



RESEARCH ARTICLE

INTONATION VARIATION OF DECLARATIVE QUESTIONS BY KENYAN
SPEAKERS OF ENGLISH

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ABSTRACT

The focus of this paper is to highlight the various manifestations of intonation patterns to declarative questions by Kenyan speakers of English who use English as a Second Language (ESL). Specific references are made to two ethnic groups (Bukusu and Nandi), who produced maximally distinct accents during the pilot study. The paper describes the range of intonation patterns that exist among Bukusu and Nandi ESL speakers and further establishes whether there are features of intonation that distinguish the two groups. The objectives are achieved with respect to auditory and acoustic analysis of both read and spontaneous speech. Acoustic analysis by use of Prosogram script for Praat software and Tone and break indices (ToBI) for prosodic annotation is adopted to depict nuclear accent placement, accent types and their associated boundary tones. Additionally, the intonation patterns are coded and plotted in Ms Excel for variability tests. The British School is combined with the Autosegmental-Metrical (AM) theory of intonation for discussion. The findings are explored departing from an assumption that these ethnic groups demonstrate dissimilar intonation patterns based on their underlying first languages (L1) substrate. Instrumental analysis reveals that the Bukusu adopt a high nuclear that ends in a low boundary tone (H* L%). While the Nandi ESL speakers predominantly yield a rising nuclear followed by a high boundary tone (L*H H%).

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INTRODUCTION

In the Kenyan linguistic scenario, the learning of English in schools as a second language (ESL) is mainly (particularly in rural areas) preceded by the acquisition of the local language (L1), and/or the lingua franca, Kiswahili. It is therefore not uncommon to find that the English spoken in Kenya, as described by Edgar Schneider (2007), is undergoing "nativization" thus the varieties of English in this country are "products of a specific evolutionary process tied directly to their colonial and postcolonial history" (*Ibid.*, p. 3). Schneider further explains that postcolonial varieties are characterised by, for instance, "phonological innovations" (*Ibid.*, p. 56) like intonation, which this article seeks to explore. There is, however, no documentation of intonation of English varieties spoken in Kenya. This paper, thus, builds around postcolonial varieties of English spoken in Kenya, while benefiting from the work of proponents like Schneider (2007) and Mufwene (1997) among others. Illustrations for the range of intonation patterns and variability are made from the Bukusu and Nandi ethnic groups, whose intonation patterns deemed maximally distinct during the pilot study.

The Kenyan Linguistic Scenario

Furthermore, the paper is embedded in the wake of the New English(es) paradigm and embraces the Kachruvian approach regarding norm-developing fellowships in the Outer Circle, "institutionalized non-native varieties (ESL) in the regions that have passed through extended periods of colonization" (Kachru, 1992, p. 356) like Kenya. As a matter of fact, during the colonial context, British missionaries spread the English language tentacles to Kenyans in the late 19th century (Sure, 1991a, p. 245) and the language was taught to a few elites for indirect rule policy (Skandera, 1999, p. 11). Those who were to serve as headmen, chiefs, tax collectors and clerks among others, for the benefit the colonial masters. The female population did not have access to schooling at this time; thus, they did not enjoy English which was instrumental to an individual's access to white collar jobs (clerks, teachers, headmen, chiefs and priests among others), European thought and other related privileges of the colonial system. When the British withdrew from Kenya after it had gained independence in 1963, they left something very precious behind: the over forty mother tongues of the distinct tribes found in Kenya. Although during this time a greater number of Kenyans could access English, particularly those who accessed schooling over the first four years of primary education, the major language

