

Allophonic Variations in Educated Yoruba-English Bilinguals' Pronunciation

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ABSTRACT

The study of Nigerian English phonology had been taken to the regional levels such as Hausa-English, Igbo-English and Yoruba-English by different scholars. This study is a response to the clarion call of Jowitt (2020:28) that the concentration of the scholars should be on the task of identifying, describing, and analyzing the forms of English usage in Nigeria for the purpose of working towards the codification of the variety called Nigerian English and, most importantly, the reception of the international recognition it deserves. While Standard English remains a model and a reference point against which other varieties can be evaluated, the local standard also needs to be specified, described, and recognized as belonging to the assemblage of world Englishes. A total number of 64 respondents comprising newscasters, lecturers, pastors, and part three University students were purposively selected for the study. The study employed Chomsky and Halle's Generative Phonology to generate rules which account for the variations attested in the realisations of conditioned past tense morphs by educated Yoruba-English bilinguals in Southwestern Nigeria. Findings reveal that the pronunciation of Nigerian broadcasters can be described as a supportive model of Standard British English for Nigerian users of English. Also, noticeable variations in the realisations of the conditioned past tense morphemes by other participants; lecturers, pastors and students can be described as the reflections of Nigerian spoken English which can be arranged in form of re-written rules explicable within the scope of Generative Phonology.

Keywords: Allophonic, Bilingual, Morphophonemic, Pronunciation, Variation.

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I. INTRODUCTION

The use of English in Nigeria among the bilinguals manifests linguistic features that differentiate it from Standard British English at phonological, lexical, morphological, syntactic, and semantic levels. The reasons adduced to this are number of historical, linguistics and social variables such as the influence of orthography or spelling, articulatory setting, inevitable dialect differentiation of a language spoken over a wide geographical area, socio-cultural values, and linguistic influence, Adetugbo and Awonusi (2009).

At the phonological level, different scholars such as Udofot (1997, 2004), Akinjobi (2004), Oladipupo (2008) and Sunday (2010) conclude that suprasegmental phonology constitutes the main hurdle to Nigerian learners and speakers of English as a second language. Udofot (2020) explains that at suprasegmental level, the West Africa accents are most noticeable. Many learners and users of English in a second language situation, as observed by Sunday and Oludotun (2020:79) have great difficulty with suprasegmental features such as stress, intonation, and rhythm. It is of importance to note that it is not only the suprasegmental phonology that poses a problem to users of English in Nigeria but also the realization of allophones of some phonemes at the segmental level. For instance, the past tense allomorphs of English which are phonologically conditioned are realised by non-native speakers of English with the linguistic rule they are familiar with. An allomorph is the different realization of the same phoneme based on the phonological environments in which it occurs. While the native speakers depend on and conform strictly to the morphophonemic rules, the non-native speakers adhere to the linguistic rules they are familiar with in all situations. Rasim and Nidiham (2020:4) explain that while native speakers of any language implicitly apply basic morphophonemic rules during all language processing tasks, ESL bilinguals could find it very difficult to apply, especially when the phonological system of their first language is markedly different from that of the target language. This study supports Bamgbose's proposal in Akinjobi (2004:558) that the concentration of the scholars should be on the task of specifying, describing, and analyzing the forms of English usage in Nigeria. Also, Jowitt (2020:28) noted that Nigerian English in the spectrum of varieties of English around the world has hardly received the attention it deserves, hence, the need for more impressive

studies is sacrosanct. This therefore calls for a detailed data-based description of such variety with adequate features for identification for it to be recognized as a distinct variety of Standard English. This study, therefore, examines the realizations of past tense allomorphs of educated Nigerian speakers of English.

II. OBJECTIVES OF THE STUDY

This study aims to examine the allophonic variations in the pronunciations of educated Nigerian speakers of English with the following objectives:

- i) to identify the predominant allophonic variations of the conditioned past tense morphs that characterize Educated Yoruba-English pronunciations.
- ii) to examine whether the realizations of allophonic variations by selected participants impede national and international intelligibility.

III. RESEARCH QUESTIONS

This study provides answers to the following questions:

- i). what are the predominant allophonic variations of the conditioned past tense morphs that characterized educated Yoruba-English pronunciations?
- ii). to what extent do the realizations of allophonic variation impede both national and international intelligibility?

IV. MORPHOPHONEMIC VARIATION IN ENGLISH

Morphophonemics or Morphophonology are used interchangeably to explain the study of the interaction between morphological and phonological processes. Spencer (2000:100) explains the term as the interaction of word formation with the sound system of language. The idea of morphological conditioning and phonological conditioning accounts for the interaction of phonemes within morpheme, the interaction which is accounted for within an overall morphophonological system. While morphology studies the word formation of a language, phonology is concerned with the sound system. Morph, morpheme, phoneme, and allomorph are the primary concepts of morphophonemics as observed by Akinola (2020:13). It can therefore be explained further that morphophonemics is the phonemic realization of allomorphs of a given language.

