

Variable Realization of Interdental Fricatives in Nigerian English

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Introduction

While some forms of variability exist in the pronunciation of the interdental fricatives /θ/ and /ð/ in Nigerian English [NE] (Udofot 2004, Awonusi 2004, Akande 2006, Akande and Akinwande 2006), this study examines the question of what linguistic and social constraints may influence this variation in NE. Previous studies such as Akande (2006)'s study focused mainly on university graduates covering a smaller range of other constraints on the interdental fricatives variation; Akande and Akinwande (2006) examined Yoruba English bilingual graduates. This study however investigates this variability in Nigerian English speakers' speech from different backgrounds and coded for a wider range of variables, with the aim of identifying the variants of the interdental fricatives and the conditioning linguistic and social constraints. It is observed that these variables may be influenced by social factors such as setting, sex, ethnicity, educational background, style; and linguistic factors.

Spoken Nigerian English

Studies on Nigerian English reveals that the variety is distinct from other varieties especially at the level of pronunciation (Jowitt 2000; Udofot 2002, 2004; Akande 2006). Some factors have also been identified to affect NE speech. Jibril (1982) identifies the factor of ethnicity. He observes that spoken Nigerian English is a reflection of the speech differences of the diverse ethnic groups in the country. Banjo (1996)'s study underscores other factors that may influence spoken Nigerian English. He suggests that aside quality of education, home background may affect the way Nigerians use English (Banjo 1996:78). Home background deals with the different environments in which children are raised. Children raised in more educated environment by more educated parents or outside the country in native speakers environment may speak more target-like than others who don't have such background. Also, with English becoming more prestigious in the country and people looking down on the indigenous languages, some parents speak English to

their children right from when they were very young. Those children may grow up to speak English more fluently than those who do not have this kind of background. However, it should be noted that the quality of education or English proficiency of the parents will have to be considered also, in terms of the form the children will grow up speaking.

More specifically on the pronunciation of interdental fricatives in NE, studies such as Simo Bobda (1995), Udofot (2004), Akande (2005) underscore some variation in their realization though from different perspectives. Simo Bobda (1995: 254) reveals that /θ/ and /ð/ are often realized as [t] and [d] respectively in NE. He points out that there is no distinction in NE between the pronunciations of *tin* and *thin* on the one hand and *dose* and *those* on the other hand. His study only identifies the variants but does not really explore the variables that may influence this phenomenon. Udofot (2004)'s study investigated general features of spoken English in Nigeria and one of her findings is that /θ/ in *think* and *thigh* changes to [t] and /ð/ in *that* changes to [d]. She identifies the level of education as a major factor for classifying spoken NE. In a more recent study, Akande (2005) examined pronunciation problems in the English of fifty Yoruba-speaking undergraduates of Obafemi Awolowo University in Nigeria using a prepared text and a structured questionnaire in addition to asking the informants to narrate any interesting story of their choice. He discovers that out of fifty subjects who participated in the study, only 8 and 6 pronounce /θ/ and /ð/ as /θ/ and /ð/ respectively. In the case of /θ/, 42 subjects pronounced it as [t] while 44 pronounced /ð/ as [d]. He concludes that these fricatives are problematic for Yoruba speakers of English. However, the study is limited to the Yoruba speakers and also to undergraduates.

In a similar study by Akande and Akinwale (2006), based on 200 subjects who are native-Yoruba speakers of English and university graduates, it was found out that, for the pronunciation of interdental fricatives, the level of education is a more crucial social variable than sex. They argue that this is because their subjects who had university education could use (θ) and (ð) variants while those who did not have university education, irrespective of their sex, could not at all. They conclude that "there is no significant sex differences in the speech of our informants with respect to the realizations of the sounds investigated, sex differentiation cannot be considered a prominent social variable in the linguistic behavior" (Akande and Akinwale 2006: 12). While these studies apparently establish that the realization of interdental fricatives is variable in NE, there are some limitations. First, some of these studies including Akande (2005), Akande and Akinwale (2006) cover a smaller range of subjects (undergraduates, graduates and Yoruba speakers). Second, not

many factors are coded for since it is believed that other factors (not only education) may also influence the realization of the interdental fricatives.

Therefore, the current study examines the realization of the interdental fricatives in NE with the aim of identifying the sociolinguistic factors that may determine the variables which is done by broadening the scope of subjects to involve more diverse subjects and coding for more factors – linguistic and social factors.

