

## **Analysis of Grammatical and Discourse Intonation in Selected Radio Broadcasters in Nigeria**

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### **Abstract**

*Intonation and the functions it performs/fills are well established in language use, especially in the interpretation of meaning and speaker intention. This study investigates the performance of radio broadcasters in selected radio stations in Akwa Ibom State, Nigeria, with the aim of determining the broadcasters' ability to deploy appropriate aspects of the English intonation system during news presentation. Five news broadcast sessions were sampled, and ten newscasts were recorded and transcribed. Analysis of the data was anchored on Firth's prosodic theory and Halliday's systemic grammar, while Pratt's acoustic analysis was employed for phonetic measurement. Results of the analyses show variation in the deployment of discourse intonation markers both in stress placement and pitch as well as in marking grammatical issues like appropriate demarcation of clauses/syntactic units like WH-questions, polar questions, etc. in discourse. These variations have implications for audience comprehension and mutual intelligibility, especially for non-Nigerian listeners.*

**Keywords:** Discourse, Intonation, Pitch, Stress, Intelligibility, Broadcasters, Nigeria.

## 1. Introduction

The question of an appropriate model of pronunciation among radio broadcasters in Akwa Ibom State is of considerable importance. Broadcasters in Nigeria are expected to employ a form of standard Nigerian English that is intelligible, fluent, and appropriate to audience and context. Although the Nigerian school curriculum does not prescribe a specific pronunciation model, it emphasises the use of internationally acceptable English in spoken communication.

A standard variety is typically associated with broadcast institutions and educated speakers within society, and its features are often emulated by wider speech communities (Labov, 1972). While grammatical accuracy is a key component of standard usage, prosodic features, particularly stress and intonation, play an equally critical role in meaning interpretation and communicative effectiveness.

The global spread of English has led to the emergence of multiple varieties, often referred to as "Englishes", shaped by diverse sociolinguistic environments (Eka, 2017). In multilingual contexts such as Nigeria, English functions predominantly as a second language and is influenced by indigenous linguistic systems. This has resulted in identifiable phonological and prosodic characteristics that distinguish Nigerian English from other varieties.

The indigenisation of English in Nigeria, described as domestication or nativisation (Adegbija, 2004; Udofot, 2003), has produced variations in pronunciation, stress patterns, and intonation. These variations are particularly evident in spoken domains such as broadcast media, where clarity, intelligibility, and audience engagement are essential.

Given the centrality of intonation in structuring meaning and guiding interpretation in spoken discourse, it is necessary to examine how effectively broadcasters deploy prosodic features in real communicative contexts. This study therefore focuses on the grammatical and discourse functions of intonation in selected radio broadcasts in Akwa Ibom State.

## 2. Objectives of the Study

The present study has the following objectives:

- i. To examine the discourse intonation of selected radio broadcasters in Akwa Ibom State;
- ii. To analyse the intonation of the subjects studied;

- iii. To determine appropriate deployment of grammatical and discourse intonation by the subjects studied; and
- iv. To determine the possible effect of inappropriate deployment of grammatical and discourse intonation on meaning interpretation of the spoken discourse studied.

### **3. Research Methodology**

This study adopts a descriptive and analytical approach to investigate the deployment of grammatical and discourse intonation in radio broadcasting. Five broadcast stations in Akwa Ibom State were purposively selected to ensure representation across different media outlets.

Data were collected through recorded news broadcast sessions, from which ten newscasts were obtained. These recordings were carefully transcribed, and six representative sentences produced by different broadcasters were selected for detailed analysis. The selection was guided by the need to capture variations in intonation patterns across speakers and contexts.

The analysis was conducted using acoustic phonetic procedures in a language laboratory setting. Specifically, the Praat software was employed to measure key prosodic features, including pitch (fundamental frequency) and intensity (loudness), which are critical to the realisation of stress and intonation. These features were examined in relation to their grammatical and discourse functions, such as clause demarcation, emphasis, and information structuring.

To ensure analytical rigour, the acoustic findings were interpreted within the frameworks of Firth's prosodic theory and Halliday's systemic functional grammar. This dual framework enabled the study to account for both the phonetic realisation of intonation and its functional role in meaning-making within discourse.

