

Interactionally-motivated intonation tune choice in the spoken polar questions of some educated Nigerian users of English

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Abstract

Earlier research efforts on English intonation have focused on its formalised patterns while features of individuals' natural speech intonation choice have been insufficiently investigated. This paper explored the interactionally-motivated intonation tune choice in the spoken polar questions of some educated Nigerian users of English (ENUE) to find out the extent of the conformity of their natural speech intonation patterns with the context of their interaction. The Discourse Intonation (DI) model of David Brazil constituted the theoretical background. Sixteen excerpts (polar question tone units) were selected from the spur-of-the-moment utterances of 8 electronic media participants (Group A) and 8 focus group discussion (FGD) participants (Group B). Sentence type and contexts of occurrence of the excerpts determined the choice of the polar questions that were analysed. Data collection was done with textual analysis, FGD and questionnaires. Quantitative analysis was carried out using frequency and analysis of variance (ANOVA). The participants' polar question intonation tune choice in the analysed tone units recorded 62.5% (10 out of 16 tone units) conformity with DI, in which case 6 polar questions (75.0%) from Group A and 4 (50.0%) from Group B were in consonance with DI ($p = 0.334$). With the p-value being

greater than 0.05, the difference in the mean between the two groups did not reflect any statistical significance. ENUE are thus essentially alike in their compliance with DI in the interactionally-motivated polar question intonation tune choice.

Keywords: Interactionally-motivated intonation; Polar questions; Educated Nigerian Users of English; Natural speech; Formalised patterns

1. Introduction

English, which is a stress-timed language, is principally intonational because a syllable can be stressed to make the word within which it appears stand out in its tone unit, or to classify the sentence within which the word that contains the stressed syllable occurs as regards sentence type. Placing stress on a syllable within a word may also be for the purpose of indicating a specific meaning that the sentence which contains the word is intended to communicate. Conversely, Nigerian languages are tonal; tone languages only make use of superimposed intonation to a limited degree (Cruttenden, 1986, p. 10). This non-elaborate use of intonation in Nigerian languages seems to make its extensive use in English a dilemma for users of English as a second language, including educated Nigerians.

Earlier studies on English intonation (Adesina, 2005; Akinjobi & Oladipupo, 2005, 2010; Atoye, 2005; Jowitt, 2000; Melefa, 2001; Okon, 2001; Udofot, 1997, 2007) and the West African Examinations Council's (WAEC, 2013-2016, p. 210) provisions for the teaching of English intonation have so far focused on its formalised patterns. Even the 2024 National Examinations Council's (NECO) senior school certificate examination has just tested knowledge in English speech sounds, rhyme, word stress and emphatic/contrastive stress. Hence, English Language Teaching (ELT) textbooks generally lay down a restricted set of intonation rules that permit a description of just a small part of intonation choices made in language altogether (Cauldwell & Hewings, 1996, p. 333). The rules are, by themselves, insufficient to mirror the comprehensive intonation choices made in spontaneous utterances. Being a natural occurrence and a mode of communication, language is dynamic and it changes so as to keep pace with the society. It is therefore not practicable to limit it to a finite set of rules because individuals are inclined to convey diverse shades of meanings and attitudes with varying intonation patterns which the interlocutors understand based on the context of their interaction, but which are usually not rule-based. Taking a cue from Adejuwon (2019), who examined the discourse context of educated Nigerian's intonation choices in the non-interrogative English utterances, this paper, therefore, investigates the interactionally-motivated intonation tune choices in the spoken polar

questions of some educated Nigerian users of English (ENUE) to find out the extent of the conformity of their natural speech intonation patterns with the context of their interaction.

2. Discourse Intonation (DI) model

Discourse Intonation (DI) model is a comparatively new approach to the teaching and analysis of day-to-day speech that assists in enabling English language learners “to make their meanings and intentions clear to a listener” (Brazil, 1994, p.2). This model, initiated by David Brazil, is specifically helpful in this age when there is growing interest in enquiries on the connection between intonation choices and the speaker’s communicative purpose. According to Clark et al. (2007, p. 359), quite a number of researchers have in recent times “turned their attention to the role of intonation in discourse”. This research adopts the tone system of speaker choice variable in the DI model as its theoretical fulcrum due to the currency of DI, its wide acceptance and close relevance to spontaneous utterances. Speakers have the freedom to choose a tone (referred to in this paper as tune in line with more recent usage in ELT textbooks) instead of another depending on their context of interaction.

