UNIQUENESS OF GHANAIAN ENGLISH PRONUNCIATION: ANALYSIS OF DENTAL FRICATIVE SOUNDS

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Abstract:
The variety of English used in Ghana is not the same as the one used in Britain, America or Nigeria. There seem to be observable differences in Ghanaian English pronunciation, semantics, lexis and grammar which have led to two opposing views. The first group sees those differences as errors that need to be corrected. The second group, on the other hand, believes that not all the differences are errors. Rather, there are some acceptable differences which distinguish the variety of English used in Ghana. It is against this background that the study sought to identify and describe some phonological differences in educated Ghanaian English to contribute to the on-going debate on Ghanaian English. Using Kachru’s ‘Nativisation Theory’, the research argues that there is a Ghanaian variety of English characterized by unique phonological features such as difficulty in pronouncing dental fricative sounds /ð/ and / θ/. To support this argument, instances of “Ghanaianisms” were collected from spoken sources and analysed. A text was read by participants and recorded into a Speech Analyser and described qualitatively. The study has confirmed that, the phonological differences in the English in Ghana are mainly brought about by nativisation process. It is believed that the study will contribute to the on-going debate on Ghanaian English and its codification.

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1. Introduction

Ghana is one of the countries where the English Language was used after its introduction in Africa. English was first introduced on Gold Coast by the Europeans in the 16th Century (Adika, 2012). Since then, English has been used as the language of education, administration, law and governance. According to Sey (1973), English is the official language of Ghana. Studies on English in Ghana clearly show that the language is not used the same way as it was transported to Ghana but it is currently used in a way which is peculiar to the Ghanaian context.

Ghanaian English is the variety of English languages spoken in Ghana, a former British colony. Adika (2012:156) notes that Ghanaian English “has been travelling the delicate expansionist path of innovation, adaptation, and maintenance of standards over the years”. This suggests that Ghanaian English is characterized by innovations, that is, the language has changed to suit its new environment which makes it distinct from the transported language while at the same time the language maintains some standards of native speakers.

What actually accounted for the spread of English in the world? Crystal (1977) identifies two main factors: the expansion of British colonial power towards the end of the 19th Century and the emergence of the United States as the leading economic power in the 20th Century. British colonial power spread like bushfire to almost all parts of the world, including the Americas, the West Indies, Australia, South East Asia and Africa. In West Africa for example, the British colonized countries like Ghana, Nigeria, Sierra Leone and Gambia. All countries in West Africa, East Africa, South East Asia and others later formed a world body known as the Commonwealth.

The American factor also had an influence on the spread of English. American technological advancement (e.g. the internet), has oiled the wheels of the diffusion of English words into the cultures of other nations. The United States not only has nearly 70% of all mother-tongue speakers in the world but its variety of English is also fast gaining currency (Crystal, 1977). Again, “American power and influence are felt throughout the world; and it is American English that now provides the initiatory power for the world’s lingua franca” (Dillard 1975: 56). In Ghana, for instance, a study conducted by Gyan (2004) on the influence of American English on Ghanaian English shows that “Americanisms” are fast gaining currency in educated Ghanaian English. Some of the lexical items found included candy, truck, drugstore, OK, mayor etc. This is normally brought about as a result of international tourism and technical assistance programmes given by the United States.

Kachru (1985) devised a means of classifying the users of the English language worldwide by using three concentric circles. They are: Inner Circle, Outer Circle and Expanding Circle. According to him, the Inner Circle refers to countries where English is used as a native language (ENL). The language is acquired naturally and used in all domains of social and personal activity. Such countries include the United Kingdom, the United States, Australia, Canada, and New Zealand. There are also small groups of native speakers in South Africa, Zimbabwe and Namibia. The Outer Circle comprises countries that use English as a second language (ESL). In such countries, English has either an official or semi-official status. Most of the British colonies fall
within this group. Here, English has a wide range of functions in education, administration, the judiciary, the media and others. The Expanding Circle is also made up of countries which do not have a history of colonisation by the members of the Inner Circle but recognize the importance of English as an international language. In these countries, English is seen as a foreign language (EFL) and it has no official status. Some of these countries include; China, Germany, Japan, Norway, Burma, Libya, etc. The non-native users of English, who by their geographical distribution, numbers, and varied uses, have brought about the spread of English throughout the world.