used away from school was still their respective mother tongue. English was the language of instruction from standard four onwards unlike the first four years of vernacular usage (Sure, 1989, p. 56). Even at this period in history, majority of those who attended school were male. Only until the nineteen seventies was there demand for equal opportunity in education with regard to gender. Despite this, any statistics on the users of English in Kenya reflect a higher number of the male population than female. The male literate population is estimated at 90.6 % while that of female is 84.2% (Central Intelligence Agency, 2010). Although the Kenya government took upon itself to increase the number of schools and teacher training colleges the years following independence from the British, the presence of the English native-speaker model receded to the background with the departure of many native speakers, in this case the British. Subsequently, qualified teachers of English became scarce in the postcolonial period. With these among other factors, the language of the former colonial power has not yet developed into mother tongues (Brenzinger, Heine & Sommer, 1991, p. 19) at least not for the time being; and currently, the English taught in Kenyan schools is neither American nor British English, but likely to be an “indigenized variety” (Kachru, 1982). Learning from (sometimes under-qualified) non-native teachers reinforces deviance from the standard and thus, facilitates the development of distinctive stabilized linguistic features, which we refer to here as the Kenyan English.

As years progressed, “aspiration to speak like the British” started to be linked to a “colonial hangover” and, was for that reason, “stigmatized” (Ragnarsson, 2011, p. 34). This reflected tolerance of non-native usage of English, but the norms of accuracy and fluency associated with pronunciation, grammar or semantics theoretically remained the British norm. In this case, the learning of English in schools as a second language (ESL) is preceded by the acquisition of the local language, and/or the lingua franca (Kiswahili). The use of English has, thus, mostly been restricted to certain domains, such as higher education, politics and business, and also to a relatively small number of people (Brenzinger, Heine & Sommer, 1991, p. 19). Worth noting, Kenya has more than forty-two ethnic languages (CIA, 2010); with the Makonde added following presidential public announcement in 2017 as ethnic group number forty-three, having lived in Kenya as immigrants from Malawi, Mozambique and Tanzania since the colonial period (This is Africa, February 2, 2017). Despite Kiswahili being an official language together with English as embedded in the Constitution of Kenya (2010, p. 13), majority of Kenyans use Kiswahili for a greater number of informal contexts and a few formal contexts since it is the lingua franca. At the same time, “just like Kiswahili the national language of Kenya, English certainly acts as a lingua franca among people who speak different African languages” (Nabea, 2009, p. 127).

It is also important to mention that Kenya has assigned English a predominant role in formal contexts, for example government, administration, international and intra-national transactions, legislation, several religious functions, a majority of advertisements, political manifestos and other important documents. It is predominantly the medium of instruction in schools and also the language for major television and radio broadcasts. With all these dominant roles in the public sphere that reflect the importance of the English language in Kenya, a far more enticing discussion is a look at the actual spoken English in Kenyan everyday life.

Before delving into this, let us first familiarise ourselves with the two ethnic groups that have been considered for analysis in this paper.

Who are the Bukusu and Nandi?

Bearing in mind that these are only two of more than forty-three ethnic languages in the densely multilingual Republic of Kenya (CIA, 2010), these two were selected for this study because they display accents that are maximally distinct. To begin with, the Bukusu are a Luhya sub-group of Bantu languages who dominate the Western geographical region of Kenya. There are at least twenty-three dialects of the Luhya speakers; of whom the Bukusu and Maragoli are the largest dialects. The Bukusu speak Lubukusu and have an approximated population of 1.5 million speakers (Joshua Project, 2010). The Nandi on the other hand, are a Kalenjin speaking people who inhabit the western part of the Kenyan highlands and the North Rift Valley. Kalenjin is classified in the Nilotic branch of the Nilo-Saharan languages. The Nandi are approximated at 0.8 million people and speak Nandi (Kenya Decides, 2012).

As mentioned, during the pilot study, these two ethnic groups displayed distinct intonation differences in their utterances in English. Thus, this paper intends to prosodically describe their nuclear accent placement, nuclear accent types and final boundary tones while uttering declarative questions and to further establish the extent to which their intonation patterns varies.

Pertinent Questions and Hypotheses

This paper was governed by two research questions:

- What is the range of intonation patterns that exist among Bukusu and Nandi speakers of English?
- How do intonation patterns of Bukusu speakers of English vary from those of Nandi speakers of English?

In relation to the research questions and for further guidance into conducting this research, the under-mentioned null hypotheses were formulated:

H0. 1: There is no significant difference in the intonation pattern of the English declarative questions **within** Bukusu and Nandi ESL speakers.