The term is also described as a process that presents formalized rules that predict the allomorphic variation in the morpheme of a given language. This explains that variations that involve alternation in the shape of the morpheme are not just an arbitrary occurrence, but an outcome of phonological conditioning, Ubong (2009). The above analysis can be exemplified with the conditioned English plural morpheme and past tense morpheme.

The English plural morph 's' is phonologically conditioned. Akinola (2020: 13) explains that the plural allomorphs alternate between three distinct allomorphs, depending on the preceding phonemes. Thus, when the plural marker 's' is added to morphs ending with voiceless sounds, aside sibilant and affricates /s, tʃ/, it is realised as 's'; if it occurs with nouns ending with voiced sound except sibilants and affricates, it is produced as 'z'; and if it is added to nouns ending with sibilants /s, z/ and affricates /tʃ, dʒ/ the plural marker 's' is released as 'iz'. The above instances can be briefly presented as:

hat + s → hats [hæts] = /s/ → [s]
 card + s → cards [ka:dz] = /z/ → [z]
 church + s → churches [tʃʌtʃɪz] → [iz]

Also, the conditioned past tense morpheme '-d' has three allomorphs /t, d, id/. The phonological conditioning of these allomorphs explains that if the regular verb ends with voiceless sound aside /t, d/, then the past morpheme '-d' becomes /t/ as in the example, kick + d = [ki:kt]. If the regular verb ends with voiced sound except for alveolar stops such as /t, d/, then it is realised as /-d/, as in bag + ed = [bægd]. Relatively, if the past tense '-d' morph occurs after any of these alveolar stops /t, d/, it is realised as [id], as in 'limit + d = [limited], end + d = [endid]'. The above analysis can also be summarized thus:

kick + ed = kicked [ki:kt] = /d/ → /t/
 bag + ed = bagged [bægd] = /d/ → /d/
 wed + ed = wedded [wedid] = /d/ → /id/

The major concern of this paper is on the realization of phonologically conditioned past tense morphs by the selected participants.

Rasim and Nidham (2000) investigated the morphophonemic processes on the deep and surface levels with reference to English derivational suffixes. Findings revealed that not all derivational suffixes affect the phonology of the derivative, and also, morphophonemic represents only the abstract level of the morphology and phonology interaction.

Anderson (2008) discussed the phonologically conditioned allomorphy in the morphology of Surmiran (Rumantsch). The research was triggered by some examples in the earlier work of Andrew Carstairs (1986) that seemed to fall inconveniently between the stools of phonology and morphology. These are cases where some alternations whose forms are not plausibly attributed to the operation of phonological rules nonetheless seem to be conditioned by factors that are purely phonological. The work was examined within the purview of Prince and Smolensky's (2004) Optimality theory. From the finding presented, the study concludes that Surmiran shows a rich system of phonologically conditioned allomorphy where the conditions governing the use of one allomorph or the other are a matter of the phonological environment in which the stem appears.

Akinola (2020) conducted a morphophonemic study of the 's' morph in Yoruba-English Newscasters' mastery of the realisations of the allomorphs, having been exposed to training in pronunciation. The newscasters were listened to and different realisations of morpheme 's' by each participant were analysed quantitatively. Findings show that out of 1,207 occurrences of 's' morph, 840 representing (69:60%) were realised as [s], [z], and [ɪz] following the native speakers' patterns. In contrast, 306 (25.35%) distinctive Nigerian English variants were articulated while 61 (5: 05%) were instances of deletion. The study, therefore, presents Yoruba-English Newscasters' speech as sophisticated English users and as well as a model for Standard Nigerian English Variety.

Fasunon (2020) examined the pronunciation of the regular plural morpheme (-s) or (-es) by selected Nigerian English teachers in Southwestern Nigeria using Optimality theoretical analysis. A total number of twenty-four randomly selected English language teachers from public and private secondary schools were used for the study. Fifteen regular words woven into isolated sentences and a reading passage served as the data for the study. The study revealed that the participants used faithfulness constants more than markedness constraints in realizing the plural marker 's' or 'es' of the test words. The participants' realisations of the regular plural marker, expected in words whose bases end with a voiceless non-sibilant sound, vary from what is obtainable in the received pronunciation. Some of the participants also omitted the regular morpheme completely in pronouncing the targeted words, which led to a case of no allomorph.

