

# Conversational Intonation Patterns in the “Wh-” Question Utterances of Some Educated Nigerian Users of English

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## Abstract

Earlier works on English intonation have paid attention to its formalised patterns; whereas people’s conversational utterance intonation choice features are inadequately investigated. This work explores the conversational intonation patterns of some educated Nigerian users of English (ENUE) to establish the compliance of their conversational speech intonation patterns with the context of their interaction. It further investigates if the domain of interaction has any significant impact on people’s intonation choices. Fourteen excerpts are purposively selected from the conversational utterances of 7 purposively selected electronic media participants (Group A) and 7 focus group discussion participants (Group B). Structure and contexts of occurrence of the excerpts determines the choice of the analysed “wh-” questions. Data collection was done by textual analysis, Focus Group Discussion (FGD) and questionnaire. Frequency and analysis of variance were employed for quantitative analysis. The Discourse Intonation (DI) model of David Brazil’s served as the theoretical framework. The “wh-” question tone-unit intonation patterns of the participants averagely conform to DI, with 5 excerpts (71.4%) from Group A and 2 (28.6%) from Group B being in agreement with DI ( $p = 0.106$ ). There is no statistically significant difference in the mean between the two groups as the statistical p-value was above 0.05. Consequently, ENUE are generally alike in their non-adherence to DI in “wh-” question tone unit intonation choices of their spontaneous utterances.

**Keywords:** Conversational intonation; “Wh” question utterances; Educated Nigerian users of English; Formalised patterns; Discourse intonation

## Introduction

English, a stress-timed language, is largely intonational as a syllable is stressed to make the word of which it is a part prominent in the tone unit, or to categorize the sentence in which the word that contains the stressed syllable occurs by its sentence type. Placing stress on a syllable in a word may also be aimed at specifying the sense which the sentence consisting the word is meant to convey. On the contrary, Nigerian languages are tonal; tone languages only utilise some degree of overlaid intonation (Cruttenden, 1986: 10). This minimal use of intonation in Nigerian languages makes its comprehensive use in English a challenge for Nigerian users of English as a Second Language (ESL).

Works on English intonation (Udofot, 1997 and 2007; Jowitt, 2000; Okon, 2001; Adesina, 2005; Akinjobi and Oladipupo, 2005 and 2010; Atoye, 2005 and Melefa, 2001) and the West African Examinations Council’s (WAEC, 2013-2016: 210) provision for the teaching of English intonation have so far concentrated on its rule-governed patterns. Even the 2024 National Examinations Council’s (NECO) senior school certificate examination only tested knowledge in English speech sounds, rhyme, word stress and emphatic/contrastive stress. Most English Language Teaching (ELT) textbooks thus simply provide a scanty set of intonation rules that permit an analysis of just a small fraction of intonation options made in language altogether (Cauldwell and Hewings, 1996: 333). The rules are, by themselves, insufficient to demonstrate the comprehensive intonation choices made in spontaneous speech. Language, as

a natural phenomenon and a means of communication, is dynamic as it changes so as to match up with the society. As a result, it cannot be limited to a fixed set of rules as individuals are inclined to convey diverse degrees of meanings and attitudes with shifting intonation patterns comprehended by the interlocutors within their interactional context, but which are usually not rule-based. Aligning with Adejuwon (2019) who investigated the discourse context of educated Nigerians' non-interrogative English utterance intonation patterns, this paper, therefore, examines the conversational intonation choices in the “wh-” question utterances of some educated Nigerian users of English (ENUE) to find out the agreement of their spontaneous “wh-” question intonation choices with their context of interaction. In the rule-based intonation model, “wh-” questions (questions starting with “wh-” like what, which, when, etc.) are those on which “it is quite usual...to use a falling tone” (Roach, 2009: 156). This may not necessarily be the pattern in conversational situations.