H0. 2: There is no significant difference in the intonation pattern of the English declarative questions **between** Bukusu and Nandi ESL speakers.

A Word on Intonation

Although the topic of intonation has a variety of literature, intonation in itself is not exhaustive. Therefore, in this section the researcher mentions some apposite information within the scope of this paper. Roach (1983, p. 14), cited in Grabe, Kochanski and Coleman (2005), states that “intonation, which is an aspect of phonology, in English is said to involve primarily the pragmatic impact of utterances and occasions when the ‘wrong’ intonation causes a difference in grammatical meaning or utterance type” (*Ibid.*, p. 1). The phonological intonation aspect is, according to Grabe, Kochanski and Coleman (2003), affected by a large number of

factors and that among these are dialect and utterance type (*Ibid.*, p. 1). Here, we explore Kenyan local dialect speakers' differences in nuclear accent placement, nuclear contours and final boundary tones of a declarative question, which are applied here as declarative statements interpreted as questioning "only if they *can't* be interpreted as telling" (Gunlogson, 2003, p. 51). Pierrehumbert and Hirschberg (1990) consider L* H H% to be the typical question contour for British English and we could thus expect it to be the phonological realisation of the declarative question contour as well. Gunlogson (2003), assumes that one of the necessary properties of declarative questions is their rising intonation, which she defines as "non-falling from the nuclear pitch accent to the terminus and ending at a point higher than the level of the nuclear accent" (*Ibid.*, p. 10), a description which (in her own understanding) fits all of the tunes H* H H%, L* H H%, L* H L% and L* L H%.

Adopting Gunlogson's approach in the relevant aspects, Steedman (2003, p. 253) considers boundary tones to be crucial with respect to speaker's or hearer's commitment, suggesting that H H% and L H% express hearer's commitment (and are thus presumably associated with declarative questions), while L L% and H L% express speaker's commitment. To summarise, there seems to rule a consensus with respect to the assumption that declarative questions are marked with "question intonation", but the exact nature of the contour is a subject of disagreement. This is because some subjects treated the question as a declarative proper, which implied that there was no turn-completing on the utterance and it was immediately followed by another utterance by the same speaker (thereby receiving no *yes/no* response from the addressee).

Moreover, other subjects treated the utterance as a declarative question, which implied that there was a turn-completing on the utterance and in the context could be turned into a polar question followed by a reply that (contextually) entailed a *yes/no/I don't know* answer. This meant that it would take the canonical *yes/no* question format that has a low fundamental frequency, which is associated with higher stress, not high fundamental frequency. Considering this notion, an explanation of stress in relation to the highest fundamental frequency alone is bound to fail since it makes entirely the wrong predictions, while explanation that takes the whole intonational structure into account does not encounter the same shortcomings. Moreover, for declarative questions in British English, fundamental frequency is highest on the word with nuclear accent, relatively high on words with prenuclear accents and low on unaccented words after the nuclear accent. Of importance to note, is that the few high fundamental frequency points that may occur after the nuclear accented word are segmental perturbations due to voiceless consonants (Ayers, 1996, p. 11). This paper, however, does not delve into all the embedded aspects of sentence level intonation, but focuses on the nuclear accented word(s) and its pitch contour as articulated by two ethnic groups of Kenya, there by creating different accents that distinguish these groups. As cited in Ayers (1996, p. 14), both Bolinger (1958) and Vanderslice and Ladefoged (1972) define "accent" in terms of "pitch obstruction on a prominent word". Further cited in Ayers (1996), Bolinger (1958) and Vanderslice and Ladefoged (1972) indicate that "the pitch obstruction can be up or down" and an "upward pitch obstruction is more common", thus, this "explains why a bulk of experimental literature associates