### **4. Theoretical Framework**

The theory adopted for this work is the prosodic theory by Firth (1930). Prosodic theory has to do with phonetic features like tone, intonation, accentuation – stress, pitch, and duration – which extend over entire syllables or words, and phonological phenomena which extend over longer utterances like phrases and sentences (Eka, 1996).

Prosody, which is an aspect that deals with the spoken language rather than written language, plays an important role in conveying the speaker's mood, relationship with the reader and other attitudinal matters (Densen 1991). Further, prosody involves

facial expressions, gestures and body movements, which can all portray a specific attitude. "We can all express emotions with adjectives – happy, angry, sad, afraid, surprised, tired and so on – but often we express the emotions with prosody" (Abbelin, 2005:10); for example, "come here" can be used in different circumstances when the voice quality is changed; it can be a command or a request.

#### 4.1. Intonation

Intonation is a fundamental feature of spoken language and plays a crucial role in the interpretation of meaning and speaker intention (Bolinger, 1985; Cruttenden, 1986; Gimson, 1989; Roach, 1991). It constitutes a central component of suprasegmental phonology, also referred to as prosodic phonology or simply prosody (Roach, 2009). As a prosodic feature, intonation operates through variations in pitch across an utterance, contributing significantly to the organisation and interpretation of spoken discourse.

Intonation is commonly defined as the patterned variation in pitch during speech. Crystal (2008) describes intonation patterns as sequences of pitch levels or tones; however, this use of "tone" must be distinguished from its application in tone languages, where pitch contrasts function at the lexical level to differentiate meaning. In contrast, in non-tone languages such as English, intonation serves a range of communicative functions beyond lexical distinction. These include signalling speakers' attitudes and emotions, differentiating between sentence types (e.g., statements and questions), highlighting informational focus, and regulating conversational interaction.

- i. Scholars have identified several key functions of intonation. While different classifications exist, Wells (2006) outlines six major functions, which are particularly relevant to this study.
- ii. Attitudinal function (for expressing emotions and attitudes) Example: a fall from a high pitch on the 'mor' syllable of 'good morning' suggests more excitement than a fall from a low pitch.
- iii. Grammatical function assists in identifying syntactic structure. Intonation can signal distinctions between sentence types, such as statements and yes–no questions, and can help disambiguate structurally ambiguous utterances.  
Example: He is going home?

- iv. Focusing (to show what information in the utterance is new and what is already known) Example: I saw a man in the garden. Answer, "Whom did you see? Or what happened? While I saw a man in the garden?" Answers, "Did you hear a man in the garden?"
- v. Discourse function (to show how clauses and sentences go together in spoken discourse) Example: Subordinate clauses often have lower pitch, faster tempo and narrower pitch range than their main clause, as in the case of the material in parentheses in "The Red Planet (as it is known) is fourth from the sun."
- vi. Psychological function (to organise speech into units that are easy to perceive, memorise and perform) For example, the utterance "You can have it in red, blue, green, yellow or black" is more difficult to understand and remember than the same utterance divided into tone units, as in "You can have it in red, blue, green, yellow or black."
- vii. Indexical function (to act as a marker of personal or social identity) Example: group membership can be indicated using intonation patterns adopted specifically by that group, such as street vendors or preachers.

The discourse function of intonation is the function that analyses sentences' appearance in the bigger context. The discourse or cohesive function of intonation signals how groupings of clauses and sentences go together in spoken language; it enables others to signal whether or not one reacted to the conclusion of the sentence, whether one needs to keep talking or he's prepared to allow another speaker a turn. Since the 1970s, the discourse function of intonation has ended up being the focus of linguistics research. Thus, phonologists have shifted their interest from the simple pitch forms to the discourse function of intonation. Discourse function has its beginnings in the formal description of Halliday but was developed into a total hypothesis by Brazil (Coulthard 1985). The hypothesis is attractive since it's straightforward and has a powerful explanatory force.

The grammatical function of intonation refers to the syntactic part played by words or phrases in the context of a specific clause or sentence, now and then called essentially 'function'. In English, the grammatical function of intonation is essentially decided by a word's position in a sentence, not by inflection (or word endings). This function can be used to identify the grammatical structure; it does the same thing that

punctuation does in writing. It can mark where a sentence begins and where it ends. Although the grammatical function of intonation is difficult in teaching, it is so important because it is used in daily communication. "Many sentences which are potentially ambiguous in their spoken form can be identified by intonation" (Katamba, 1989:244). The grammatical function of intonation is used in ambiguous sentences in their written form, and this ambiguity can be cleared by using intonation.