Tune, for which Brazil (1997) uses tone, is defined as pitch movements distinguished by their exact direction or contour (Coulthard, 1985, p. 101). Brazil (1997, pp. 9-10) recognises five tunes, that is, fall, rise, fall-rise, rise-fall and level as the “complete set of possibilities”. Nevertheless, vital to tune choice is the proclaiming/referring (P/R) opposition “that is realised by the two tunes most frequently found in many kinds of discourse, the ‘fall’ and the ‘fall-rise’” (Brazil, 1997, p. 68). The fall depicts its tone unit as “something freshly introduced into the conversation”, whereas the fall-rise portrays the tone unit on which it is placed as “what we are talking about” (Brazil, 1997, pp. 68-69). That is, a falling tune is a proclaiming tune while a rising tune is a referring one. The letters “*p*” (proclaiming) and “*r*” (referring) are accordingly used in place of graphic symbols $\searrow$ and $\nearrow$ respectively (Brazil 1997, p. 69).

3. Methodology

The study participants comprised sixteen educated Nigerian users of English (ENUE). The polar-questions spontaneously spoken by eight of the participants (Group A) were recorded during chat programmes and within-news dialogue sessions on the electronic media (Nigerian Television Authority – NTA, Africa Independent Television – AIT, Channels Television and Federal Radio Corporation

of Nigeria – FRCN) while the interactionally-motivated spoken “yes/no” interrogatives of the remaining eight participants (Group B) were recorded during focus group discussion (FGD) carried out by this researcher. The two sets of participants were chosen to find out whether the sphere of interaction could have an impact on the intonation choices of ENUE. An eight-excerpt text (Excerpts A1 to A8) was put together from the utterances of the participants in Group A (an excerpt from each participant) and another text of eight excerpts (B1 to B8) was produced from the utterances of the Group B participants, also based on an excerpt from each participant (See Appendices A and B). The portions that are underlined in the excerpts are the analysed polar questions.

All the participants had academic certifications varying from National Certificate in Education (NCE) to university degrees, being professional broadcasters, senior civil servants, postgraduate students and other similarly qualified professionals. Educated Nigerian English which represents the most socially acceptable in Nigeria is said to be spoken mostly by university graduates (Gut, 2005, p. 154). Conversely, Adejuwon (2011, p. 51) has found out that acquiring a university degree in English Language is not necessarily a proof that one is better in the use of English intonation than those who are taught this prosody elsewhere. The important thing is the intensity or quality of the teaching together with the instructional facilities as well as the eagerness or interest of the learner.

Analysis of the data collected was done based on the identification and the quantification of the intonation tunes the study participants used. The exact intonation tunes that the study sample used were identified and the regularity of their occurrence was established. The symbols *p* (for proclaiming tune) and *r* (for referring tune) were employed in place of the falling arrow ($\searrow$) and the rising arrow ($\nearrow$) respectively to represent the tunes placed on the illustrative tone units in the data analysis section. This is in agreement with how Brazil (1997: 69) changed from using arrows to employing the symbols *p* and *r*. The instrumental approach was applied to identify the participants' intonation patterns. The acoustic analysis for the study was done by playing back the recorded data to the wasp (sfs/wasp) software on the computer. Some of the spectrograms (that is visual representations of the intonation contour) consequently generated are used in the tone-unit illustrations for the analysis. These tone units were taken from the excerpts.

STATA version 11 (a software package for statistical data analysis that was created by Statacorp in 1985 but released for use in 2013), which permits command and reduces error, was used to do a univariate (descriptive/qualitative) analysis of the data. This produced the frequencies and percentages of the occurrences of both the proclaiming and the referring tunes in the study sample's utterances. Thus, determined was the participants' conformity with the DI model. The percentages of the study sample's use of the proclaiming and the referring tunes

(summary data) thereby generated were subjected to analysis of variance (ANOVA) for inferential (quantitative) analysis. This revealed the statistical significance level in the mean between the two groups.