2. How English Came to Ghana

By Kachru’s classification, Ghana falls among the colonised countries that belong to the Outer Circle and the fact that we were colonised suggests that English was somehow ‘imposed’ on us. History has it that, around the 15th Century, the first British sailors set foot on the Gold Coast, now Ghana to trade in gold and spices. Communication between the Europeans and the indigenous people was a problem which greatly affected their mission to trade with the local people. With time, the Europeans started training some Africans to use them as interpreters to help in their trading activities. According to Sarfo-Adu (2007), by the end of the 17th Century, a number of Ghanaians were capable of interpreting the European languages, especially English. Notable amongst them is the chief of Cape Coast, Cudjoe Cabosheer, Philip Quaque, Jacobus Capetein and Anthony William Amo. The governor at the time, Sir Charles McCarthy, made sure that English was properly taught in all government schools. As a result, he ordered textbooks for use in the schools and also made sure that English culture was inculcated in the local population (Sackey, 1977). Another contributory factor was the Christian Missionaries who encouraged the study of the Bible in schools. All of these culminated in English becoming the de facto lingua franca for the literate population in the country.

3. The Role English Plays in Ghana

The role English plays in Ghanaian societies cannot be underestimated. Ghana has over 60 indigenous languages which make it very difficult to understand a speaker from another part of the country. English, therefore, serves as the means to communicate in such situations. It is needed for practical interaction purposes, for higher education and employment opportunities. English is the language for government business, religion, parliament, the judiciary and international business. Above all, English is the language that identifies Ghana as an English-speaking country.

However, it must be noted that the kind of English used in Ghana is quite different from the British Standard (i.e. the Target English) in the sense that ours varies in terms of pronunciation, meaning and vocabulary, grammar and so on (Freeborn, 1998). Thus, pronunciation, which forms an aspect of phonology, is drifting from the Target language leading us to distinctive phonological features in Ghanaian English which this study tries to explore. Sekyi-Baidoo (2002) observes that where varieties are said to have resulted out of others, they have even established their identity through their deviation from their Target language.
4. Statement of the Problem

The kind of English spoken by most educated Ghanaians is quite different from the native varieties like British or American English. Again, the number of ethnic groups scattered across the length and breadth of Ghana has led to modifications in the phonological aspect of Ghanaian English. The way an Ewe speaker (A person from Volta Region of Ghana) pronounces a word in English, to some extent, will differ from that of an Akan speaker (a person from Ashanti, Brong, Akyim, Akwaupim, Fante). Thus, this study tried to identify some possible variations in educated Ghanaian English by looking at dental sounds like the basis to establish the unique features that can be found in the phonological aspect of Ghanaian English.

4.1 Research Questions

The study is guided by the following questions:

1) What defining phonological features exist in Ghanaian English?
2) How much, if any, does it deviate from the British Variety in terms of phonology?
3) Should Ghanaian English, because of its varied features, be regarded as inferior to other World Englishes?

4.2 Significance of the Study

In the first place, this study will add to the existing knowledge on identifying the unique features of Ghanaian English. Again, it could serve as reference material for researchers probing into non-native varieties of English, especially in the area of phonology. Also, the study will clarify the issue of standard and non-standard varieties of English. Teachers and other critics of Ghanaian English will come to terms that Ghanaian English has its unique phonological features which need to be accepted in the same way as the British or the American Standards. Finally, the study has implications for teacher training as well as language teaching and learning in Ghana.

5. Review of Related Literature and Theoretical Framework

5.1 Standard English

What is Standard English? What features make a particular variety of English Standard? These questions are important because Standard English is perceived to be the most prestigious of all varieties of English and it has been used as a yardstick in assessing other varieties of English including Ghanaian English. Strevens (1983) defines Standard English as a particular dialect of English, being ‘universally accepted’ as the ideal educational target in teaching English.

From the above definition, it could be observed that Standard English is not in a way limited to any locality or geographical area and can therefore be found everywhere. It is also the language of education in the English-speaking world and can be spoken with any accent.

Standard English was believed to have originated in the southeast of England (Trudgill, 1999). London was the centre of government, trade and commerce, and so the language of the social group with the highest degree of power, wealth and prestige became “attractive” to others who sought to copy it. Thus, Standard English evolved; it was not produced by conscious design (Strevens, 1983). It was later codified through printing to become standard. From the British point
of view, Standard English is linked with high status and widely described accent known as Received Pronunciation (RP) because of Daniel Jone’s authoritative work, *An English Pronouncing Dictionary, (1948 edition)* which concentrated mainly on RP. It was later associated with the BBC because the official newscasters did so with the RP.

The fact that Standard English is historically associated with Britain has led to some kind of imposition on the other varieties as non-standard. This cast a slur on the non-native varieties including Ghanaian English. Thus, from the British point of view:

1) There is only one and only one way of speaking or writing the English language.
2) The deviations from this norm are illiteracies or barbarisms and that non-standard forms are irregular and perversely deviant (Milroy and Milroy, 1991: 40).