Agboyinu and Adekunle (2020) carried out research on Phonosyntactic Rule ordering involving rule bleeding relationship between phonological units and past tense allomorphs in educated Yoruba English. The semi-spontaneous speeches of selected educated Yoruba-English speakers for the purpose of checking the extent to which they approximate to the Standard British English rule bleeding order in the production of disparate clusters without articulatory complication were examined. The speeches of the participants were subjected to qualitative analyses using Chomsky and Halle's (1968) Generative Phonology theory as a framework. The frequency of the correctly pronounced forms was counted to derive quantifiable data which were analysed using simple percentage valuation. The findings of the study revealed that the educated Yoruba-English speakers do not apply the rule-bleeding principles to consonant clusters generated by regular past tense morphemes which results in articulatory complications and mispronunciations. It is therefore recommended that teaching of phonological rules and rule ordering concepts should be introduced at secondary and tertiary levels of education to reduce pronunciation complications in Nigerian English. All the above studies showed that the realization of morphophonemic alternations is phonologically conditioned, and rule ordered. This study intends to examine how compliant are the educated Yoruba-English bilinguals' pronunciation to these ordered rules of allophonic variations of English.

V. THEORETICAL FRAMEWORK

The analysis of the conditioned past tense morphemes by selected educated Yoruba -English bilinguals carried out in this study was hinged on Chomsky and Halle's (1968) Generative Phonology Theory. The theory studies the processes involved in the transformation of segments from their underline representation to their phonetic representation. This explains that the theory applies a set of phonological rules that process underlying theoretical forms of a language into a surface representation that is heard, Oladipupo (2014). The theory recognizes three levels of representations phonemic level, transformational level, and phonetic level. The interaction among the three different levels is a result of phonological rules applying to the underlying forms of the language and yielding surface phonetic representation. The concern of the theory, therefore, is to generate rules that capture all levels of representation in a language.

Harrington (2004) in Akinola (2020) emphasizes rules that link the often highly abstract underlying forms that are related. Chomsky (1968) asserts that phonological description is not based on analytic

procedures of segmentation and classification but is rather a matter of constructing the set of rules that constitute the phonological component of grammar. This explains that phonological conditioning is inherently governed by a bundle of phonetic features and the phonemes themselves. Thus, the concern of Generative phonology is the formalization of rules to capture the phonological conditioning Chomsky and Halle in Schane (1973) provide another insight into the alternation of sounds in generative phonology by adopting distinctive features theory. The relevance of this theory is hinged on the assumption that sound segments are a set of properties, 'bundle of features' rather than as indivisible entities. Specifically, features are as extracted from articulatory or acoustic properties of a segment to capture phonological rules earlier explained. In view of the above, it is important to explain that generative phonology through distinctive features is capable of accounting for the variations and alterations involved in the realization of conditioned past tense morpheme by educated Yoruba-English bilinguals because second learners' spontaneous performance cannot be described as a collection of deviations or non-deviations, but a reflection of their own rules which can be arranged in form of re-write rules explicable in the input and output purview of the generative phonology.

VI. METHODOLOGY

A total number of 64 participants purposively selected across Southwestern Nigeria comprising 9 Newscasters, 15 higher institution lecturers, 10 pastors and 30 part three university students were used for the study. The recorded broadcast news of 9 Newscasters selected across the Southwestern Nigeria; Nigeria Television Authority, channel 10, Lagos, Ogun State Television, Ogun State, and Adaba FM, Akure, Ondo State, were collected for the study. Also, the recorded lectures of randomly selected lecturers of faculty of Law and Department of English across three universities; University of Ibadan, Oyo State, Ekiti State University, Ekiti State, and Joseph Ayo Babalola, Arakeji in Osun State to represent Federal, State and Private Universities respectively. Recorded sermons of selected Pentecostal and Orthodox churches from Ekiti and Ondo States were collected for the study. 10 students were selected from each University used for the study. A prepared words list extracted from the recorded news, lectures and sermon was given to each participant (student) to be read into a tape recorder. The recorded voices of the tested words were listened to by the researcher for the realisations of conditioned past tense morphemes by the chosen respondents. The data were listened to several times for transcription purposes. In order to determine the extent of the participants' correctness in the production of the tested English conditioned past tense morphemes, the voices were scored, and marks were awarded. Data collected were analysed using simple percentages. Phonological analysis was equally carried out using generative phonological theory.

VII. PRESENTATION AND ANALYSIS OF DATA

The study described the production of conditioned past tense morphemes by educated Yoruba-English bilinguals. The lexical items and the resultant variant realisations of the respondents were presented in Table I, the participants', scores awarded, and percentages were displayed in Table II. It is of importance to note that relevant items extracted from the recorded news, lectures and sermons were used to prepare a word list given to the selected university students to be read into a tape recorder.