4. Data analysis, findings and discussion

4.1. Group A participants' intonation choices in polar-question tone units

The analysis of the Group A participants' intonation choices revealed conformity with discourse intonation (DI) in 6 of the 8 polar-question tone units (Excerpts A1, A2, A3, A4, A5 and A6), representing 75.0%, while the remaining 2 tone units (Excerpts A7 and A8), representing 25.0%, were not consistent with DI.

The population recorded greater conformity with DI by placing the referring tune, which is the unmarked, that is, rule-based tune for grammatical intonation, on four out of the six tone units that were uttered in consonance with DI. It is for that reason inferable that the conformity of the study population with DI in 6 of the 8 excerpts was due, mainly, to their knowledge of grammatical intonation rules in English Language Teaching (ELT) textbooks rather than awareness of DI on their part. The choice of the referring tune by the participant who produced Excerpt A1 suggests that she knew the government was ill-prepared, but only expected her co-interactant to confirm what she already suspected to be the case. Her use of the referring tune to utter the "yes/no" question thus conforms to DI. The participant in Excerpt A3 had already stated the need for all involved, including herself, to task themselves and she had assumed her co-interactant's consent. She only sought confirmation of her presumed common ground with the other party by the question, thereby making her use of the referring tune to be conformity with DI.

Also, based on the information the speaker of Excerpt A5, a broadcaster, had gathered, she knew that the fault was not the federal government's alone and also knew that the government official she was interacting with was aware of that fact as well. She only wanted to confirm that position from her co-interlocutor. The participant's choice of the referring tune in this tone unit is, therefore, in accord with DI. Likewise, the participant in Excerpt A6, also a broadcaster, already knew that the primary motive for setting up businesses was to make profit. He merely asked the question to establish a common ground between himself and his interviewee. The use of the referring tune to produce the tone unit, that is, Excerpt A6 (Figure A1) is, for that reason, consistent with DI:

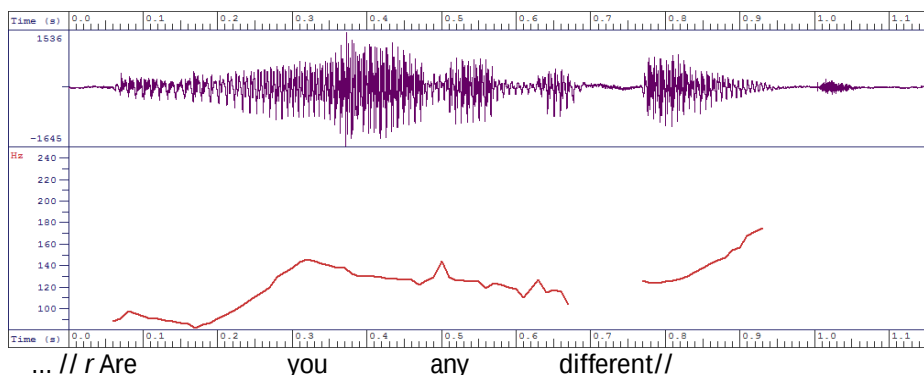


Figure A1 SFS screen capture of “Are you any different?”

The two tone units with non-conformity with DI had one produced with the referring tune and the other with the proclaiming tune. That is, the referring tune was used in place of the proclaiming tune in a tone unit while the proclaiming tune was applied instead of the referring tune in the other. This shows a state of inconsistency in the choice of intonation tunes by the participants. The participant in Excerpt A7 could not have been finding out with a particular question (a “wh-” question in the excerpt: “// ∇ ...what is the level of cooperation//”) and immediately be making sure with the very next question that was meant to reinforce the preceding one. This participant was definitely seeking to be informed; hence, his choice of the referring tune is inappropriate and, as such, is not in concord with DI. The polar question in Excerpt A8 (Figure A2) was uttered as a leading question which was intended to extract a response to confirm what the speaker had suspected to be the case. A “wh-” question (“// ∇ How about the legislature and the roles they are supposed to play for the Nigerian polity//”) was actually asked to reiterate the “yes/no” interrogative. The use of the proclaiming tune to utter the polar question is therefore out of place in DI:

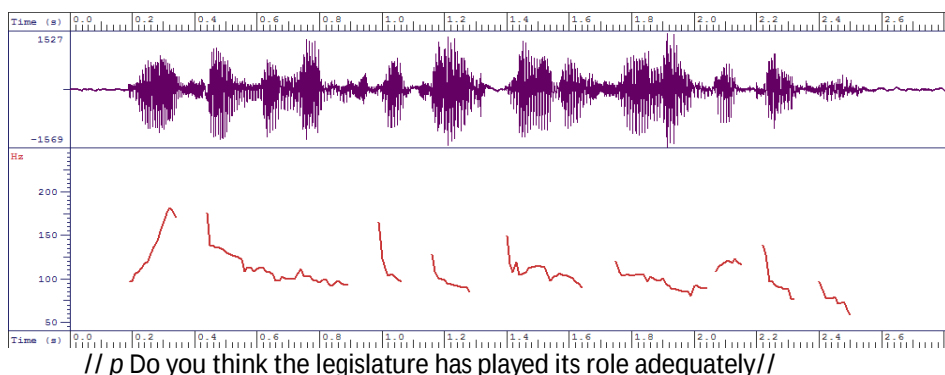


Figure A2 SFS screen capture of “Do you think the legislature has played its role adequately?”

4.2. Group B participants' intonation choices in polar-question tone units

Group B participants had conformity with DI in 4 of the 8 Excerpts (Excerpts B1, B4, B7 and B8), that is 50.0%, while the participants' placement of intonation tunes on the remaining 4 (Excerpts B2, B3, B5 and B6), representing 50.0%, was not consistent with DI. On the one hand, the choice of the referring tune to ask the polar question in Excerpt B1 falls within the purview of DI. Certain information had earlier been provided and the question was only meant to confirm the suspected agreement of the other parties in the conversation with the speaker's position. The speaker in Excerpt B4 chose the proclaiming tune as a signal to the interviewee that she wanted to be informed by him on how long insurgency had existed in Nigeria. The use of the proclaiming tune here is thus in accord with the DI model. The referring tune was applied by the participant in Excerpt B7 to signal some common ground between himself and his fellow Hausa/Northern Nigerian interlocutor; hence his referring tune choice here is in line with the DI model. The speaker of Excerpt B8 also placed the proclaiming tune on his polar question as a signal to the interviewee that he was seeking information. This claim is supported by the subsequent tone units, also produced with the proclaiming tune, which the participant employed to explain his question in order to make it clear. The conformity of the participants with DI is illustrated with Excerpts B1 (Figure B1) and B8 (Figure B2) respectively:

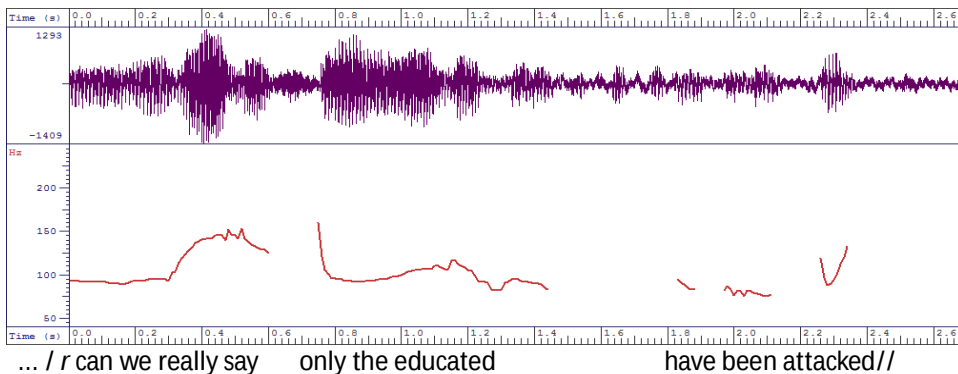


Figure B1 SFS screen capture of “... can we really say only the educated have been attacked?”