Trudgill (1999) therefore put the argument to rest by saying that Standard English comes in a number of ways as American Standard or British Standard. He seems to suggest that Standard English is country-specific; for just as the British or Americans may have their Standard so the Nigerians or Ghanaians may have theirs also without any restriction. What is more important is that the variations should not be so overwhelming to the extent of affecting *intelligibility* among speakers of English.

5.2 The Non-Native Englishes

Kachru (1985) refers to the non-native varieties as ‘new Englishes’. He describes them as varieties of English that are not native and goes on to give their characteristics as:

1) They have an extended range of uses in the sociolinguistic context of a nation.
2) A process of nativisation of registers and styles has taken place both in formal and contextual terms.
3) A body of nativised literature has developed which has formal and contextual characteristics, which mark it as localized.
4) They have a long period of use.

In this way, the new Englishes come with their own unique features suited to their linguistic environment. For instance, Scheider (1966) in his research, *West African Pidgin English*, identifies the practices of speakers dropping consonants in word-initial and word-final positions; insertion of vowel sounds between consonant clusters, the elimination of diphthongs and the shortening long vowels.

In defense of non-native Englishes, Bamgbose (1997) in his article, *Non-native English on Trial*, rebuts all critics on the grounds that those accusations stem from a prejudiced standpoint purported to favour the native varieties. He argues further that language cannot remain static and it is an aspect of growth and adaptation to the cultural and linguistic environment that varieties must develop.

6. Ghanaian English

There has been a debate as to whether there is such a thing called *Ghanaian English*. Out of which have emerged two opposing groups; those who critically question the existence of the Ghanaian variety of English and those who recognize the existence of a Ghanaian variety of English. These two views will be useful to this study.
6.1 Opinions against the Existence of a Ghanaian Variety of English

This school of thought views Ghanaian English as a deviation from British English. They see the deviations as errors that need to be perfected to meet the target language. Some of these advocates include: Sey (1973), Gyasi (1991), Ahulu (1994) and Annor - Nimako (2004). Annor-Nimako (2004) acknowledges that Ghanaians show deviations from British English in syntax, semantics and pronunciation. Again, local idioms and loan words emanating from the mother tongue interference have been introduced in Ghanaian English. He, however, sees these deviations as errors and says in the Preface to the book; “The aim of this book is to make the reader sensitive to good English”. Sey (1973) rejects a Ghanaian variety of English on the premise that English is not used in many situations in Ghana and only 30% of the Ghanaian population use English. An observation such as this might imply that English plays no significant role in Ghana. Again, he suggests that words such as enstool, outdooring, chop bar, and fitter labelled Ghanaian are not overwhelming enough to be granted a variety status. Ahulu shares a similar view by asserting that “no educated Ghanaian will accept anything other than British standard variety; for the educated Ghanaian from the beginning aspires to be proficient in British English”.

6.2 Opinion in Favour of a Ghanaian Variety of English

This second group holds that Ghanaian English exists. For instance, Asante (1995) makes a strong case for a Ghanaian variety of English. She dismisses the position of Sey, Gyasi and Ahulu, by saying that their argument on the forms claimed to be peculiar to the Ghanaian environment. Using the nativisation model, Asante supports her position with examples of phonological, morphological, syntactic and lexico-semantic peculiarities of the Ghanaian variety of English. She contends that users of English in Ghana can easily understand coinages like fitter, chop bar, bush meat, lorry station but the outsider who may not be a native speaker of English or a non-native speaker needs further explanation of such vocabulary items. Asante’s work suggests that we must stop viewing Standard English from the British Standard to the realization that Ghanaian English is changing shape in a non-linguistic environment. Norrish and Dolphyne (1974) recognize the existence of a Ghanaian variety of English when they say, “there are no doubt regional varieties of English throughout the world…that need to be recognized…and above all need to be described linguistically” (p.83).

Owusu-Ansah (2004) posits that there are three varieties of English in Ghana: native English, educated Ghanaian English and learner English. He suggests that educated Ghanaian English is internationally intelligible and still retains a recognizable Ghanaian flavour. He points out the unique features of Ghanaian English used by educated Ghanaians. In phonology, for example, Owusu-Ansah talks of a 9-vowel system, vowel harmony and accentuated and intonational system influenced by Ghanaian languages. The grammar is characterized by left-dislocated constructions, the conflation of forms and odd couples, while the lexis displays a considerable amount of loan words and semantic change. On how to view the variations, Owusu-Ansah (1991) argues that when a variety of non-native English attains a status, we do not have to use the norms of native varieties as a yardstick to measure the deviations. This view opposes Gyasi, Ahulu and Annor – Nimako’s views that anything non-native constitutes errors that must be corrected.
The unique features that characterise the pronunciation of Ghanaian and other Englishes are vast and obvious - replacement of dental fricatives with stops; substitution of /a/ for /æ/, /æ/, /a/; absence of the schwa /ə/; reduction of diphthongs and triphthongs into monophthongs; consonant cluster simplification and many others, and must be seen as the markers of our sociolinguistic and cultural identities. We must not be quick to attack them simply because they deviate from a foreign standard, RP. While many prescriptive-minded critics would prefer to see spelling pronunciation in Ghanaian English as an error to be eradicated, its presence must be perceived within a broader context (Mesthrie, 2004).