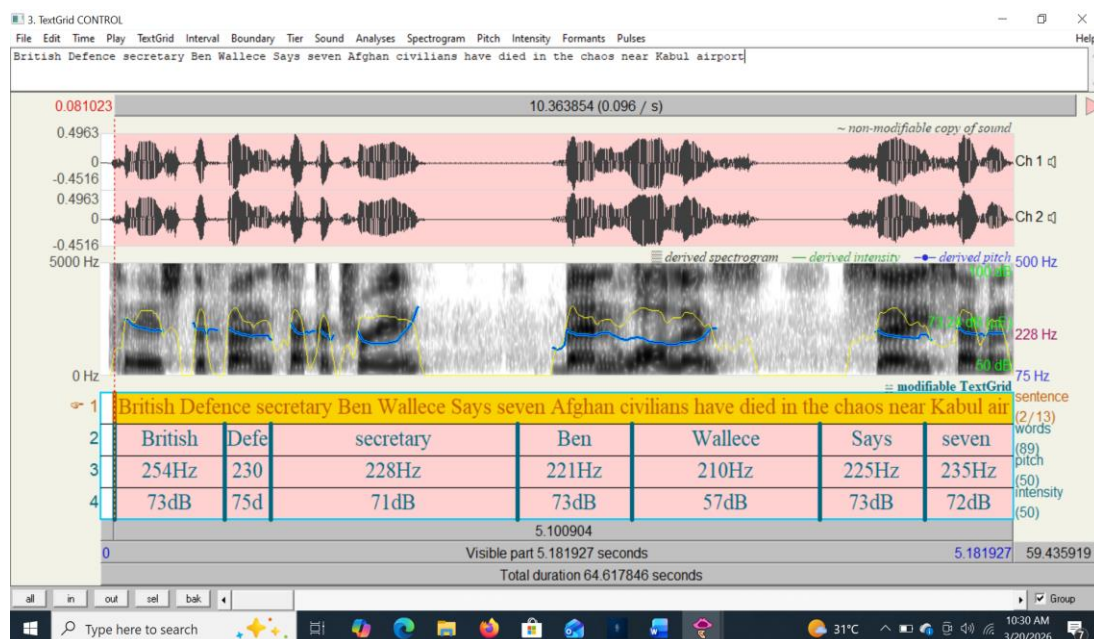
## 5. Data Presentation

Out of the ten respondents, the productions of 6 are analysed. Six sentences were recorded for the newscasters and the same six were recorded for the control. In all, ten sentences were analysed acoustically.

### 5.1. Analysis of Sentence 1

**Sentence 1:** British Defence Secretary Ben Wallace says seven Afghan civilians have died in the chaos near Kabul Air.

#### Control



**Fig. 1** Analysis:

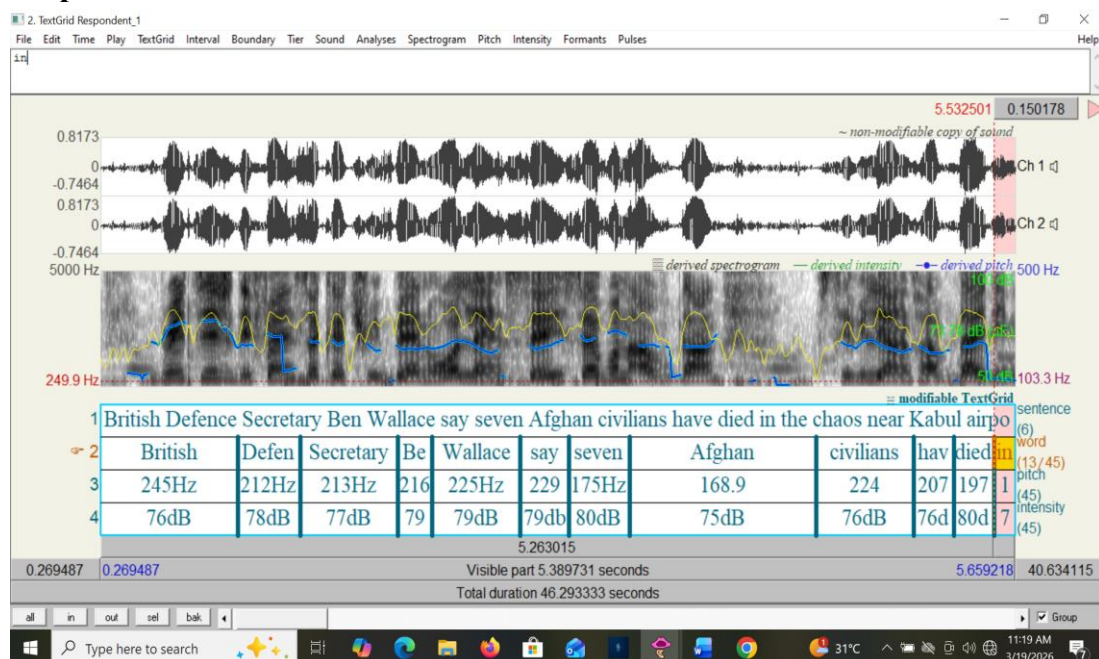
The pitch rises and falls smoothly.  
 No extreme jumps (not too high, not too low)  
 Intensity is steady (not too loud or too soft).  
 Speech sounds natural and balanced.