### **Theoretical Framework**

Discourse Intonation (DI) model, a fairly recent method for teaching and analysing everyday utterance, assists in enabling English language learners “make their meanings and intentions clear to a listener” (Brazil, 1994, p. 2). The DI model, created by David Brazil, is especially helpful at this period of a rise of awareness in investigating the connection of intonation choices with the speaker's communicative purpose. Quite a number of researchers have in recent times “turned their attention to the role of intonation in discourse” (Clark et al., 2007: 359). The present paper has as its theoretical hinge the tone system of speaker choice variable in the DI model due to the prevalence of DI, its wide acceptance and close relevance to interactionally-motivated speech. Speakers freely choose a tone (called “tune” in this paper in line with more recent usage in ELT textbooks) instead of another depending on their context of interaction.

Tune, which is referred to as tone by Brazil (1997), is explained as pitch movements marked by their specific direction or curve (Coulthard, 1985: 101). Brazil (1997: 9-10) recognises five tunes which are: fall, rise, fall-rise, rise-fall and level that he labels the “complete set of possibilities”. Nonetheless, crucial to the selection of tune is the proclaiming/referring (P/R) opposition that “is realised by the two tones most frequently found in many kinds of discourse, the ‘fall’ and the ‘fall-rise’” (Brazil, 1997: 68). The fall presents its tone unit as “something freshly introduced into the conversation” whereas the fall-rise portrays its tone unit as “what we are talking about” (Brazil, 1997: 68-69). That is, a falling tune is proclaiming while a rising one is referring. Letters “p” (proclaiming) and “r” (referring) are thus used instead of the arrows ↘ and ↗ respectively (Brazil 1997: 69).

### **Methodology**

The study participants were composed of fourteen educated Nigerian users of English (ENUE). Seven participants' (Group A) conversational utterance were recorded on discussion programmes and interview sessions during newscast on the electronic media (Nigerian Television Authority – NTA, Africa Independent Television – AIT, Channels Television and Federal Radio Corporation of Nigeria – FRCN). Seven other participants' (Group B) spontaneous utterances were recorded during focus group discussion (FGD) carried out by this researcher. Both sets of participants were chosen to find out if interactional context could affect the intonation choices of ENUE. A text containing seven “wh-” question excerpts (Excerpts A1 to A7) was produced from the utterances of Group A and another text of seven “wh-”

interrogative excerpts (B1 to B7) was drawn up from the utterances of Group B (See Appendices A and B). The texts were generally prepared interactively to show their conversational contexts. The “wh-” question parts of the excerpts are typed in italics while the responses are in normal prints. The underlined parts of the excerpts constitute the analysed tone units.

The educational qualifications of the whole participants ranged from National Certificate in Education (NCE) to university degrees, as they were senior government officials, university lecturers, medical doctors, etc. Educated Nigerian English which represents the most socially acceptable is said to be spoken principally by university graduates (Gut, 2005: 154). Adejuwon (2011, p. 51) has however revealed that getting a university degree in English is not an automatic means of making one a better user of English intonation than those who learn this prosody elsewhere. What is important is the depth of the training as well as the instructional facilities available and the learner’s willingness.

The intonation tunes used by the study sample were analysed based on their identification and quantification. The specific intonation tunes employed by the participants were identified and the rate of their use was verified. The symbols *p* (proclaiming tune) and *r* (referring tune) were used in place of the falling arrow (↘) and the rising arrow (↗) respectively to specify the tunes placed on the analysed intonation groups used for illustration in the data analysis. This follows Brazil’s (1997, p. 69) shift from arrow usage to the use of the symbols *p* and *r*. Acoustic analysis was employed to identify the participants’ intonation patterns. The recorded data were played back to the wasp (sfs/wasp) software on the computer for acoustic analysis. A number of the spectrograms thereby produced are used as illustrative Figures (SFS screen captures) in the analysis. The analysed tone units were extracted from the excerpts.

STATA version 11, which permits command and reduces error, was applied for univariate (descriptive/qualitative) analysis of the data. This produced the frequencies and percentages of both the proclaiming (falling) and the referring (rising) tunes incidences in the participants’ utterances. The participants’ compliance with the DI model was thus established. The percentages of the study sample’s application of the proclaiming and the referring tunes (summary data) thereby generated were subjected to ANOVA for inferential (quantitative) analysis. This revealed the level of statistical significance in the mean between both groups.

