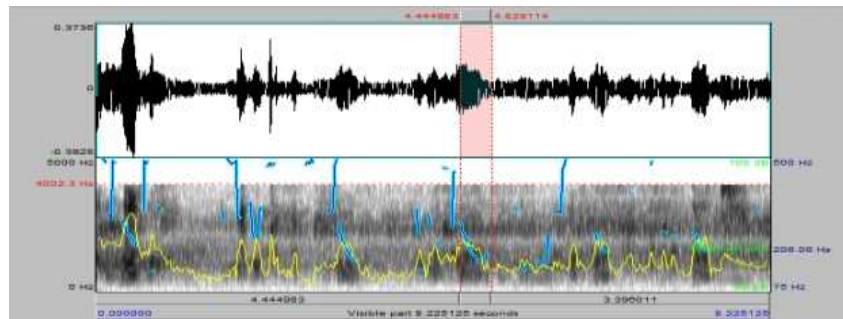


Figure 3.2.7: Production of the vowel /ɔ:/ in “course” by Igbo Respondent at 384 ms

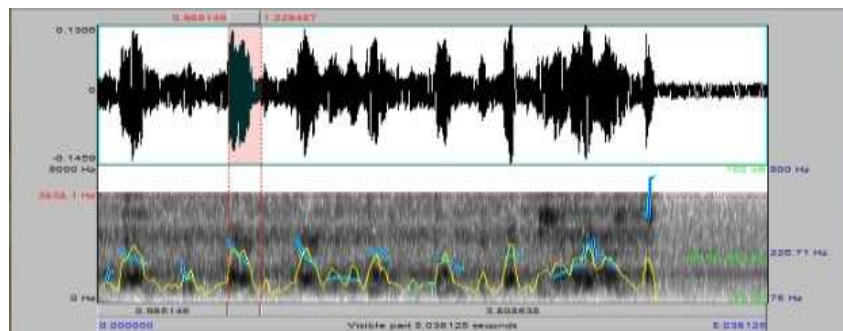


Figure 3.2.8: Production of the vowel /a:/ in “card” by Yoruba (Western) Respondent at 244 ms

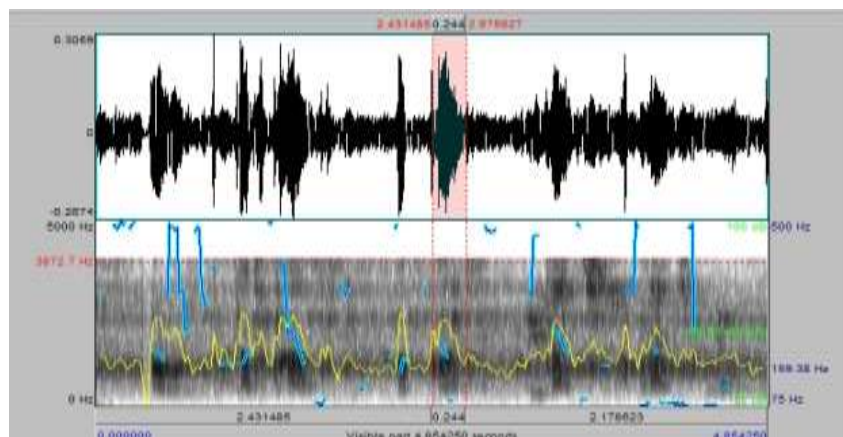


Figure 3.2.9: Production of the vowel /ɔ:/ in “course” by Yoruba Respondent

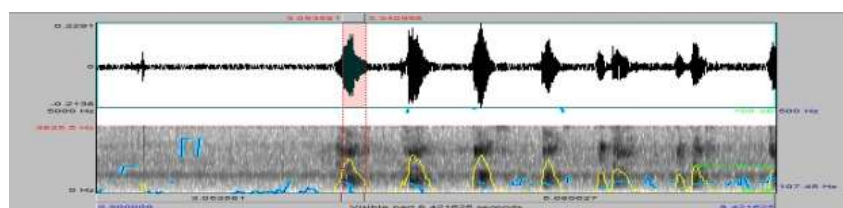
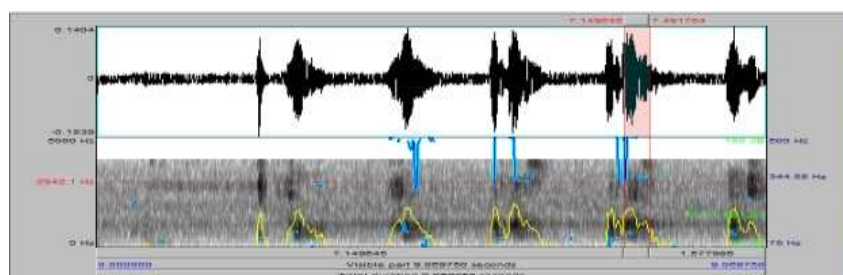


Figure 3.2.10: Production of the vowel /a:/ in “card” by Hausa (Northern) Respondent at 277 ms