TABLE I: REALISATIONS OF THE LEXICAL ITEMS BY THE RESPONDENTS

Lexical Items	Morphophonology Rules	Standard British English Production	Educated Yoruba-English variant realisations
picked	'ed' becomes /t/ after verbs that end in voiceless sounds	/pi:kt/	/pi:kt/ , /pi:kd/
booked		/buk/	/buk/ , /bukd/
bumped		/bʌmpt/	/bʌmpt/ , /bʌmpd/
equipped		/ɪkwɪpt/	/ɪkwɪpt/ , /ɪkwɪpd/
developed		/dɪveləpt/	/dɪveləpt/ , /dɪveləpd/
B	'-d' or 'ed' becomes /d/ after verbs that end in voiced sounds	/pa:keɪdʒd/	/pa:keɪdʒd/
increased		/ɪŋkrɪ:zd/	/ɪŋkrɪ:sd/
curbed		/kɔ:bd/	/kɔ:bd/
bagged		/bægd/	/bægd/
carried	'd' or 'ed' becomes /ɪd/ after verbs that end with alveolar stops: /t,d/	/kærɪ:d/	/kærɪ:d/
indebted		/ɪndɛbtɪd/	/ɪndɛbtɪd/
limited		/lɪmɪtɪd/	/lɪmɪtɪd/
concluded		/kɔŋkludɪd/	/kɔŋkludɪd/
awarded		/əwɔ:dɪd/	/əwɔ:ɛd/ , /əwɔ:dɛd/

The variant realisations of the Educated Yoruba-English bilinguals as displayed in Table 1 shows that some of the participants' obeyed the phonological rule of conditioned past tense morpheme pronunciation, hence, correct realisation of the tested words was recorded. It was also observed that the realisation of past tense morpheme 'd' or 'ed' after verbs that end in voiced sounds does not constitute a problem to the participants. In the pronunciation of past tense morph 'd' as /t/ after verbs that end in voiceless consonant and past tense 'd' or 'ed' as /id/ after verbs that end with voiced and voiceless alveolar stops; /t,d/, variants of pronunciation were recorded. This explains that most of the participants obeyed the rules they are familiar with as against the Standard British English morphophonemic rule.

TABLE II: OVERALL PERFORMANCE OF REALISATIONS OF CONDITIONED PAST TENSE MORPHEMES
BY THE SELECTED PARTICIPANTS

Participants	Number of Items tested	Correct	%	Incorrect	%
Newscasters	5	5	100%	Nil	Nil
	5	5	100%	Nil	Nil
	5	4	80%	1	20%
Total	15	14		1	
Lecturers	5	3	60%	2	40%
	5	5	100%	----	----
	5	3	60%	2	20%
Total	15	11		4	
Pastors	5	2	40%	3	60%
	5	4	80%	1	80%
	5	1	20%	4	80%
Total	15	7	40%	8	60%
Students	5	2	40%	3	60%
	5	5	100%	----	----
	5	1	20%	4	80%
Total	15	8	60%	7	40%

In the Table II above, the conditioned past tense morph 'ed' after verbs that end in voiceless sounds was correctly realised by all the participants (newscasters) making 100%, also 100% was recorded in the realisations of the morph 'd' or '-ed' by the same respondents after verbs that end in voiced sounds. A significant of 80% was equally recorded in the pronunciations of morph '-d' or '-ed' after the alveolar stops: /t, d/. In the realisations of the tested morphemes: /t/, /d/ and /id/ by the lecturers, the following results were recorded; 60%, 100% and 60% respectively. The third group comprising the Pastors recorded 40% in the realisation of /t/, 80% in the realisation of morph /d/ after voiced sounds and 20% in the pronunciation of /id/ after alveolar sounds. The respondents in the fourth group recorded 40% in realisation of /t/, 100% in the realisations of /d/ and 20% in the realisations of /id/ morphemes.

VIII. FINDINGS AND CONCLUSION

The overall performance shows that the Newscasters acquaint themselves with the rules guiding the realisation of conditioned past tense morphs of English, hence, the tested past tense morphemes were correctly realised. This might be as a result of pronunciation trainings obtained by them. This finding corroborates the assertion of the previous studies (Soneye & Faleye, 2015; Akinola, 2020, Sunday & Ayinde, 2020) that the pronunciation of the Nigeria Newscaster is locally and internationally intelligible, hence, it can stand as a supportive model of Received Pronunciation to Nigerian speakers of English. Equally, the performance of lecturers revealed that while some take cognizance of the phonological rules conditioning the formation of past tense morphemes, most of them applied the rule they are familiar with. The variations recorded in the production of the selected participants reflect the predominant allophonic variations that exist in the production of conditioned past tense morphemes of Nigerian spoken English. It is of importance to note that the variations in the realisations of the past tense morphemes by the educated Yoruba-English bilinguals' do not affect both national and international intelligibility but explain that they are variants of the same phoneme which are explicable within the phonological rule of Chomsky and Halle's Generative Phonology.

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