higher pitch with higher stress" (Ayers, p.14). Vanderslice and Ladefoged's (1972) records comprise, Chomsky and Halle's (1968) Nuclear Stress Rule and Liberman and Prince's (1977) Relative Prominence Projection Rule into an account of intonation that encompasses accents as mentioned in Ayers (1996, p. 14). It is further recorded in Ayers that both rules combined state that "the nuclear stress is the highest level of stress and thereby the metrically strongest one" (*Ibid.*, p. 14). This study, like other recent models, continues to describe intonation as having accents. The models have described the fundamental frequency contours of English as comprising of sequences of tonal elements: pitch accents, phrase accents and boundary tones (Pierrehumbert, 1980; Pierrehumbert & Hirschberg, 1990; Beckman & Elam, 1997). Here, all the tonal phenomena of English are described with only high tone (H), low tone (L) and boundary tone (L% or H%) which marks the end of the intonational phrase. With these in mind, let us now consider the theory behind this study.

Variationist Framework within Sociolinguistic Theories

Sociolinguistic theories best explain the nature of language variation within multilingual communities as opposed to relying on an interference paradigm which has so dominated research; Kenyan English research is not an exception (Nduku & Jepkirui, 2003). In sociolinguistics, language may vary in phonology, semantics and syntax. Honey (1991) asserts that:

If a regional speaker also uses the grammar, vocabulary, and idiom that are distinctive of his region, then we say he is speaking a dialect. But if he uses the grammar, vocabulary, and idiom of the Standard English found in newspapers, books, magazines, and news bulletins, then all we will notice about his speech is his accent. (*Ibid.*, p.10)

Another aspect that can possibly be noticed in a regional speaker is his or her intonation bearing in mind that variations "differ markedly from each other in the way people pronounce words" (Kirkpatrick, 2007, p.17). The scope of this paper has limited itself to phonological variation with keenness to prosody affiliated with Bukusu and Nandi intonation patterns of declarative questions in the English language.

METHODOLOGY

Research Area and Target Population

To achieve the objective, suitable research methods were applied, where urban areas for example hospitals, government offices, and police stations among others were targeted since they harbor the educated who often speak English. Moreover, both urban and rural areas were targeted for institutions of higher learning, since the language of instruction is, as already mentioned, mainly English. Purposive sampling was used and applied to the target population to get subjects who speak English and the ethnic language in question.

Subjects and Task

The study focused on subjects who were currently living in Kenya and had gone through the Kenyan education system up to tertiary level. This is because graduates "from university are almost undistinguishable from speakers of International English, except for their pronunciation" (Seidel, 2004, p. 4).

The subject sample was limited to participants who spoke English and one of the vernacular languages in question. Kiswahili was not necessary, although it was expected that all subjects spoke this language by virtue of it being the lingua franca (Nabea, 2009, p.122). Therefore, the fact that all subjects spoke Kiswahili; it was dismissed as a potential variable for this study. There were twenty-four (24) females and twenty-four (24) male subjects for each ethnic group under study. The total number of subjects from each ethnic group was forty-eighty (48). Subsequently, the total number of subjects for the study was ninety-six (96). The subjects had attained different levels of education; from those who had attained: (a) primary schooling (of eight years), (b) secondary schooling or (c) tertiary/higher education, which is either college/higher education, where majority of the subjects from both groups had attained tertiary/higher level of education. They had an age range of between twenty-five (25) to sixty-eight (68) years. The average years for the Bukusu were 40.95 and 40.60 for the Nandi. They also had varied occupations, with majority of both Bukusu and Nandi subjects as administrators or secretaries in the formal employment.

Data Collection, Extraction and Annotation

The subjects were involved in a conversation with the researcher and recorded onto a digital voice recorder (Olympus WS-321M). The whole conversations of subjects were analysed by the researcher by way of highlighting and selecting only the declarative questions present in the utterances. One short and one long declarative question were used from each of the ninety-six (96) subjects. These sentences were transferred into the Praat software version 5.1.05 (Boersma and Weenink, 2009) for analysis. Annotation on the basis of Beckman and Elam (1997) Tone and Break Indices (ToBI) was adopted. ToBI provides a method for marking high and low tonal targets in a sentence and distinguishing the varying combinations that may occur. The labeling of intonation patterns was done using a combination of auditory analysis and visual inspection of fundamental frequency traces.