### Meaning:

This is what “normal speech” should look like.

**Sentence 1:** British Defence Secretary Ben Wallace says seven Afghan civilians have died in the chaos near Kabul Air.

### Respondent



### Fig. 2: Analysis

Two things were measured here:

#### i. Pitch (Hz)

How high or low the voice sounds

High pitch → sharper voice

Low pitch → deeper voice

## ii. Intensity (dB)

How loud or soft the voice is

High intensity → louder speech

Low intensity → softer speech

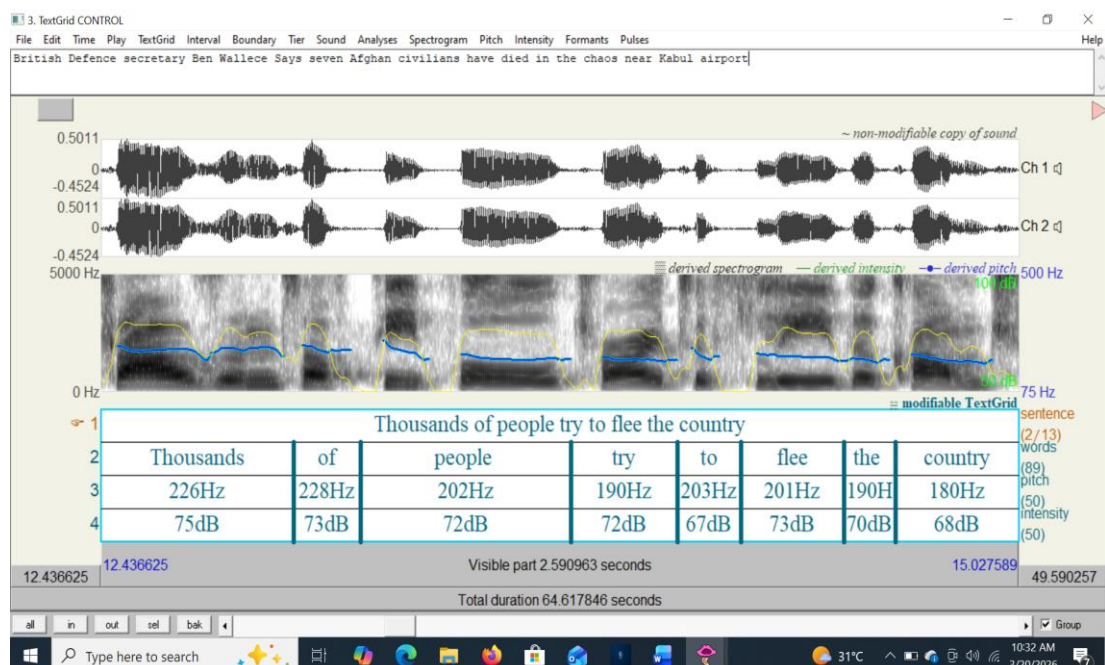
The control sample exhibits a relatively smooth pitch contour, characterised by gradual rises and falls without abrupt fluctuations. Intensity remains stable throughout the utterance, resulting in a balanced and natural prosodic pattern consistent with standard broadcast delivery.