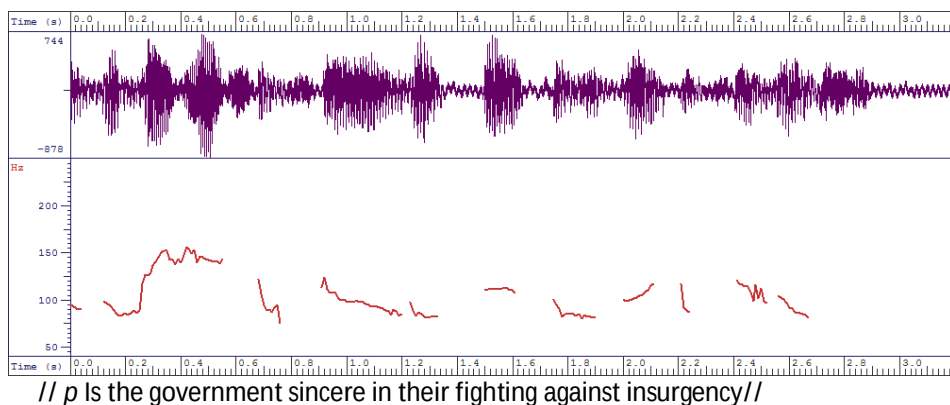


Figure B2 SFS screen capture of “Is the government sincere in their fighting against insurgency?”

On the other hand, the choice of the proclaiming and the referring tunes respectively to ask two successive polar questions in Excerpts B2 and B3 meant to draw out just a response (the latter being intended to emphasize the former) shows that the participants were not sure about which one should be used in these contexts. The polar questions are obviously those that expect confirmation, going by the fact that the nefarious activities of Boko Haram were common knowledge. Also, the use of the proclaiming tune in Excerpt B5 does not conform to the DI model because it was an echo question which the participant asked to make sure that he heard his interviewer correctly, and not to find out anything new. The interviewer in Excerpt B6 (Figure B3) asked the question to get someone among his interviewees to confirm what all of them in the group already knew as the meaning of insurgency and specific examples of insurgent groups had earlier been discussed by them. The participant’s choice of the proclaiming tune to ask the question is therefore inconsistent with DI:

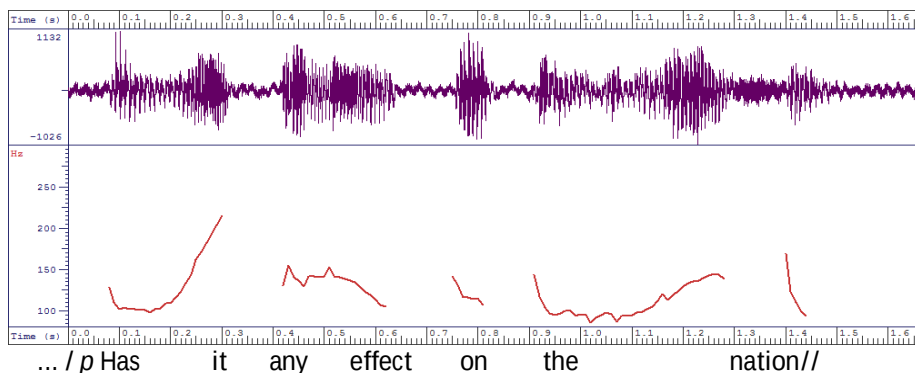


Figure B3 SFS screen capture of “Has it any effect on the nation?”

Like the Group A participants, their Group B counterparts also used both the referring and the proclaiming tunes to produce “yes/no questions”, but not with the same level of conformity. While the Group A participants used the referring tune with greater DI conformity (in 4 out of the 6 tone units/Excerpts that were uttered in consonance with DI), their Group B counterparts recorded equal conformity using both tunes (in 2 tone units/Excerpts apiece). Sixty percent of the total DI-compliant excerpts (6 out of 10 excerpts for both Groups A and B) were produced with the referring tune. This implies that the conformity of the participants with DI in polar questions was due mainly to their knowledge of the rule-based pattern for “yes/no” questions rather than any awareness of DI or proficiency in its application.