Further, the subjects were also involved in reading a passage. Reading a passage deemed fit since it had identical sentences that are feasible for direct comparison of variation of intonation as are illustrated in examples in this paper. Celce-Murcia, Brinton and Goodwin 1996, (pp. 215-217), suggested using the story "Hills like White Elephants" by Ernest Hemingway (Hemingway, 1956, pp. 249-253) to practice intonation, while reading aloud. Although this is purely an explorative and not instruction study, this suggestion still deemed *sui table* because the story is ideal for testing intonation accuracy, since most of the text is dialogue. Lamb (1996) terms Hemingway's mode of writing, in which the dialogue receives an essential role in the story's composition, "modern dialogue" (*Ibid.*, p. 454), where Hemingway has created a real-life conversation (*Ibid.*, p. 455).

Limitations

Given the nature of this research, it was impossible to have exact same sentence utterances by the subjects in spite of a somewhat guided dialogue session between the researcher and the subjects and inclusion of open-ended questions. That is why a reading passage was also administered to curb any biasness that may emerge from varied grammar, syntax, vocabulary among others for depicting direct variation in

intonation. The dialogue session was *sui table* for spontaneous speech which yielded varied utterances that were almost similar sentences. These came in handy in supportive evidence of the range of intonation patterns yielded by the speakers.

Findings and Analysis

Scores for Variation within Ethnic Groups

Evidence as provided in Table 1 illustrates that Bukusu ESL speakers produced three types of intonation patterns for declarative questions. Two of the patterns had a high nuclear that ended in a falling boundary tone (H* L%). In declarative questions, fewer intonation patterns were observed compared to yes/no questions and *wh*-questions, nevertheless, variation was still evident. The Nandi ESL speakers yielded four different types of intonation patterns. Two of the patterns had a nuclear fall (H* L%). One nuclear rise plateau (L* H%) was also found. The most popular pattern had a rising nuclear followed by a high boundary tone (L*H H%).

Scores for Variation between Ethnic Groups

Long Declarative Questions

As indicated in Table 3, for the utterance of the long declarative questions, there was strong agreement at 79% by Lubukusu speakers to place the nuclear at the initial position. Only 27% of Nandi speakers placed the nuclear at the initial position. The results further reveal that the remaining 73% of the Nandi group placed the nuclear at the terminal position. The other 21% of the Bukusu speakers placed the nuclear at the terminal position. There was no medial nuclear accent placement by both groups. Sixty-three percent (63%) of the Nandi speakers yield a L*H nuclear at the terminal position with a high boundary tone (H%) as depicted by the example in Figure 1.

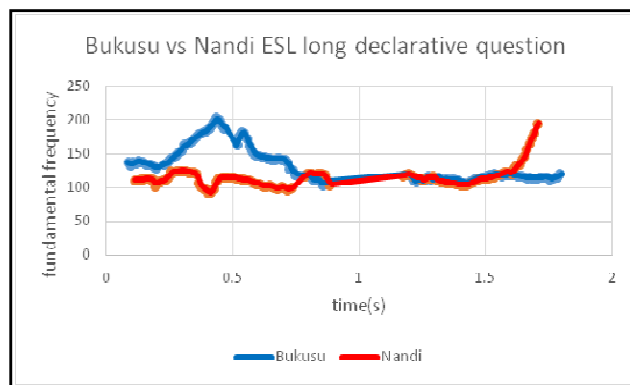


Figure 1. F0s for Majority of Nandi and Bukusu ESL Speakers' Contours for "You know how I get when I worry"?

Lubukusu speakers show strong agreement, at 79%, for a peak (H*) nuclear placement with a low boundary tone (L%); as also shown by the example in Figure 1. It is also prudent to note that some speakers from both groups split the intonation unit into two phrases, thus, eliciting pauses between words. Refer to Figure 2 for an example of two phrases produced by Nandi speakers. Nonetheless, they still had a nuclear at the terminal position (circled in the figure). The Lubukusu speakers who also split the intonation unit into two, on the other hand, had an early nuclear placement for both phrases as reflected by the example on Figure 3.

