PRODUCTION AND INTERPRETATION OF ACCENTUAL INTONATION TUNES IN L2 ACQUISITION: IMPLICATIONS FOR NIGERIAN SPOKEN ENGLISH ACCENT

Julianah Ajoke Akindele
Richard Damilare Akano

Intonation is one of the most problematic aspects of English prosody for L2 learners. Although studies on Nigerian English (NigE) intonation have claimed that Standard English intonation differs significantly from native Englishes, but the interpretation and production of accentual intonation tunes in L2 acquisition have been inadequately explored. Fifty final-year Nigerian university undergraduates in the Department of English were randomly sampled, and each of the respondents was made to read aloud into a digital voice recorder, and to interpret ten English sentences. Respondents' performance was converted to simple percentages, while the voice production of each of the respondents was elicited from Huckvale's Speech Filing System (SFS). Respondents' frequency of occurrence at the production level showed 134 instances of appropriate use, while inappropriate use amounted to 366 out of 500 expected results of accentual tunes. Performance on sex basis revealed males' and females' appropriate accentuation at 67 instances each and 183 instances of inappropriate accentuation respectively, with both sexes showing no difference in accentual tune use. Findings further revealed that out of 500 expected results for the interpretation of accentual tunes, respondents appropriately interpreted the English sentences in 360 instances, while 140 respondents misinterpreted the English sentences. Though, the results of the respondents revealed some level of competence in the interpretation of accentual tunes, at the production level, respondents unsatisfactorily applied accentual tunes to English expressions. The study recommends that the exposure of L2 learners to digitised non-enculturation materials should be imbibed across private and government-owned institutions across the educational strata.

Keywords: Accentual intonation tune, L2 acquisition, native Englishes, Nigerian spoken English accent, university undergraduates

Introduction

Intonation is a communicative import that helps to determine the product of communication regardless of the lexical or grammatical meaning of the words used. It is a phonological phenomenon used to give different meanings to utterances. Generally, intonation is the rise and fall in pitch of voice during speech production. The fluctuations of pitch patterns in some languages convey synthetic information, although their uses linguistically vary from one language to another. Most important is that the lexical items in any language are usually spoken with a varying pitch. A static pitch in one's voice is not normal in conversation. Therefore, the pitch of the voice is constantly changing. Where there is no such constant change of pitch, the spoken utterance will not only sound monotonous or unintelligible, but one is also sure to be deprived of an important means of expression (Crystal, 1980).

Reviewing works of literature on intonation, it is not difficult to find that most linguists have extensively worked on the functions of intonation, which reveals the important role intonation plays in the communication of meaning. As vital as the knowledge of intonation is to the perception of meaning, this knowledge may not be common among L2 speakers. Observations show that not much attention is given to it, especially at the primary and secondary school levels in Nigerian classrooms. The reasons could be as a result of the fact that it is a suprasegmental feature, its complexity arising from stress, syllable placement, inadequate experts to handle the technicality of the topic, and inadequate facilities such as language laboratories, among others. Commenting on this assertion, Cruttenden (1986, p.181) says "… the literate in any given language tend to know at least something about grammar but little or nothing about intonation". Furthermore, commenting on the correlation between punctuation (as used in grammar) and intonation, Cruttenden (1986) points out that there is a correlation between punctuation and intonation. For instance, a pair of commas will often indicate a parenthesis or a parenthetical type of structure like a non-restrictive relative, and in such a case, the pair of commas will often correlate with the boundaries of a separate intonation group, e.g., Carl Basset, who was expected to win, actually only came second. Intonation is very essential in communication. It determines the meaning the speaker passes along to his or her hearers. Moreover, it betrays the speaker's attitude and reveals the true intentions of a speaker. Often, this is achieved with the aid of other non-linguistic features, such as facial appearances.