In contrast, Respondent 1 demonstrates noticeable irregularities in pitch modulation. The pitch contour shows abrupt fluctuations, with exaggerated rises and falls that disrupt the natural rhythm of the utterance. Although intensity remains relatively stable, the excessive pitch variation results in an over-expressive delivery, which may affect listener comprehension and perceived professionalism.

## 5.2. Analysis of Sentence 2

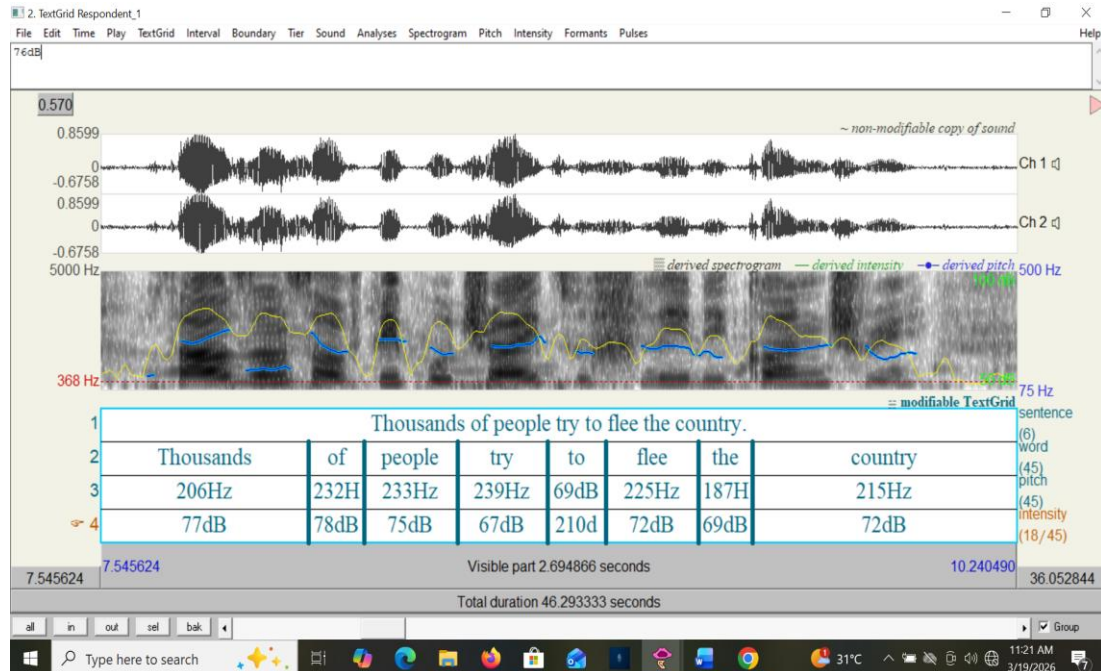
**Sentence 2:** Thousands of people try to flee

### Control



**Fig. 3**

## Respondent



**Fig. 4**

### Respondent 2 (Too Flat / Monotone)

Pitch stays almost the same

Very little rising or falling

Intensity slightly drops in places

### Interpretation:

The speaker sounds flat and less interesting

No strong emphasis on important words

### Compared to control:

Not enough variation

Lacks natural rhythm

The control production displays appropriate pitch variation, with a clear rise-fall pattern that highlights the informational focus of the utterance. Intensity is evenly distributed, contributing to clarity and emphasis. Respondent 2, however, exhibits a markedly restricted pitch range. The pitch contour remains relatively level throughout the utterance, indicating minimal prosodic variation. Although intensity shows slight decline in certain segments, the overall delivery is characterised by monotony. This

lack of variation reduces prosodic prominence and weakens the communicative impact of the utterance.