Methodology

Data were collected from five recent Nigerian English movies to allow a wider coverage of speakers. The participants are 30 speakers including 15 males and 15 females from the movies. These are major characters who spoke more frequently throughout the movies and as a result had more use of the interdental fricatives. They also have different educational and social backgrounds. Specific focus is given to pronunciation of the interdental fricatives by speakers and the linguistic environment(s) and different stylistic contexts both formal and informal are considered. Factors like setting, education, ethnicity, style are examined to determine social constraints. In all, 300 tokens were collected for the voiceless interdental and 359 tokens were collected for the voiced interdental fricative. The data were prepared in Excel and quantitatively analyzed through Goldvarb X.

Coding System

The variables were coded separately because we suspect that they may be influenced by different factors. Thus, it will be necessary to identify the factors that influence each of the variables in the study.

a) The interdental fricatives (coding and some examples)

(1) (θ) variable

F	voiceless interdental fricative /θ/	"who are you on the phone <u>with</u> "
t	voiceless alveolar stop /t/	"Henen, You <u>th</u> ought she was?"

(ð) variable

f	voiced interdental fricative /ð/	"is that a job?"
d	voiced alveolar stop /d/	"she will meet me in the village"

(2) Word class

l	lexical word	"I made a list of <u>th</u> ings for the market"
f	function words	"Don't mess <u>with</u> me!"
n	numbers	"there are <u>th</u> ree steps"

(3) Sentence positions

i	initial	"with all the money I gave you"
m	medial	"money to continue with mama's treatment"
f	final	"see your mouth"

(4) Ethnicity

A	Yoruba
B	Igbo
C	Calabar

(5) Preceding phonological environment

h-high, m-mid, l-low, x - diphthong) Vowels [with, bath, I thought]		
n	nasal	"I am fine thank you"
L	lateral	"I gave you all things"
s	stop	"I don't think so"
f	fricative	"Take the drugs with you"
0	nothing	"thank you sir"

(6) Following phonological environment

h-high, m-mid, l-low, x - diphthong) Vowels [thing, thought, thousand]		
s	stop	"Today is her birthday now"
f	fricative	"am deeply in love with Chuka"
g	glide	"am not in this business with you"
r	through	"we can go through it"
L	lateral	"with Lagos on my mind"
n	nasal	"I don't know what's wrong with me"
0	nothing	"who are you on the phone with"

(7) Sex

m	male
f	female

(8) Style

f	formal
i	informal

(9) Socioeconomic status

u	upper working class
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- m middle working class
 - l lower working class
- (10) Educational background
- e educated
 - L less-educated
- (11) Setting
- v village
 - c city

Findings and Discussion

The tokens for the (θ) and (δ) variable were analyzed Goldvarb X. The results for both variables are presented in the tables in the following sections:

θ Variable realization Results:

Table 1: Factor Groups Affecting the variable realization

Table 1: θ variable realization			
	input: .62	p = .000	
1. Setting	weight	N	%
city	.86	195/253	77%
village	.15	10/125	12%
2. Ethnicity			
Igbo	.57	163/272	63%
Yoruba	.62	132/164	71%
3. Formality			
formal	.97	135/215	62%
informal	.20	70/144	48%
4. Education			
educated	.76	39/163	84%
less educated	.19	166/196	23%
5. Sex			
female	.71	135/215	62%
male	.35	70/144	48%
6. Word type			
numbers	.95	19/23	82%
function	.48	59/94	62%
lexical	.43	127/242	52%
groups not selected: sentence positions, phonological environments, social class			

The results show that the (θ) variable is influenced by both linguistic and social factors. Social factors such as setting, ethnicity, education, sex and style affect the use of the interdental fricative while linguistic factor such as word type influence the variable. City dwellers tend to use the target like form than the village dwellers. The targetlike form is used in more formal contexts than informal. More educated people use the targetlike form more than the less educated ones. In terms of sex, women tend to favor the use of the target like form than men. We also found out that there is a higher tendency of realizing the targetlike form in numbers in NE than in other word types.