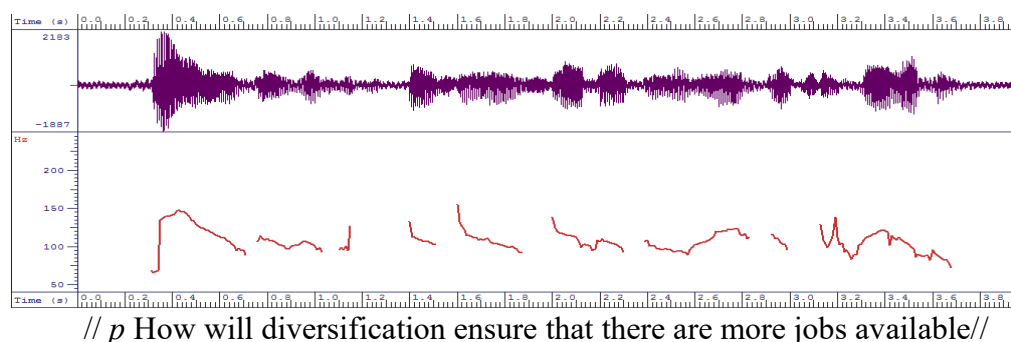
## **Data Analysis**

### **Group A Participants’ Intonation Choices in “Wh-” question Tone Units**

Five out of the 7 tone units (Excerpts A1, A3, A4, A5 and A6) produced by the study participants in Group A, representing 71.4%, conformed to DI. Excerpt A1 speaker obviously knew his interviewee’s university of affiliation, rendering his choice of the referring tune for asking the “wh-” interrogative to be in agreement with DI. The participant who uttered Excerpt A3 was querying the government’s readiness to control a disaster situation. Hence, her use of the referring tune points to the fact that she knew the government was unprepared; she merely expected her co-interlocutress to confirm what she already believed to be the case. Uttering the tone unit with the referring tune is therefore in tune with DI.

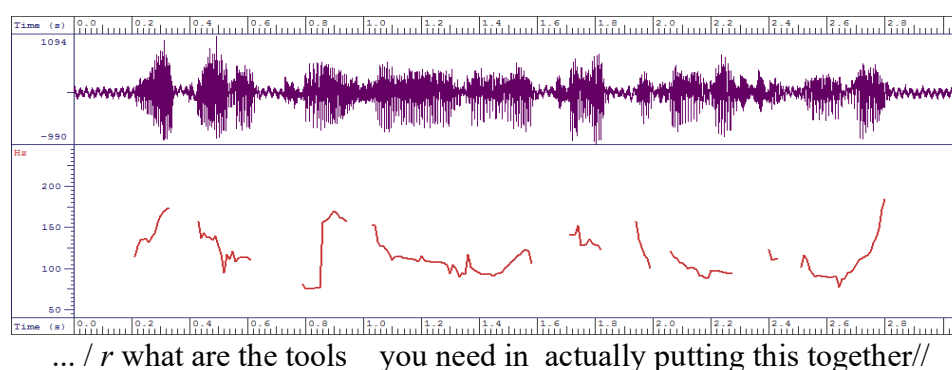
Excerpt A4 participant was actually seeking information from a medical practitioner as regards the latter’s experience in his area of specialisation. The proclaiming tune choice thus conforms to DI. The use of the proclaiming tune in uttering Excerpt A5 aligns with DI since the participant was attempting to find out the level of collaboration between a food security

expert and the government. The proclaiming tune choice by the participant who uttered Excerpt A6 (Figure A1 below) is also in consonance with DI because of the fact that she was asking for information from her interviewee on a matter she did not want to assume knowledge about:



**Figure A1: SFS screen capture of “How will diversification ensure that there are more jobs available”**

The outstanding 2 intonation groups (Excerpts A2 and A7), that amount to 28.6%, did not agree with DI. Excerpt A2 speaker was apparently seeking the information she did not have. Consequently, using the referring tune to utter this tone unit is not DI-compliant. Contrarily, in the context of this excerpt, it is obvious that Excerpt A7 participant had presumed that the legislature was to be held responsible just like the executive as regards polity handling. Hence, her enquiry was a leading question meant to obtain a confirmation of her suspicion. Using the proclaiming tune is for that reason not consistent with DI. The non-compliance of the participants’ tune choice is illustrated in Excerpt A2 (Figure A2):