### 5.3. Analysis of Sentence 3

#### Sentence 3: Nigerian Ambassador Sheena Alagir has sought increased collaboration Control

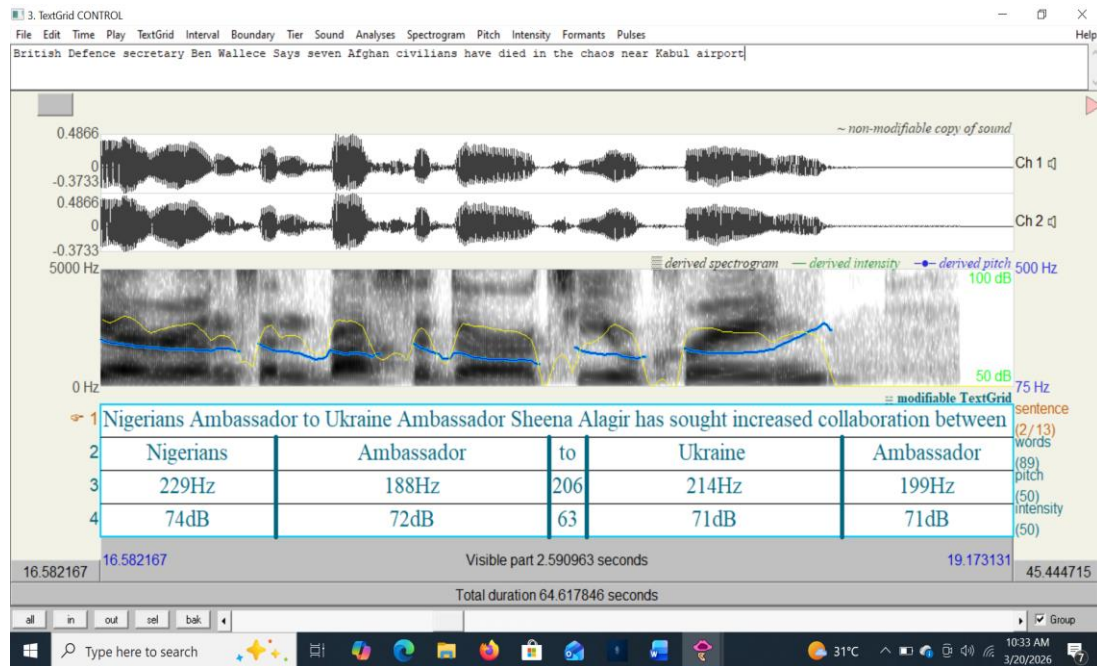
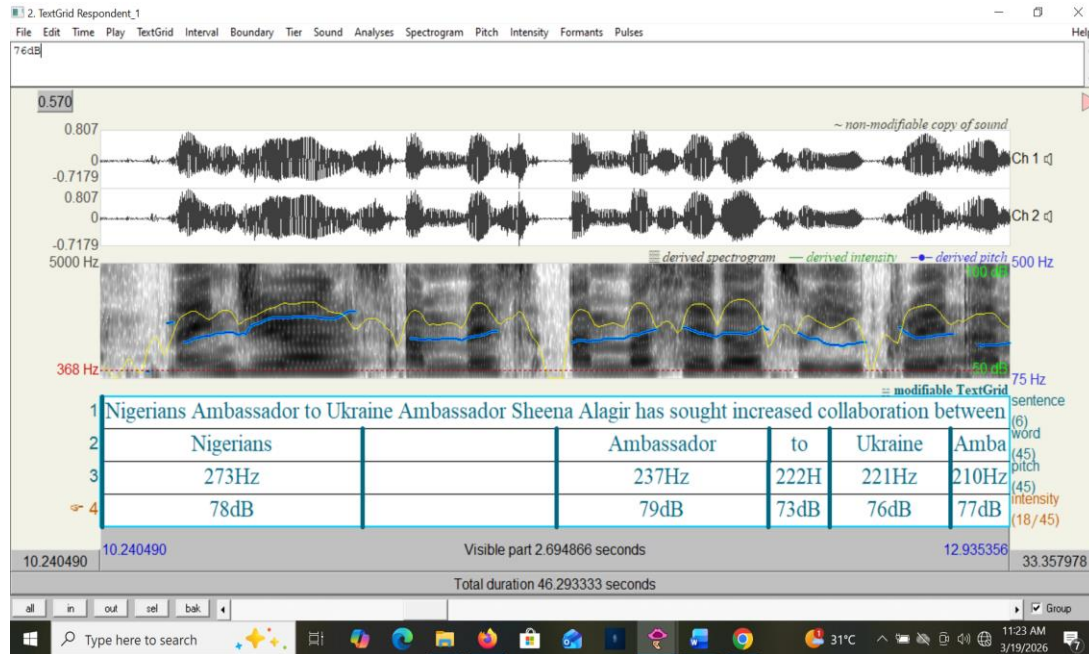