3.3: Analysis of Acoustic Data

Figures 3.2.1 to 3.2.10 present the spectrograms of the vowel sounds /a:/ and /ɔ:/ in the words “card” and “course” respectively, from the Praat object window as produced by the Control and four respondents

sampled from each of the sociolinguistic groups. The words selected consist of the vowel and the adjacent consonant sound in each. The aim is to examine and confirm the weight of the vowel sound as produced by SNE speakers as well as determine the effect of the adjacent consonant sound on vowel weight or length. From the analysis, it is observed that the Control lengthens the sounds and obtains three hundred and ten milliseconds (310ms) in “card” and three hundred and sixty-two milliseconds (362ms) in “course”. The SNE speakers as well as the Respondents shorten the sound such that the Southern Respondent obtains two hundred and fifty four milliseconds (254ms) in “card” and two hundred and ninety seven milliseconds (297ms) in “course”; the Eastern Respondent obtains two hundred and twenty nine milliseconds (229ms) in “card” and three hundred and eighty four milliseconds (384ms) in “course”; the Western Respondent obtains two hundred and forty four milliseconds (244ms) in both “card” and “course” and the Northern Respondent obtains two hundred and seventy seven milliseconds (277ms) in “card” and three hundred and forty two milliseconds (342ms) in “course”.

From the spectrograms, it is obvious that the respondents lengthen the long vowel sound /ɔ:/ in “course” more than they do in “card”. This may be due to the sonority of the adjacent consonant sound /s/. Some authors and researchers have argued that sonority is a major contributor of weight (Fox 2000, Majid 2021, Ewen and Hulst 2001). It could be argued that sonority exceeds voicedness in determining the weight of vowels. The same is also noticeable in the Control’s performance. Only the Yoruba Respondent produced the same weight in the two syllables or words analysed in the acoustic analysis.

All the weight segments are measured and analysed within the syllables. Even though they are measured in the syllables they occur, it has been noticed that most consonants have no length or lengthening, except the fricatives, nasals and affricates; therefore, the length of consonants is totally excluded in the measurement, even though their occurrence (in the coda position) contributes to the weight segment measured. The length of segments is measured in milliseconds (ms).

Segments measured in one hundredth of a millisecond are the shortest, followed by those measured in two hundredths of a millisecond. Segments with a length of two hundred (200) milliseconds and above are considered long and heavy, while those up to three hundred (300)

milliseconds and above are considered to be super heavy. This is in line with MT (Hayes 1989).

Finally, some words were identified and analysed perceptually from the respondents' spontaneous speeches: They include: do, you, can, feel, for, learn, of course and had. It was noticed that about seventy percent (70%) of the words were given the same weight criteria when compared to the given sentences. This further confirms the authenticity of the findings made by the researchers, which corroborates those of other researchers and scholars that vowel length is generally reduced in sentences when compared to words (cf. Konzorcium, 2006).

3.4 Data Presentation, Analysis and Discussion of Findings

Table 3.1: Analysis and Presentation of Long Monophthongs

WORDS/SOU NDS	M W	C W	SOUTH NA	EAST	WEST	NORT H NA	TOTAL	SOUTH PA	EAST	WEST	NORT H PA	TOTAL		
			NA							PA				
					NA		NA NN		PA			PA PN		
meet /mi:t/	2	2	5	2	3	3	13	67	25	10	15	15	16	64
learn /lɜ:n/	3	3	6	4	5	3	18	62	30	20	25	15	23	77
card /kɑ:d/	3	2	7	8	4	4	23	57	35	40	20	20	29	71
soon /su:n/	3	3	12	10	11	12	45	35	60	50	55	60	56	44
course /kɔ:s/	2	2	18	16	13	18	65	15	90	80	65	90	81	19
Total			48	40	36	40	165	235	48	40	36	40	41	59

Source: Field Data 2024 by the Researchers

Key: MW – Moraic Weight; CW – Control's Weight; NA – Number Able; NN – Number Not able; PA – Percentage Able; PN – Percentage Not able

**Table 3.2: Short and Long Monophthongs in the Same Phonetic Environment
(Length/Weight and Meaning)**

S/N	WORD/ SOUND	MW	CW	SOUTH NA	EAST NA	WEST NA	NORTH NA	TOTAL		SOUTH PA	EAST PA	WEST PA	NORTH PA	TOTAL	
								NA	NN					PA	NN
								1.	live /ɪv/					2	2
2.	leave /li:v/	3	3	5	5	5	7	22	58	25	25	25	35	27	73
3.	hat /hæt/	1	1	15	16	14	10	55	25	75	80	70	50	69	31
4.	heart/hɑ:t/	2	2	4	4	4	3	15	65	20	20	20	15	19	81
5.	fill /fɪl/	2	2	10	8	10	7	35	45	50	40	50	35	44	56
6.	feel /fi:l/	3	3	18	19	19	18	74	06	90	95	95	90	92	08

4.1 Discussion of Findings

Table 3.1 presents the analysis of long monophthongs (i:, ɜ:, a:, u:, ɔ:) in the words “meet, learn, card, soon and course” respectively. It is discovered that the SNE speakers sampled have some challenges in producing long vowel sounds. Three of the words presented are underlyingly super-heavy and are, therefore, trimoraic as represented in the column. In Table 3.1, it is observed that the respondents only perform well in producing the weight unit in “course”, accounting for a total score of eighty-one per cent (81%). The score is only sixteen percent (16%) in “meet” with the same bimoraic weight. This outcome may be attributed to the quality and sonority of both the vowel and consonant sounds involved. For instance, /ɔ:/ is described as an open rounded vowel and /s/ is a sibilant consonant sound. These qualities contribute to the high sonority of the sounds, thereby helping the respondents to lengthen the syllable, “course”.