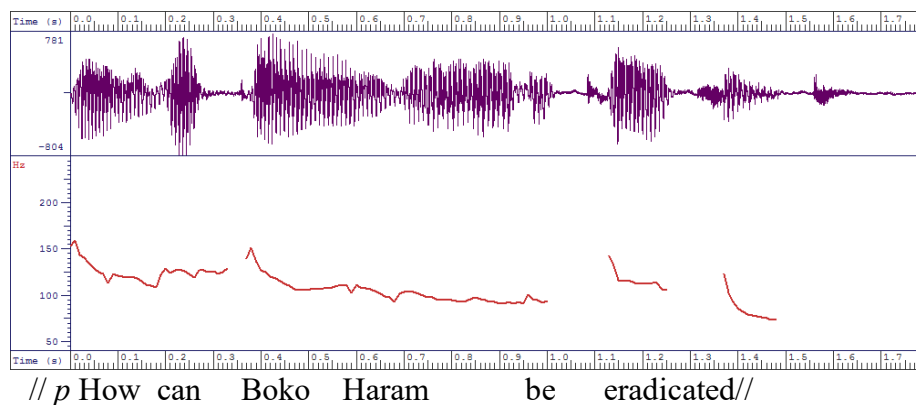
**Figure A2: SFS screen capture of “... what are the tools you need in actually putting this together”**

Going by the study participants’ intonation patterns, it seems that most educated Nigerians generally regard “wh-” interrogatives as normally seeking information. The participants therefore placed the proclaiming or falling tune, which is the formalised tune for “wh-” questions, on 4 of the 7 analysed intonation groups. It can thus be claimed that ENUE employ the proclaiming tune for asking the “wh-” interrogatives intended to elicit information. In addition, in view of the fact that 2 out of the 3 tone units uttered with the referring tune are

really making sure of the suspected, we can modestly assert that the Group A's excerpts conform to DI.

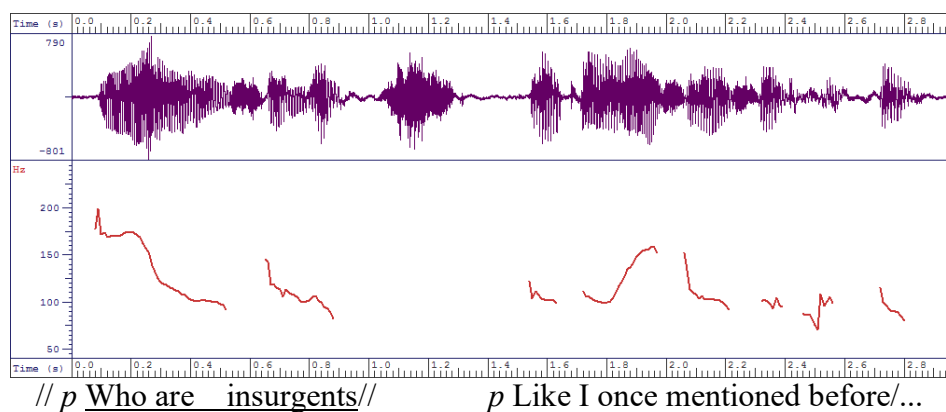
### Group B Participants' Intonation Choices in “Wh-” interrogative Tone Units

The study participants in Group B recorded compliance with DI in 2 of the 7 excerpts with “wh-” question tone units (Excerpts B2 and B7), which represents 28.6%. Excerpt B2 speaker uttered the two “wh-” interrogative intonation groups in the excerpt using the proclaiming tune. This was intended to truly draw out information. With these questions, the participant wanted to hear his interviewees' view on how to stamp out the “Boko Haram” menace. His pattern therefore conforms to DI. The proclaiming tune was also used to ask the Excerpt B7 “wh-” interrogative tone unit which is an open-ended question. An insurgent group was well known to both interlocutors because they were both from Northern Nigeria where Boko Haram was on the loose. Nonetheless, Excerpt B7 speaker did not restrict his interviewee on how the question can be answered. He asked the question with nothing stipulating his expectation. Essentially, the participant desired his interviewee to state his view which the interviewer did not assume would totally agree with his own opinion. The consistency of the participants' intonation usage with DI is illustrated with the following extract from Excerpt B2 (Figure B1):