Table 1. Range of Intonation Patterns Produced by Bukusu ESL Speakers in Declarative Questions

Prenuclear	Nuclear Accent	Final Boundary Tone	Weight (Frequency)	Stylisation
	H*	L%	76% (73)	
H*	L*H	H%	20% (19)	
H*L H* H* L	H*	L%	4% (4)	

Table 2. Range of Intonation Patterns Produced by Nandi ESL Speakers in Declarative Questions

Prenuclear	Nuclear Accent	Final Boundary Tone	Weight (Frequency)	Stylisation
H*	L*H	H%	67% (64)	
	H*	L%	24% (23)	
H* H*L	L*	H%	5% (5)	
H* (H*)	H*	L%	4% (4)	

Table 3. Distribution of Nuclear Accent Types for Long Declarative Questions

Group	Nuclear Accent Type	Weight	Final Boundary Tone	Weight	Position of Nuclear Placement
Nandi	L*H	63%	H%	63%	Terminal
	L*	10%	H%	10%	Terminal
	H*	27%	L%	27%	Initial
Bukusu	H*	79%	L%	79%	Initial
	L*H	21%	H%	21%	Terminal

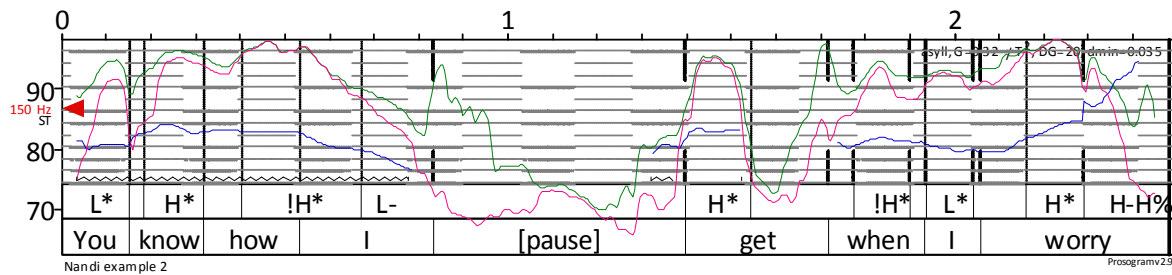


Figure 2. Example of Nandi Speakers with Two Phrases

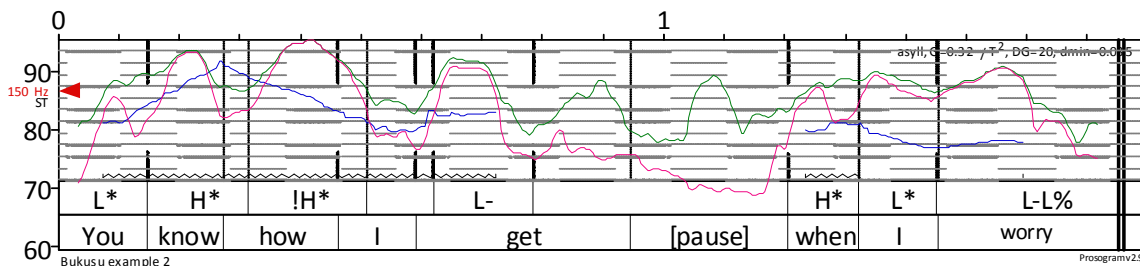


Figure 3. Example of Lubukusu Speakers with Two Phrases

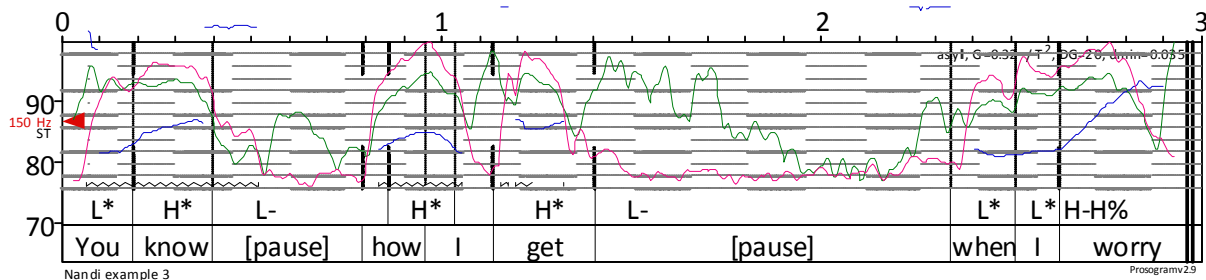


Figure 4. Example of Nandi Speakers with Three Phrases

Interestingly, some Nandi speakers further split the intonation unit into three phrases with accent placement at initial, medial and terminal positions. Reference is made to Figure 4 for an example to illustrate the same. Worth noting, the last accented word *worry* still received the nuclear accent.