Relatedly, Cruttenden (1986) describes the scope of intonation as prominent syllables, how they are made prominent, and to what extent they are made prominent. It involves how the movement from one syllable to the next is made. Therefore, the importance of intonation, its functions in communicative events, and its uniqueness in the study of language inform the current study. Apart from that, linguists (Aina 2018; Akindele and Oladipupo, 2022) have observed that many L2 users have challenges perceiving and producing the

appropriate intonation tunes in English utterances, and this could have a great comprehension effect. There are two basic intonation tunes (rise and fall) that are used to perform different functions: grammatical, accentual, attitudinal and discourse functions.

A significant number of studies on the English intonation of L2 Nigerian users (see Atoye, 2005; Akinjobi & Oladipupo, 2010; Odeyemi, 2017; Adejuwon, 2019) exist in the literature. For instance, Akinjobi and Oladipupo (2010) examined intonation and attitude in Nigerian English to ascertain the extent to which Nigerian speakers of English use English intonation tunes to express an attitude in line with the Standard English model. The study corroborated existing claims that Nigerian users of English encounter difficulty in appropriately using English intonation, especially attitudinal intonation. While this study focused on the attitudinal function of intonation, the interpretation and production of accentual intonation tunes in L2 acquisition have been sparsely researched. This, therefore, accounts for the essence of this study and its contribution to the body of knowledge on the interpretation and accentuation of intonation tunes among Nigerian L2 learners. For the purpose of clarity, standard English is a variety of English spoken in English-speaking countries and countries that speak English as a Native Language (ENL), such as British English, American English, and Australian English. While this is also referred to as "native English", "non-native English" is a variety of English spoken in countries where English is taught as a second language (L2). For instance, countries like Nigeria, Ghana, and Gambia, to mention just a few, are observed to be L2-speaking countries.

Nigerian English and Nigerian English Phonology

Crystal (2003) remarks that over 300 million people across the globe use English as an official language. In Nigeria, English is not just an official language but a language of wider communication and a second language for the majority of Nigerians. It is also the language of education and a teaching subject in the Nigerian school curriculum. The widespread use of English in Nigeria, along with some linguistic peculiarities, has resulted in Nigerian English (NigE), a variety of English written and spoken in Nigeria. Nigerian English, as defined by Alo (2005, p.16), refers to "a domesticated variety of English, functioning within the Nigerian linguistic and socio-cultural setting as a second language (ESL)". It manifests the linguistic (phonological, syntactic, semantic, pragmatic and socio-cultural) characteristics of the Nigerian environment (social and physical). This NigE variety has been investigated at different linguistic levels—syntax, lexis, discourse-pragmatics, phonetics and phonology—and has been found to be markedly different from the native variety, especially at the phonological level. Investigation into the sound systems of NigE has further shown that the prosodic domain of stress, rhythm, and intonation constitutes a major hurdle for most NigE speakers (Banjo, 1979). In the same vein, Nigerian English phonology has been characterised as being remarkably different from Standard English (SE) form at both segmental and prosodic levels (see Atoye, 1991;

Awonusi, 2004; Akinjobi, 2004; Akindele, 2011, 2018, 2020). The heterogeneous linguistic culture and linguistic diversity of Nigeria have not made the task so easy, especially at the level of phonology. Scholars (Banjo, 1979; Jibril, 1982; Udofot, 2003; Utulu, 2014) have observed that the English spoken by the speakers of these Nigerian languages is often influenced by the phonetic features of their mother tongues. Several linguists (Sunday, 2008; Akinjobi & Akindele, 2016; Aina, 2018) have also commented on the noticeable differences in the accents of the NigE and SBE forms. These variations, apart from the segmental features, have been noticed to be more prominent in intonation. Intonation tune assignment has been claimed to be the most problematic for Nigerian users of English (see Okon, 2001; Akinjobi & Oladipupo, 2005; Oladipupo, 2008).