Fig. 5

## Respondent



**Fig. 6**

### Respondent 3 (Unstable)

Pitch goes very high and very low

Intensity is sometimes too low (weak voice)

#### Simple interpretation:

The speaker is inconsistent

Sometimes too loud, sometimes too soft

Sometimes too high, sometimes too low

#### Compared to control:

Too unstable

Poor balance

#### Conclusion:

Speech is irregular and not well controlled

#### 5.4. Comparative Evaluation of Respondents

Across the dataset, distinct patterns emerge in the prosodic performance of the respondents. These patterns can be categorised into three broad profiles based on pitch variation and intensity stability:

- i. **Balanced Prosody (Optimal Performance):** Respondent 4 demonstrates a pitch contour and intensity pattern closely aligned with the control sample. The delivery is characterised by moderate pitch variation, stable intensity, and smooth rhythmic flow, resulting in a natural and intelligible broadcast style.
- ii. **Moderately Controlled Prosody (Acceptable Performance):** Respondent 5 exhibits relatively stable intensity and moderate pitch variation. However, the reduced pitch range limits expressiveness, producing a somewhat subdued delivery. While intelligibility is maintained, the communicative impact is less pronounced.
- iii. **Deviant Prosody (Suboptimal Performance):** Respondents 1, 2, 3, and 6 display varying degrees of deviation from the control pattern. Respondent 1 demonstrates excessive pitch fluctuation, resulting in over-modulation. Respondent 2 and Respondent 6 exhibit restricted pitch variation, leading to monotonic delivery. Respondent 3 presents the most inconsistent performance, characterised by both unstable pitch and irregular intensity.

**Table 1: Overall Comparison Summary**

Respondent	What is happening	Problem	Quality
R1	Too expressive	Too many pitch jumps	Average
R2	Flat speech	No variation	Poor
R3	Unstable	Too much variation + weak spots	Poor
R4	Balanced	No major issue	Best
R5	Slightly flat	Less expression	Good
R6	Too controlled	Not expressive	Average

### 5.5 Summary of Findings

The control sample consistently demonstrates a balanced interaction between pitch variation and intensity stability, which serves as a benchmark for effective broadcast speech. Among the respondents, only one (Respondent 4) approximates this pattern closely, while others exhibit deviations in the form of either excessive modulation or insufficient variation.

These findings suggest that effective broadcast delivery requires a controlled balance between pitch dynamism and stability. Both extremes (monotony and excessive fluctuation) negatively impact intelligibility and listener engagement. Optimal performance is therefore achieved through moderate and well-regulated prosodic variation.

### 5.6 Discussion of Findings

The acoustic analyses presented in the preceding section reveal significant variation in the deployment of pitch and intensity across the sampled broadcasts (Sentences 1–6). These variations are indicative of differing levels of control in the use of prosodic features, particularly in relation to sentence stress and intonation patterns.

The findings show that the degree of loudness, as reflected in intensity measurements, is closely associated with sentence stress. However, in many instances, stress placement deviates from patterns typically associated with received pronunciation (RP). Such deviations suggest that the broadcasters do not consistently adhere to conventional prosodic norms expected in standard broadcast English. Sentence stress appears to be determined in several cases by the broadcaster's affective or intuitive judgement rather than by applying accepted discourse or grammatical rules and principles. While this occasionally results in appropriate emphasis that aligns with intended meaning, it more frequently leads to misplaced or insufficient prominence on key lexical items. Consequently, the communicative function of intonation (like signalling of focus, contrast, and clause boundaries) was not always effectively realised.

These inconsistencies can be, on one hand, attributed to first-language interference, a common feature in second-language phonological production. Given that English functions primarily as a second language in the Nigerian context, the influence of indigenous phonological systems may affect both pitch range and stress placement. On the other hand, individual articulatory habits and varying levels of phonetic training among broadcasters may contribute to the observed irregularities.

From a discourse perspective, the findings indicate that inadequate control of intonation impacts not only sentence-level meaning but also the organisation of extended speech. In cases where pitch variation is either excessively restricted (monotonic delivery) or overly exaggerated (unstable modulation), the resulting speech lacks prosodic coherence. This affects the listener's ability to identify informational focus, interpret speaker intention, and process the flow of discourse effectively.