Short Declarative Questions

The findings for short declarative questions displayed in Table 4 indicate that there was strong agreement at 73% by Bukusu speakers and only 21% of Nandi speakers to have an early nuclear placement.

Table 4. Distribution of Nuclear Accent Types for Short Declarative Questions

Group	Nuclear Accent Type	Weight	Final Boundary Tone	Weight	Position of Nuclear Placement
Nandi	L*H	71%	H%	71%	Terminal
	H*	29%	L%	21%	Initial
Bukusu	H*	81%	L%	8%	Medial
	H*		L%	73%	Initial
	H*		L%	8%	Medial
	L*H	19%	H%	19%	Terminal

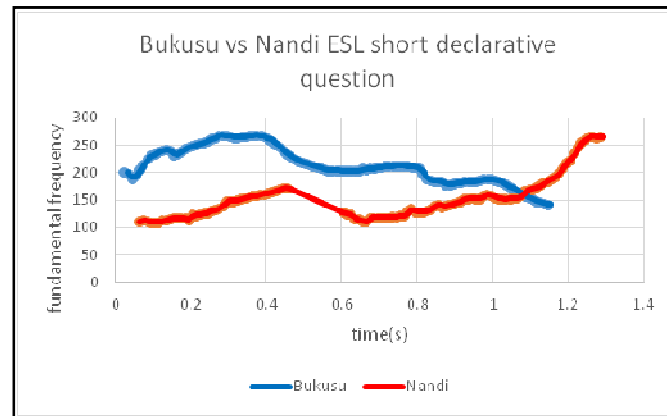


Figure 5. F0s by Majority of Bukusu and Nandi ESL Speakers' Contours for 'You know I love you?'

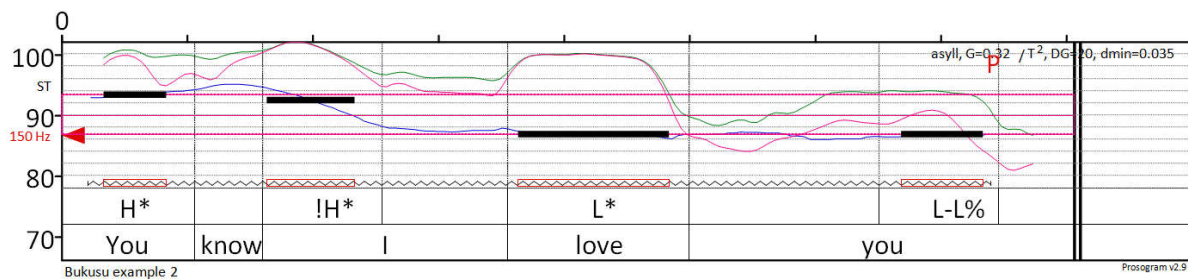


Figure 6. Downstepped Hat Accent on 'I' by Lubukusu ESL Speakers

Strong agreement at 71% of the Nandi speakers and only 19% of Lubukusu speakers placed the nuclear at the terminal position. The nuclear was also placed at the medial position by 8% of Lubukusu speakers and 8% of Nandi speakers. There was strong agreement for Lubukusu speakers to adopt a high-level tone for the nuclear accent followed by a falling boundary tone; which is in turn a rising-falling contour for the whole intonation unit.