Another area that Ghanaian English exhibits a unique identity from other varieties of English, including the native varieties, is phonology. On how consonants are used, for instance, the realization of non-post-vocalic /r/ as an approximant or a trill depends on the quality of the r-sound in the speaker’s L1 (Akan has an r-sound similar to that of English; Dolphyne 1988: 27-29) and on the speaker’s phonetic competence. /l/ is not part of the Hausa or the Akan phoneme inventory (Dolphyne 1988: 29), so some of these speakers more or less consistently substitute it with /l/ or /l/ in Ghanaian English. [l] and [r] are in the complementary distribution or free variation in the major Ghanaian substrate languages (e.g. Akan, Dolphyne 1988: 42-43; Ewe, Schadeberg 1985: 9; Dagbani, Wilson 1977: 123), and they may be used interchangeably on the lower end of the Ghanaian English continuum, especially by older speakers who had little formal education. The realization of /ʧ, ʤ/ also varies according to the Ghanaian language backgrounds of Ghanaian English speakers, the major Akan dialects Twi and Fante having /ʧ, ʤ/ (Dolphyne 1988: 29).

From our discussion so far, it has been established that a lot of literature exists on the existence of Ghanaian English but there is not much work done on the unique phonological features that distinguish Ghanaian English from other varieties. Bamgbose (1982) and Udofot (1997) for instance worked on the stress patterns used in non-native varieties specifically, on Nigerian English. Dolphyne (1988) Schadeberg (1985) and Wilson (1977) tried to find out why some Ghanaians are not able to pronoun certain consonant sounds such as: /l/, /r/, /ʧ/ and /ʤ/. Gyasi, Ahulu and Annor – Nimako’s work opposed the existence of Ghanaian English while Asante, Owusu-Ansah and others strongly hold that Ghanaian Language exists with its distinctive characteristics. Notwithstanding all these, much study needs to be carried out especially in the area of dental sounds by Ghanaian speakers of English to add to the existing knowledge of Ghanaian English. This is what this study tries to do.

6.3 Framework for the Study

Language and culture are related; as there are some elements of culture deposited in Language. Therefore, language must be able to convey the worldviews and cultures of its users. English language is a non–native language in Ghana and the need for the language to cater for the demands of Ghanaians due to the socio-cultural differences between Ghanaians and native speakers of English necessitated the nativisation of English to suit the Ghanaian environment (Bamgbose, 1995:1). The pragmatic use of English in Ghana is one of the ways English has been nativised to project the cultures, traditions and customs of Ghanaians to the world.

The study, therefore, adopts the nativisation theory proposed by Braj Kachru (1992) because it is the theory that initiated the controversy among linguists regarding the use of
English in non-native language communities. According to Kachru (1992), nativisation is the process which creates a localized linguistic identity of a variety. The term ‘process,’ refers to those productive mechanisms which lead to the modification of a target language. The productive mechanisms underline collocation innovation, syntactic simplification or overgeneralization and native rhetorical stylistic devices. By localized linguistic identity is meant that through the processes “the linguistic innovations are determined by the localized functions of a second language variety, the culture of conversation and the communicative strategies in new situations and the transfer from local languages”. Nativisation consists of two major components - linguistic and cultural. The linguistic component is made up of innovations found at the various levels of linguistic structure like phonetic, morphological, syntactic and semantic. The cultural component refers to the acculturation of English where elements of the local culture are shown in the lexicon.

Nativisation draws its support from two major language phenomena that are language contact and second language acquisition. According to Kackru (1986) language contact refers to a situation where two or more languages come into contact for political, geographical, historical or educational reasons. The natural outcome of such contact is linguistic innovation as we find in Ghanaian English. The totality of these deviations in phonology, syntax and discourse provides the basis for labelling various formations such as Ghanaianisms, Americanisms and Nigerianisms etc. Opposition views to the existence of Ghanaian need to study Kachru’s Nativisation Theory in order to have a second thought.

7. Methodology

The study used descriptive analysis by the use of a qualitative approach.