Setting which has a significant influence, which could be based on the fact that most speakers of the target like form in Nigerian English (NE) reside in big cities. Hence, living in the city can influence one's use of the variable. In Nigeria, particularly, standard of living and quality of social amenities and education are very high in the cities. The cities are very competitive such that getting good jobs and economic survival are influenced by good English communication skills. Lagos especially where two speakers Chichi and Chimamanda relocated, is one of the most expensive cities in Nigeria. Head offices of financial institutions, leading companies and richest people in the country reside in Lagos. So, most people migrate to Lagos from the villages for survival just like these two speakers who were initially residing in the village. After getting to Lagos, they socialized with friends including those born there and meeting very educated and rich people in Lagos. It was observed that they began to use the target like in the city which they had never used before. Hence, factors like socialization, exposure and survival in the city affects their use of the variable.

Table 2: Cross Tabulation of Sex and Education

	V	Less Educated	Educated
Women	θ	30 28%	105 97%
		108	110
Men	θ	9 16%	61 69%
		55	89

This reveals that sex and education together play a major role in the variable use of the interdental fricative. Less educated women generally use the target like (interdental fricative) about 28% while

the more educated women use it about 97%. Less educated men, on the other hand, use the target-like variant about 16%, while the more educated men use it about 69%. Thus, there is a significant relationship between education and sex in the realization of the voiceless interdental fricative.

ð Variable realization Results:

Table 3: ð variable realization				
		input: .65	p = .000	
	weight	N	%	
1. Ethnicity				
Igbo	.59	146/211	69%	
Yoruba	.56	121/179	62%	
2. Sex				
female	.80	166/252	65%	
male	.52	107/196	54%	
3. Setting				
city	.70	266/373	86%	
village	.18	27/175	21%	
4. Formality				
formal	.53	258/413	61%	
informal	.18	15/30	50%	
5. Education				
educated	.68	257/345	74%	
less educated	.11	16/103	16%	
6. Word type				
lexical	.91	23/26	88%	
function	.46	250/422	59%	
Factor group not selected: sentence positions, phonological environments, social class				

Table 3: Factor Groups Affecting the variable realization

We find that the (ð) variable is influenced by both social and linguistic factors. The social factors include ethnicity, sex, setting, education and linguistic factor such as word type. For setting, there is a higher tendency for those dwelling in the city to favor the use of the target like variant than those living in the village. This is not unexpected since there is more exposure to target like forms in the city than the village especially in the Nigerian context. For instance, the presence of international companies, high quality of education, influence of foreign media in the city may affect the use of target like forms.

Formality affects the realization of the variable in the sense that it occurs more in formal contexts than informal contexts. More educated people use the targetlike form more than the less educated ones. This confirms the influential role of education in realization of the fricatives that has been identified by previous studies (Akande 2006; Akande and Akinwande 2006; Udofot 2004). In terms of sex, women tend to favor the use of the target like form than men. For word type, it was observed that lexical words favour the targetlike form than in function words in NE.

Table 4: Cross Tabulation of Sex and Education

	V	Less Educated	Educated
Women	ð	11 9%	151 87%
		86	169
Men	ð	3 2%	106 59%
		67	179

This reveals that sex and education together play a major role in the variable use of the interdental fricative. Less educated women generally use the target like (interdental fricative) about 9% while the more educated women use it about 87%. Less educated men, on the other hand, use the target-like variant about 3% while the more educated men use it about 59%. In sum, educated women generally use the target-like variant than educated men. Thus, both education and sex interact as variables as determinants of the realization in NE.

Conclusion

From our findings, we see observe that the realization of the interdental fricatives is conditioned by both social and linguistic factors though social factors play a more influential role than linguistic factors which has also been noted by previous studies (Awonusi 2004, Banjo 1995). However, this study identifies a number of social factors, aside education which has been largely noted by previous studies. It underscores that setting, ethnicity, sex, and style may be influential in the realization of the interdental fricatives. Setting here demonstrates that locality (sociolinguistic environment) may affect speech production in NE. This also relates to the idea that most Nigerians

are able to identify where a person comes from based on his pronunciation (Bamgbose 1971). Word type is identified as a major linguistic factor and this includes numbers, function and lexical words. It is noticed that the realization of the interdental fricatives vary in these linguistic categories.

Furthermore, this study opines that while level of education is a very significant factor as it has been frequently identified by previous studies (Akande 2006; Akande and Akinwande 2006; Udofot 2004), this study observes that sex may be influential since educated women use the target like more than educated men. Essentially, what this study has done is to widen the scope of previous studies by demonstrating that other factors (social and linguistic) may influence the variable realization of the interdental fricatives in Nigerian English.

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