In the other three words, which are trimoraic, the respondents only performed averagely in “soon”, accounting for fifty-six percent (56%). The SNE respondents' performance is poor in the words “meet”, “learn” and “soon”. The performance could be explained in terms of the quality of the sound and in terms of mother tongue interference. In total, the overall performance in the long monophthongs accounted for forty-one percent (41%). This performance corroborates previous researchers' remarks that long vowel sounds are not contrasted in most Nigerian indigenous languages and this affects their realisation of English pure vowels (Adetugbo 2004; Josiah and Ngor 2022).

Figures 3.5.1 to 3.5.5 present the moraic analysis of the long monophthongs occurring in their respective syllables. Explicitly, two

words: “meet and course” are assigned two moras at the UR, while the other three: “learn, card, soon” are assigned three moras each according to their weight elements at the UR. The syllable “meet”, was reduced to a light syllable with one mora, while the super-heavy syllables in “learn” and “card” were reduced to heavy syllables with two moras at the SR as seen in Figure 3.5.2b and Figure 3.5.3b, respectively. Two of the words are given appropriate weight both at the underlying and surface representations. This means that the SNE respondents were able to pronounce the two words with appropriate weight just as they are represented at the UR. The given words are “soon” and “course”. This may be attributed to the quality and sonority of the vowel and consonant sounds involved (cf. Ewen and Hulst 2001).

Table 3.2 examines the data on short and long monophthongs in the same phonetic and phonological environments, having the same vowel quality. The only difference in these words is the difference in the length of the vowel. The aim is to ascertain if the weight of a segment, especially in minimal pairs, can affect meaning. It was observed during the data collection process that the respondents hardly showed any distinction between the pairs examined. More often, they tended to reduce the weighty segments and increase the weightless ones and also performed better at sentence or context level than at the word level. At the word level, the respondents hardly differentiated between the pairs. At the sentence level, some of them had to re-read the sentences after learning the meaning of the word in the context. This goes further to indicate that the length of vowels can determine the meaning of a word. This also corroborates earlier studies and scholars (cf. Akpan, 2010).

5.1 Summary of Findings and Conclusion

The “Phonological Weight of the Vocalic Systems in Nigerian English” has been the subject of this investigation. This article concentrates on investigating the long vowels only. The analyses are specifically carried out according to the stated objectives. For instance, the first objective was to find out if SNE speakers could produce English vowel weight at the surface level in the same way as SBE speakers. This was analysed using the moraic theory as represented in Figures 3.5.1 to 3.5.5 as well as in Table 3.1. Statistically, SNE’s performance accounts for forty-one percent (41%). It could be concluded that SNE do not produce vowel weight as compared with SBE surface level, even at the underlying level.

For the second objective about the weight criteria of long vowels as produced by SNE, the analysis is carried out in Table 3.2. The respondents' performance in producing the long vowels and their total percentage performance is forty one percent (41%). The performance implies that the production of long vowels by SNE speakers of English is poor or below average. During the data collection process, in most cases, it was noticed that SNE respondents did not observe any weight distinction between long and short segments, even when they were given in minimal pairs. This finding corroborates Adetugbo's (2004), Josiah and Babatunde's (2011) and Jowitt's (2019) findings.

The third and last stated objective on examining the correlation between weight and meaning shows that weight is associated with the meaning of words. The data are analysed in Table 3.2 and it is ascertained in the analysis that length can determine the meaning of words. In the course of the research, it was observed that the respondents did better in distinguishing between the length of vowels at the sentence level or connected speeches than at the word level. At some point, they had to repeat the reading after learning the meaning of the sentence.

This study hereby concludes that SNE lacks proper weight distinction. Apart from the respondents that are educated in the English language, most of the other respondents paid little or no attention to vowel distinction. Here, this study contrasts Eka (2001), which states that there is no significant difference in the vowel duration of ENE (Educated Nigerian English) and SBE (Standard British English).

It is based on this that the researchers recommend the teaching of the English language as a general course to undergraduates from their first year to their sophomore year, and even to their third year, irrespective of the students' main course of study. It should not only stop at the first year, as is obtainable presently in Nigerian universities. It is also recommended that teachers employed to teach English Language at the secondary school level should be qualified ones. They should also be carefully selected so that incompetent ones would not be brought into the system, so that those teachers would be able to lay a good and solid foundation for their learners.

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