7.1 Sample Population

The population of the study is educated Ghanaians who have attained different levels of proficiency. Four (4) speakers of Ghanaian English were selected based on their ethnic backgrounds. Three of the participants were final year Senior High School Students (SHS) from different schools. In addition, one (1) teacher who teaches English at the SHS level was selected for the study. Finally, a VOICE, representing British Standard English, was used as one of the participants. It was necessary to get a native VOICE which could serve as a standard measurement in order to assess the extent of the deviation, if any, and how much the deviation could be. Since the researcher could not fall on any British National, he relied on The Longman Online Dictionary of Contemporary English which gives an accurate pronunciation of British English. The dictionary also provides easy access for external audio recording hence the decision to use a VOICE as one of the participants. In all, five (5) participants were used for the study.

<table>
<thead>
<tr>
<th>Participants</th>
<th>Background</th>
<th>Identification (Id)</th>
<th>Sex</th>
<th>Native Language</th>
</tr>
</thead>
<tbody>
<tr>
<td>Part 1</td>
<td>Ghanaian Student</td>
<td>Bright K.</td>
<td>Male</td>
<td>Ewe</td>
</tr>
<tr>
<td>Part 2</td>
<td>Ghanaian Student</td>
<td>Besty R.</td>
<td>Female</td>
<td>Twi</td>
</tr>
<tr>
<td>Part 3</td>
<td>Ghanaian Student</td>
<td>Job T.</td>
<td>Male</td>
<td>Ga</td>
</tr>
<tr>
<td>Part 4</td>
<td>Ghanaian English Teacher</td>
<td>Eric M.</td>
<td>Male</td>
<td>Dagomba</td>
</tr>
</tbody>
</table>

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7.2 Data Collection
Discourse Data was used for the study. The method employed was field research where read/spoken texts were recorded and later transcribed for the analysis. Thus, classroom discourse, in the form of reading and pronunciation was used for the study. The data was in two parts; Text One was to reduce the observer’s paradox during the recording. Text Two was to be used to check the possible variations in dental sounds. A written text was read by participants, recorded into a Speech Analyzer, transcribed and used for the study. This is because the spoken matter is believed to portray variations between native and non-native English. Elements of ‘Ghanaianisms’ can be found in the pronunciation of the participants.

7.3 Procedure
A. The Software Used: Speech Analyzer
Speech Analyzer version 3.1 is a computer program for acoustic analysis of speech sounds developed by Sil Language Technology. Speech Analyzer can be used to do the following tasks:

- Perform fundamental frequency, spectrographic and spectral analysis, and duration measurements.
- Add phonemic, orthographic, tone, and gloss transcriptions to phonetic transcriptions in an interlinear format.
- Perform ethnomusicological analysis of music recordings.
- Use slowed playback, repeat loops and overlays to assist with perception and mimicry of sounds for language learning.

B. Recording Equipment and Materials
Before the actual day of the recording, participants (VOICE excluded) were pre-informed. Reading texts were given to them well in advance so that they could be familiar with the texts. On the day of the recording, the researcher brought a laptop which had a headphone fixed to it to record participants are they read. The laptop had enough space on its hard drive to save all the recordings. The venue was carefully selected to avoid external noise intrusion in the recording.

C. Pre-recording Stage
The participants were allowed to choose their own time and day that was convenient for them. They were relaxed as the texts to be read into the recorder had been given to them well in advance. The researcher briefed them on all that they needed to do but gave them the choice to decide the order in which they wanted to start the recording i.e. the one to start first, second, third and so on.

D. Ethical Considerations
Ethical consideration is very important in every research as it could mar the entire work if one overlooks it. According to Richards and Schwartz (2002), “confidentiality and anonymity” are crucial in research. The researcher being aware of this, first obtained the consent of all the participants. Since the researcher himself was a tutor teaching these students, they readily consented to take part in the research. The researcher gave them complete assurance that their
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competence in the English language was not the focus of the study. The purpose was to investigate the existence of Ghanaian English and its unique features, especially in the area of Phonology. This assurance cleared any doubt in the minds of the participants. The issues of confidentiality and anonymity were thoroughly dealt with and there was a consensus that the first names and the initials of their surnames would be used to represent them instead of writing participants’ full names.

E. Management of Recording Equipment
The physical equipment used for the recording was a laptop which needed software to actually do the recording. Here, the researcher installed a recording device called Speech Analyzer (Version 3.1). This software is very special in the sense that it allows you to do virtually anything you want once the speech has been recorded. It gives accurate measurements in terms of voicing, duration, frequency and so on that can use in both Quantitative and Qualitative analyses; hence the choice of Speech Analyzer for our recordings. Before the actual recording, the researcher explained to the participants how the device works. The software was activated for participants to do a trial recording in turns. This was done to remove any fear from the participants. When the researcher was satisfied that all the controls such as the volume, the pitch and others matched the needed acoustic properties, the recordings were set in motion. The first participant had his recording by reading the already given text into the recorder. It was played for satisfaction and the audio data was saved before paving way for others to have their turn. This continued until all the participants had their recordings. The researcher duly thanked them and wished them goodbye.