In contrast, broadcasters who demonstrate moderate and controlled pitch variation, as well as stable intensity, produce speech that more closely approximates standard broadcast norms. Such patterns facilitate clarity, enhance intelligibility, and support effective communication with a wider audience, including non-native listeners. In sum, the findings of this study reveal how important balanced prosodic control is in broadcast speech. A controlled interaction of pitch and stress that is consistent with both grammatical structure and discourse function is necessary for effective intonation rather than either extreme fluctuation or minimal variation. These results reinforce the view that intonation is a critical component of communicative competence, especially when it comes to professional spoken contexts such as radio broadcasting.

## 6. Conclusion

This study has demonstrated that Nigerian English broadcasters exhibit distinct prosodic patterns when compared to British English norms, particularly in the realisation of pitch and sentence stress. The findings reveal varying degrees of deviation from received pronunciation, ranging from monotonic delivery to excessive pitch fluctuation. Nevertheless, some broadcasters display a level of proficiency that approximates standard broadcast expectations.

The study further establishes that effective broadcast communication depends on a balanced deployment of prosodic features. Both insufficient variation and over-modulation negatively affect intelligibility, listener engagement, and the accurate interpretation of meaning. Optimal performance is therefore achieved through controlled and contextually appropriate use of pitch and stress.

In light of these findings, it is recommended that broadcast institutions prioritise continuous professional development for their personnel. This should include targeted training in phonetics and prosody, regular performance evaluation, and increased exposure to standard broadcast models. Such measures would enhance broadcasters' ability to deliver news in clear, fluent, and internationally intelligible English, thereby improving overall communicative effectiveness.

**References**

- Abbelin, Å. (2005). *On the perception of emotion in speech*. Lund University Press.  
<https://lup.lub.lu.se/>
- Adebija, E. (2004). The domestication of English in Nigeria. In S. Awonusi & E. Babalola (Eds.), *The domestication of English in Nigeria* (pp. 20–44). University of Lagos Press.
- Bolinger, D. (1985). *Intonation and its parts: Melody in spoken English*. Stanford University Press.  
<https://www.sup.org/books/title/?id=2283>
- Coulthard, M. (1985). *An introduction to discourse analysis* (2nd ed.). Longman.
- Cruttenden, A. (1986). *Intonation*. Cambridge University Press.  
<https://doi.org/10.1017/CBO9780511807645>
- Crystal, D. (2008). *A dictionary of linguistics and phonetics* (6th ed.). Blackwell.  
<https://doi.org/10.1002/9781444302771>
- Densen, P. (1991). Prosody and communication. In *Studies in phonetics and phonology*. Routledge.
- Eka, D. (1996). *Elements of Nigerian English phonology*. Scholars Press.
- Eka, D. (2017). *Nigerian English in contemporary contexts*. University of Uyo Press.
- Firth, J. R. (1930). *Speech*. Ernest Benn. <https://archive.org/details/speech00firtuoft>
- Gimson, A. C. (1989). *An introduction to the pronunciation of English* (4th ed.). Edward Arnold.
- Halliday, M. A. K. (1970). *A course in spoken English: Intonation*. Oxford University Press.
- Halliday, M. A. K. (1994). *An introduction to functional grammar* (2nd ed.). Edward Arnold.  
<https://doi.org/10.4324/9780203431264>
- Katamba, F. (1989). *An introduction to phonology*. Longman.
- Labov, W. (1972). *Sociolinguistic patterns*. University of Pennsylvania Press.  
<https://repository.upenn.edu/handle/20.500.14332/8058>

Roach, P. (1991). *English phonetics and phonology* (2nd ed.). Cambridge University Press.

Roach, P. (2009). *English phonetics and phonology* (4th ed.). Cambridge University Press.

<https://www.cambridge.org/highereducation/books/english-phonetics-and-phonology/>

Udofot, I. (2003). Nativisation of English in Nigeria: A cultural and linguistic renaissance. *Journal of Nigerian English and Literature*, 4, 42–52.

Wells, J. C. (2006). *English intonation: An introduction*. Cambridge University Press.  
<https://doi.org/10.1017/CBO9780511808857>