**Figure B1: SFS screen capture of “How can Boko Haram be eradicated”**

The rest 5 excerpts (Excerpts B1, B3, B4, B5 and B6), representing 71.4%, were not conformity with DI. The 2 “wh-” interrogative tone units in Excerpt B1, for instance, were uttered using the proclaiming tune. The discussed topic being well-known to all the FGD participants, the participant simply posed the questions to confirm what he already knew was the issue by requesting the interviewee to define Boko Haram. His use of the proclaiming tune for the questions is thus not in conformity with DI. The interviewer just employed the rule-based intonation for “wh-” interrogatives. In addition, the proclaiming tune choice in Excerpt B5 does not conform to DI as the participant only echoed the question asked by Excerpt B4 speaker, that is, it is not a new question, but a confirmation of a previous one. Besides, the participant stated in the excerpt that he had earlier answered the question:



**Figure B2: SFS screen capture of “Who are insurgents? Like I once mentioned before”**

It is important to note that the entire tone units examined in this section were said with the proclaiming tune. As earlier observe, it appears that majority of educated Nigerians normally view “wh-” interrogatives as simply seeking information in tune with the grammatical intonation rule on “wh-” questions. Due to this fact, Group B participants just applied the fall to produce the whole intonation groups involved. It can for that reason be averred that whereas ENUE employ the proclaiming tune in seeking information with the “wh-” interrogatives, several are not aware that the referring tune can as well feature in asking the same question type intended to verify what is already assumed to be the case.

Despite the glaring divergence in Group A participants’ compliance with DI (71.4%) and Group B study population’s conformity with DI (28.6%), it can still be asserted that ENUE are inclined to considering the connection between “wh-” questions and intonation as quite grammatical than discursal. This is so because 11 out of the 14 (indicating 78.6%) total excerpts (4 excerpts in Group A and 7 in Group B) containing the “wh-” interrogatives were uttered with the falling tune which is the unmarked intonation tune for “wh-” interrogatives.

### **Analysis of Variance of the Overall Study Participants’ “Wh-” question Tone-unit Intonation Choices**

Group A participants recorded 71.4% compliance with DI as the intonation patterns of 5 out of their 7 “wh-” question tone-unit excerpts conformed to DI. Group B participants, on their own part, had 28.6% agreement with DI as the intonation choices of 2 out of their 7 “wh-” question tone-unit excerpts adhere to DI. The table below presents the ANOVA representing the statistical significance level in the mean between both groups.

### **Analysis of variance of Groups A and B**

Analysis of variance					
Sources	Sum square	Degree of freedom	Mean square	F-cal	P-Value
Between	<b>0.617</b>	1	<b>0.617</b>	<b>3.049</b>	<b>0.106</b>
Within	<b>2.430</b>	12	<b>0.203</b>		



Total	3.047	13
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P = 0.05

It can be observed from the ANOVA table above that the level of significance is 0.106 ( $p = .106$ ), which is above 0.05. Therefore, the mean between Groups A and B has no statistically significant difference. This shows that interactional domain does not cause any substantial difference among educated Nigerian users of English with regard to their compliance with DI in the “wh-” interrogative tone unit intonation choices. Hence, ENUE are generally the same in their non-compliance with DI in “wh-” interrogative tone unit intonation choices. This aligns with Adejuwon’s (2019) finding that ENUE are generally alike in their non-adherence to DI even in the non-interrogative tone-unit intonation choices.