F. Challenges Encountered during Data Collection
Since advanced preparation was made, problems were not encountered much. However, there were few hitches during the collection of the data. The initial recording was noisy and it took a long time to have it resolved. Editing the different sounds produced by the participants was very difficult as each sound needed to be saved separately for easy comparison in the analysis. Also, the correct volumes of the recorder had to be reset for all the participants as each of them had different voice qualities. There were a few instances of observer’s paradox and a sense of nervousness as some of the participants thought they might not read very well. But the researcher pauses the recorder now and then to assure them and the exercise went on from then.

8. Results and Discussion
This very section analyses the data for the study. The discussion will be on how Ghanaian speakers pronounce the Dental Fricative sounds / θ / and / ð /. In all cases, participants’ pronunciation will be compared with Standard British English, represented by the VOICE.

The study employed a descriptive qualitative approach. Since the study wanted to find out the possible phonological differences between Ghanaian English and British English, Qualitative Analysis was useful in the sense that it allows for visual comparisons. The graphical representation forms the Speech Analyser, which gives precise measurement, was also used to find out the extent of variation that existed in Ghanaian English this is because knowing how far
Ghanaian English deviates from the Standard variety will contribute to the debate as to whether our variety of English is inferior to other varieties.

The table below shows the time used in pronouncing words that begin with the Voiceless Dental Fricative sound /θ/.

**Table 2: Measurement of the Duration of the Voiceless Dental Fricative sound /θ/**

<table>
<thead>
<tr>
<th>Participants</th>
<th>ID</th>
<th>Native Language</th>
<th>Sound Produced</th>
<th>Duration Time / Sec</th>
<th>Difference Voice (- minus) Participant</th>
</tr>
</thead>
<tbody>
<tr>
<td>Voice</td>
<td>Voice</td>
<td>British English</td>
<td>Thought /θɔːt/</td>
<td>0.53</td>
<td>0.0</td>
</tr>
<tr>
<td>Part 1</td>
<td>Bright K.</td>
<td>Ewe</td>
<td></td>
<td>0.29</td>
<td>0.24</td>
</tr>
<tr>
<td>Part 2</td>
<td>Besty R.</td>
<td>Twi</td>
<td></td>
<td>0.27</td>
<td>0.26</td>
</tr>
<tr>
<td>Part 3</td>
<td>Job T.</td>
<td>Ga</td>
<td></td>
<td>0.29</td>
<td>0.24</td>
</tr>
<tr>
<td>Part 4</td>
<td>Eric M.</td>
<td>Dagomba</td>
<td></td>
<td>0.43</td>
<td>0.10</td>
</tr>
<tr>
<td>Voice</td>
<td>Voice</td>
<td>British English</td>
<td>Thinking /θɪŋkɪŋ/</td>
<td>0.67</td>
<td>0.0</td>
</tr>
<tr>
<td>Part 1</td>
<td>Bright K.</td>
<td>Ewe</td>
<td></td>
<td>0.58</td>
<td>0.9</td>
</tr>
<tr>
<td>Part 2</td>
<td>Besty R.</td>
<td>Twi</td>
<td></td>
<td>0.46</td>
<td>0.21</td>
</tr>
<tr>
<td>Part 3</td>
<td>Job T.</td>
<td>Ga</td>
<td></td>
<td>0.59</td>
<td>0.8</td>
</tr>
<tr>
<td>Part 4</td>
<td>Eric M.</td>
<td>Dagomba</td>
<td></td>
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<td>0.1</td>
</tr>
</tbody>
</table>

The table above represents the time taken by both British speakers and Ghanaian speakers to pronounce “th” words to realize the sound /θ/. In doing so, a Comparative Approach was used by collecting data from both Ghanaian and British environments for comparative analysis so as to establish the extent of variation. Each word was recorded five (5) times and the average taken and recorded in the table. To obtain a standard measurement, Ladefoged and Maddieson (1996) tell us that in languages with a phonemic contrast in length, long stops have a duration between 1.5 and 3 times the duration of short stops in careful speech. When we talk about a phonemic contrast, we speak of the *length* of a consonant or vowel. “Length” is a phonological term. But when we are measuring how many milliseconds some sound takes, this physical measurement is more properly called *duration*.