An example is shown in Figure 5. Twenty-one percent of Nandi speakers also produced this type of intonation pattern. The findings for short declarative questions further reveal strong agreement, at 71% of Nandi speakers, to adopt a high-rising tone for the accent type followed by a high-rising boundary tone (also reflected in Figure 5). This pattern was also yielded by 19% of Lubukusu speakers. Evidence in Figure 5 further depicts that regardless of having a nuclear at the terminal position, the Nandi ESL speakers also yielded a prenuclear accent at the initial position. Furthermore, those speakers who placed the nuclear at the medial position also produced a prenuclear accent at the initial position. This in turn triggered a downstepped hat accent (H*) followed by a low boundary tone (L%). This is clearly shown on Figure 6. The movement of "downstep" implies a categorical compression of the pitch range that reduces the f0 targets for any high tones subsequent to the specification of the downstep, that is, the counterpart of the "upstep" initiated by the high phrase accent

(tone) (Beckman and Elam, 1997, p. 24). The discussion of these findings is detailed in the next section.

DISCUSSION

The data based on research findings in this study reveals that in varieties of English spoken by the Bukusu and Nandi, declarative questions can be accompanied by a wide range of intonation patterns. The computed variation scores within the ethnic groups for intonation show how probable it is that two speakers of the same ethnic group will produce different intonation patterns in the same utterance type. In variability tests, a score of zero (0) means that two speakers will produce the same pattern and a score of one (1) means that two speakers will produce different patterns. The results reveal that the Bukusu scored 0.4 and the Nandi scored 0.5 for variation in the general intonation contours, 0.3 by the Bukusu and 0.4 by the Nandi for variation for nuclear accent placement in long declarative questions and 0.4 by the Bukusu and 0.3 by the Nandi for variation for nuclear accent placement in short declarative questions. Although there were significant levels of intonational variation found in the data, common behaviours across speakers in one ethnic group were also observed. In each ethnic group, some patterns were more popular than others. Basing on their weight, these patterns were ethnic group specific. This finding shows that although default intonation patterns may not always be there, popular patterns

do exist. Literature on the relevance of intonation to declarative questions points out that variation between rising and falling terminal intonation characterises declarative questions. Thus it cannot be asserted that rising intonation associated with declarative forms, in its own right, indicates question function (Weber, 1993, p. 75). Melodically, the intonation pattern for declarative questions produced by majority of Bukusu ESL speakers was strikingly different from that of Nandi ESL speakers. The Nandi speakers stand out in that they are characterised by a very distinctive terminal nuclear placement with a rising boundary tone for long declarative questions. The Bukusu speakers, on the other hand, show an earlier nuclear accent placement with a high tone followed by a low boundary tone for long declarative questions. For the shorter declarative questions, only two types of tone are employed by both groups of speakers on the nuclear accented words; the high-rising and high-level tones. Bukusu ESL speakers show a general rising-falling intonation pattern; while the Nandi speakers show a rising-falling-rising intonation pattern.

Conclusion

This paper has explored intonation variation in Kenyan English with specific reference to Bukusu and Nandi ethnic varieties. It has addressed this by exposing the range of intonation patterns for different sentence types as uttered by both groups. It has also shown the extent to which utterances in English by the two groups vary in intonation. Evidently, Bukusu and Nandi ESL speakers display a distinction in their intonation patterns. Although it is commonly assumed that intonation patterns can cue utterance type, and that in British English language norms questions are likely to rise and statements are likely to fall, the findings here reveal that in some instances the correlation is not reliable. In some cases, like for the Bukusu ESL speakers, declarative questions are more likely to fall. This means that ESL speakers may be aware of and use more complex correlations between intonation patterns and utterance type and that correlations may go beyond the simple rise-equals-question formula. To sum up, the null hypotheses of this study were rejected; there was indeed significant difference in the intonation pattern of the English declarative questions within and between Bukusu and Nandi ESL speakers. Moreover, this study focused on the Bukusu and Nandi ESL speakers' intonation patterns and further research is essential to establish whether generalisations can be made or new findings can be found from the remaining ethnic groups regarding the range of intonation patterns evident in Kenyan English.

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