## Conclusion

The data analysis has revealed that there is no significant difference between both groups’ (i.e. Groups A and B) intonation choices. The study showed a notable vacuum between the conversational intonation choices of the selected ENUE and their context of interaction. That is, the joint intonation choices of the two groups of participants in the “wh-” question tone units only recorded average conformity with the Discourse Intonation (DI) model which is context based. Merging the “wh-” interrogative excerpts in which the whole study sample complied with grammatical intonation rule, it is obvious that ENUE mainly regard “wh-” interrogatives as generally seeking information. They consider the connection between “wh-” questions and intonation as more grammatical than discorsal, hence their predominant use of the falling tune for “wh-” interrogatives. It is recommended that the discourse intonation principles be integrated in the spoken English syllabuses and that elementary school pupils and learners at other levels be taught English intonation by experts in English phonology to boost its proficient use.

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## APPENDIX A

### Group A Participants' Intonation Patterns

- //\The Nigerian universities are in various stages of lack of preparedness/\but there are some high quality institutions like the one I'm associated with now//
- A1. //^\Which one of them//
- A2. //^\In terms of putting this together/^\what are the materials/^\what are the tools you need in actually putting this together//  
//^\I need a hammer/^\I need a scissors/^\I need a screw driver/ \I need chemical glue// \This is what does the wrapping//
- A3. //^\The question is/^\Are they prepared//^\Which way to go//^\Are they prepared//  
//^\NEMA and the Federal Government have met/^\time and time/\and time again/ \looking for ways of finding a solution//
- A4. //^\In your experience as a fertility doctor/\^\what would you say the demand is like//  
//^\I guess it's ever increasing/
- A5. //^\And what is the level of cooperation//  
//^\Coming to the involvement of the government/\I haven't seen a much more concerned government/\in trying to get food security for our people/\than this current government//
- A6. //^\How will diversification ensure that there are more jobs available//  
//^\I think we depend on oil/\from the report//^\So/^\we should go into manufacturing/^\into agriculture/^\into other areas/
- A7. //^\Do you think the legislature has played its role adequately//^\Because you seem to be putting all the blame on the executive//^\How about the legislature and the roles they are supposed to play for the Nigerian polity//^\Have they been able to play their role adequately//  
//^\At House of Representatives/\we have done our part//^\We have done it well/ \and I know Nigerians are proud of us//^\For you to know that we have done our



own part/\\we go to the constituencies through the committees//

## APPENDIX B

### Group B Participants' Intonation Patterns

- B1.** //\\What is Boko Haram//\\Or how can we define Boko Haram//  
//^Boko Haram simply means/\\if you want to put it literally/\\we can say it's anti-book//\\But the main idea of Boko Haram is anti-western education//
- B2.** //\\Let's look at the last question//\\How can Boko Haram be eradicated//\\How will Boko Haram become a thing of the past//  
//^To stop Boko Haram in the country/^government should engage in dialogue/\\and negotiation//\\I don't think it's by military might/\\because when you are physical with them/\\I think there'll be a lot of casualties/\\and mayhem in the country//
- B3.** //\\Our topic is//\\Insurgency in Nigeria//^Causes//^Effects//\\and Solutions//\\The first question is//\\"What is insurgency"//  
//\\Insurgency is a rebellious act against the government//^It is a rebellious act against the government/^and also a pessimistic way of intruding/\\and breaking the economy of the government//
- B4.** //\\Who are insurgents//^Probably/\\we want to get examples of insurgents/\\looking at Nigeria now/\\Who are insurgents//
- B5.** //\\Who are insurgents//\\Like I once mentioned before/^we have militants from Niger Delta/^we have OPC from western part of Nigeria/\\we have Boko from northern side of Nigeria/\\and the Ibos who are the Biafrans//^It's like I said/\\anybody who has decided to rebel against a constituted authority is an insurgent//
- B6.** //\\What do you understand by insurgency//  
//^To the best of my understanding/^insurgency is any rebellion against the authority/\\or against the state/\\that is/\\against the government//^Any act of aggression against the people/^against the authority/\\it is an insurgency//
- B7.** //\\Who are insurgents//  
//^To me/\\insurgents are not Muslims/\\they are not Christians//\\These are the people who have no fear of God//\\These are the people who are enemies of this country//\\These are the people who are enemies of the northern part of the country//