In the pronunciation of the word *thought* /θɔːt/, the VOICE, which represents the British variety, used [0. 53s], the first Ghanaian speaker, Bright K., who had an Ewe background, used [0. 29s], the second Ghanaian speaker, Besty R., a Twi speaker also used [0. 27s]. The third Ghanaian speaker, Job T., a Ga, used [0. 29s] while Eric M., a Ghanaian English teacher, used [0. 43] in pronouncing the word ‘thought’. From these figures, we can see that the time difference between the British variety and that of the Ghanaian is obvious. We recorded a vast difference between Ghanaian students and that of the British variety. [Bright K= 0.24s], [Besty R.= 0.26s] and [Job T. = 0.24s]. However, it was found that Eric M., who had had a lot of formal training in Ghanaian English pronunciation, deviated marginally recording only [0.1]. This is an indication that Ghanaian English does not deviate much going by the measure given by Ladefoged and Maddieson i.e. standard duration is between [from 1.5 to 3.0].
Table 3: Measurement of the Duration of the Voiceless Dental Fricative sound /ð/  

<table>
<thead>
<tr>
<th>Participants</th>
<th>ID</th>
<th>Native Language</th>
<th>Sound Produced</th>
<th>Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Voice</td>
<td>Voice</td>
<td>British English</td>
<td>then /ðen/</td>
<td>0.60</td>
</tr>
<tr>
<td>Part 1</td>
<td>Bright K.</td>
<td>Ewe</td>
<td>den /den/</td>
<td>0.48</td>
</tr>
<tr>
<td>Part 2</td>
<td>Besty R.</td>
<td>Twi</td>
<td>0.42</td>
<td></td>
</tr>
<tr>
<td>Part 3</td>
<td>Job T.</td>
<td>Ga</td>
<td>0.40</td>
<td></td>
</tr>
<tr>
<td>Part 4</td>
<td>Eric M.</td>
<td>Dagomba</td>
<td>0.39</td>
<td></td>
</tr>
<tr>
<td>Voice</td>
<td>Voice</td>
<td>British English</td>
<td>they /ðei/</td>
<td>0.73</td>
</tr>
<tr>
<td>Part 1</td>
<td>Bright K.</td>
<td>Ewe</td>
<td>day /day/</td>
<td>0.90</td>
</tr>
<tr>
<td>Part 2</td>
<td>Besty R.</td>
<td>Twi</td>
<td>0.36</td>
<td></td>
</tr>
<tr>
<td>Part 3</td>
<td>Job T.</td>
<td>Ga</td>
<td>0.38</td>
<td></td>
</tr>
<tr>
<td>Part 4</td>
<td>Eric M.</td>
<td>Dagomba</td>
<td>0.41</td>
<td></td>
</tr>
</tbody>
</table>

From the above table it could be observed that in pronouncing the word pairs then – den and they – day, the British VOICE showed a clear distinction in duration. Then recorded [0.60 s], day [0.48], They recorded [0.73] whilst day recorded [0.90]. This means that native speakers of English show differences in the two sounds /ð/ and /d/. However, in almost all cases the Ghanaian speakers showed slight differences in their durations. Even the Ghanaian teacher of English showed variation in his pronunciation of /ð/ and /d/. It could be seen that the time differences in British English are relatively longer than that of the Ghanaian participants. It was clearly shown that though there were variations within the British VOICE, the Ghanaian participants seem to pronounce the two words at almost the same level.

8.1 Pictorial Analysis
Below is the pictorial representation of the production of Voiceless Dental Fricative of the word Thought /θɔt/ as pronounced by the five (5) participants.

The following diagrams show graphical representations of sound recorded into a Speech Analyser. The top section of the diagram indicates the raw waveform, which is the graphical representation of the audio sound of the data. The down row shows intensity; which is the acoustic correlate of loudness and finally, duration is the measure of the wavelength from the left of the waveform to the right end.

Figure 1: Duration measurement for the VOICE (British English)
From the above figures, we realized different measurements among the participants. This gives us the indication that both British and Ghanaian speakers have different ways of pronouncing the same word.

9. Findings

The study tried to provide answers to the following research questions:
Question 1: What defining phonological features exist in Ghanaian English?

It was discovered that there were indeed some unique phonological differences in Ghanaian English, especially in consonant sounds. In short, the study found that Dental Fricative sounds /θ/ and /ð/ identifies most speakers of Ghanaian English as well as their L1 language backgrounds.

Question 2: How much, if any, does it deviate from the British Variety in terms of phonology?

It was found that though there were some deviations in duration, and intensity, the variation did not affect intelligibility, especially among those who had attained a certain level of competency in the English language. However, learners of Ghanaian English were a little bit different from the British variety; even with that, every Ghanaian could make out what the other one says.