4.3. Analysis of variance of the overall study participants’ polar-question tone-unit intonation choices

Group A participants had 75.0% conformity with DI as the intonation choices of 6 among their 8 “yes/no” interrogative tone-unit excerpts were in accord with DI. The Group B participants recorded 50.0% conformity with DI with the intonation patterns of 4 among their 8 “yes/no” interrogative tone-unit excerpts being in agreement with DI. The following table presents the ANOVA which indicates the extent of statistical significance in the mean between the two groups.

Groups A and B’s “yes/no” questions analysis of variance

Analysis of variance					
Sources	Sum of square	Degree of freedom	Mean of square	F-cal	P-Value
Between	0.250	1	0.250	1.000	0.334
Within	3.500	14	0.250		
Total	3.750	15			

P = 0.05

The table above shows that the significance level is 0.334 ($p = .334$), which is above 0.05. Therefore, the difference in the mean between Groups A and B is not statistically significant. This suggests that interactional domain, whether on the electronic media or in normal physical interaction, results in no significant difference among educated Nigerian users of English with regard to their conformity with DI in “yes/no” question intonation patterns mainly aided by their knowledge of the rule-based pattern for polar questions. ENUE are by that fact generally comparable in their conformity with DI in polar-question tone-unit intonation choices.

5. Conclusion

The study revealed no striking disparity between Groups A and B with regard to their intonation patterns. It has also been found out that most of the DI-compliant polar interrogatives of both groups (6 out of 10 excerpts) were produced with the referring tune whereas the participants were unsure about which tune to use in the remaining 6 of the whole 16 excerpts as their intonation choices were haphazard. This implies that the conformity of the participants with DI in polar questions was due largely to their knowledge of the grammatical rule pattern for “yes/no” questions. Therefore, educated Nigerian users of English generally produce the polar question with the rising tune irrespective of whether the question is intended to seek information or give confirmation. This study recommends that the discourse intonation principles, especially in the aspect of polar questions, be accommodated in the spoken English curricula and elementary school pupils as well as learners at other levels should be taught English intonation by experts in the phonology of English to improve its proficient use.

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APPENDIX A

Group A Participants' Intonation Patterns

- A1. // ↗The question is/ ↗Are they prepared// ↗Which way to go// ↗Are they prepared//
- A2. // ↘Dynamo Kiev have somehow threatened the other teams in Europe// ↘Do you think people expect anything good from Dynamo Kiev this time around//
- A3. // ↗It may not happen overnight/ ↗but we need to task ourselves// ↗Don't you think we need to task ourselves//
- A4. // ↘Do the various government agencies involved in the assessment tour work in harmony to ensure the success of the presidential assignment//
- A5. // ↗Stakeholders say/ ↘tackling environmental challenges is all encompassing// ↗Should the fault stop on the federal government table alone//
- A6. // ↗The motive for most people in business/ ↗is to make profit at the end of the day// ↗Are you any different//
- A7. // ↘Are you working in tandem/ ↘in partnership with the government/ ↗to ensure that things are better agriculturally/ ↗for Nigeria/ ↗and Nigerians/ ↗and Africans// ↘And what is the level of cooperation// ↗Does the government truly understand what partnership should be with the private players//
- A8. // ↘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//

APPENDIX B

Group B Participants' Intonation Patterns

B1. //↘Boko Haram is against western education//↘But looking at those that have been attacked by these people/↘this sect called Boko Haram/↗can we really say only the educated have been attacked//↗They go to parks/↗they bomb people/↘they go to different locations//↘Though they go to schools as well/↘I don't see Boko Haram in Nigeria as against western education alone//

B2. //↘Can we say Boko Haram is a recent development then//↗Can we say it is recent//

B3. //↘Has Boko Haram had any effect on Nigeria//↗Or are they still having effect//

B4. //↗Okay/↘it causes unrest in the society//↘Is it a recent development//

B5. //↗Well/↘insurgency in Nigeria/↘to me is/↗if we say/↘Is it a recent development//↘Yes/↘because we are known to be the happiest people on earth//↘Insurgency in Nigeria is just developing recently/↘and what is causing it is probably some linkage with some Islamic ideology//↘That's my own point of view//

B6. //↘The next question is/↘Has it any effect on the nation//

B7. //↗Has it any effect on the nation//

B8. //↘Is the government sincere in their fighting against insurgency//↘When I say government/↘I'm talking about federal and the state levels//