9.1 Explanations of the Phonological Variations in Ghanaian English

Learners of foreign languages sometimes encounter problems in the new language they learn. Ghanaians are no exception. In fact, the problem is language-based. People’s first language or mother tongue affects the other languages which they learn later in life. This problem is called L1 interference (L1 means first language). Many West African languages have sounds which do not occur in English and vice versa. This problem is seen most in consonant sounds particularly with the dental sounds /θ/ and /ð/. Because these sounds do not exist in the native languages of most Ghanaians, learners of the English Language are tempted to insert Alveolar Plosive sounds /t/ and /d/ in place of the dental sounds respectively. Hence, Ghanaian learners of English replace the Voiceless Dental Fricative /θ/ with the Voiceless Alveolar Plosive /t/. Again, the Voiced Dental Fricative /ð/ is replaced with Voiced Alveolar Plosive /d/. For that reason, it is not uncommon to hear an educated Ghanaian pronounce the word they as */dei/* or the word thought as */tɔ:t/*.

Question 1: Should Ghanaian English, because of its varied features, be regarded as inferior to other World Englishes?

It was also found that Ghanaian English, just like any other variety of English, has been adapted to its sociolinguistic environment which has brought variations in the phonology of Ghanaian English. We must therefore not see Ghanaian English as an imperfect approximation of the native Standard Englishes. We should be proud of the uniqueness of our variety of English but we must also strive to attain global proficiency and intelligibility with other speakers of English.

10. Summary, Implications and Conclusion

10.1 Summary

The purpose of this study was to investigate the existence of variations in terms of phonology and report the findings as such.

The study showed that, indeed, there were variations in Ghanaian English phonology which set it apart from other varieties of English, especially British Standard English. It was observed that difficulty in producing dental sounds was one way in which elements of
‘Ghanaianisms’ featured most. Both educated Ghanaians and learners of English had some pronunciation difficulties in dental sounds as a result of the L1 influence. However, educated Ghanaians seem to have a kind of control over their L1 influence on the Ghanaian variety of English.

10.2 Implications
This study has some implications for:

a. Educational purposes
Teachers, parents, educators, curriculum planners, etc. must come to terms that learners of a second language will have learning difficulties. Their L1 will sometimes interfere with some aspects of the new language, especially in the phonology aspect. The idea of enforcing complete native-like competence on students will lead to confusion as their mother tongue will not allow them to speak like native speakers. The curriculum must be designed to suit both international and nativised Ghanaian English. Students must be exposed to the British variety as well as the Ghanaian variety so that they can perfect their pronunciation in a way that will not lead to many deviations. As observed by Owusu – Ansah (1994) that Ghanaian students are often faced with three models of English: native models like BBC English they hear on the radio or on TV, their teacher’s model in the classroom as well those models they hear outside the classroom all needs to be taken care of the variations. Therefore, Ghanaian teachers of English should expose learners to the native models, the classroom teacher’s model as well as the models used by most educated Ghanaians. Colleges of education should tailor their training towards ‘multilingualism’ in the area of English study by exposing trainees to international pronunciation on BBC or VOA for learners to get exposure so that such students could communicate effectively with native speakers.

b. Recognition of Ghanaian English as a Standard variety of English
Most people see Ghanaian English as a deviation from the British variety while others even refute the existence of Ghanaian English. Bokamba (1971) observes that even among non-native speakers, there are those who consider themselves to be recipients of British education and therefore evaluate their own and others’ English with the British model in mind yet “no matter how hard they strive to achieve native-like perfection they do not succeed”. We should therefore not frown on people who speak English the Ghanaian way provided there is intelligibility.

c. Further Research
The literature reviewed and this particular study is an indication that such discussions have been made on Ghanaian English. This gives it enough grounds for it to be codified and made standard as Nigerian English has done. Again, the existing knowledge of Ghanaian English is in parts; some researchers worked on vocabulary, phonology, semantics, pragmatics, pidgin and others. It is about time that researchers came together to put all these aspects under one umbrella to standardize the Ghanaian variety of English so as to give it recognition as British, American or Nigerian English. Further research could also be done on the use of consonant clusters as a unique feature of Ghanaian English.
10.3 Conclusion
This descriptive study set out to find out “the uniqueness of Ghanaian English. Data were collected and analysed qualitatively by means of tables and diagrams. It was found that there were, and still are, some elements of ‘Ghanaianisms’ in the English spoken in Ghana today. The theoretical framework for the study was Kachru’s Theory of Nativisation which states that the new socio-linguistic and cultural environment leads to modification in the target language. After the data analysis, it was revealed that some elements of Ghanaian English existed in phonology. How most Ghanaians pronounce certain words is quite different from the native speakers of English, especially when it comes to dental sounds. This study has added to the existing literature in the research community that, indeed, there are some unique features of Ghanaian English that must be recognized by all and sundry.

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