Review of extant works on intonation in L2 contexts

A significant number of works have explored intonation in diverse L2 contexts. Some notable empirical studies on intonation are conducted among Spanish English speakers (Henriksen, Geeslin & Willis, 2010; Rao, 2016), German L2 speakers of English (Grosser, 1993), Japanese EFL learners (Saito & Saito, 2017), French learners of English (Horgues, 2013), Dutch L2 learners (van Maastricht, Swerts & Krahmer, 2013), Finnish learners of English (Toivanen, 2005), Russian learners of English (Mitrofanova, 2012), Indian English speakers (Puri, 2013), Malaysian learners of English (Yap & Pillai, 2018), Cantonese English speakers (Yiu, 2018), Vietnamese learners of English (Nguyễn & Đào, 2018), South African learners of English (Swerts & Zerbian, 2010), Cameroon English speakers (Ouafeu, 2014), Nigerian learners of English (Atoye, 2005; Akinjobi, 2012; Femi-Olaleye, 2020) among others.

Within the Nigerian context, Atoye (2005) investigated the perception and interpretation of intonation by some Nigerian university undergraduates and discovered that 85.7% of the correct perception of changes in intonation and 25.7% of the correct interpretation of the meanings normally associated with the intonation contours were obtained from the respondents' performance. The study emphasised intensified efforts in the teaching of the social meaning of English intonation to non-native learners rather than the analysis of its phonological structure. Akinjobi (2012) examined how academic competence translates to linguistic performance in Nigerian users of English intonation patterns, particularly postgraduate students of English. The study observed that the academic competence of respondents has little effect on the appropriate assignment of intonation tunes in expressions. Odeyemi (2017) underscored context and discourse intonation in English-medium product advertisements in Nigeria's broadcast media. Taking insights from Brazil's discourse intonation, the study discovered that the allocation of prominence to a word is an advertising model's decision based on context-of-use. In addition, Adejuwon (2019) examined discourse intonation patterns in the non-interrogative utterances of selected educated Nigerian speakers of English. Analysis showed that intonation choices in the

natural speech of the respondents are contrary to discourse intonation as they deviate from the rules of discourse intonation.

Furthermore, Asadu, Okoro and Kadiri (2019) analysed the intonation patterns of selected Nigerian bilingual educated speakers of English with orientations from Pierrehumbert's auto-segmental metrical approach. The analysis showed a low level of proficiency in the use and assignment of accurate patterns of intonation in the speeches of the participants. Olusola (2019) investigated the English intonation patterns in Nigeria's national assembly sessions. Guided by insights from Brazil's Discourse Intonation and Praat as analytical instruments, the study concludes that there is inconsistency in the discourse intonation of Nigerian federal legislators and that legislators are not conscious of the communicative value of English intonation in discourse but are mainly concerned with structural patterns of tone in units. More significantly, Femi-Olaleye (2020) focused on the application of computer-assisted pronunciation instruction (CPI) in the intonation activities of the selected primary school pupils, comparing the performance of the pupils before and after the computer-aided exercise. The post-test result showed that respondents in the experimental group improved in their understanding and use of intonation patterns more than those in the control group. The study suggested frequent alignment with computerised instruction, much more than the traditional way of teaching English intonation. Additionally, Akindele and Oladipupo (2022) used acoustic evidence to examine how 20 bilingual Nigerian English speakers from two universities in south-western Nigeria use intonation as well as the intra- and inter-language challenges they encounter in assigning intonation tunes to varied meanings. Having subjected respondents' production to Praat analysis using the TextGrid annotation, the study discovered that even in situations where different tones are expected, these speakers' utterances tended to use a simple fall tone more frequently. The study submitted that the participants' performances can be explained in terms of the inter- and intra-linguistic influences on their speech, as inter-language variables have to do with how their native tongues affect how they use the English intonation tones.

Although, the foregoing are studies on the intonation of Nigerian users of English, studies on the interpretation and production of accentual intonation tunes among Nigerian speakers of English have been sparsely researched. Therefore, this study investigates the production and interpretation of accentual intonation among university undergraduates who study English as a course. Within the realities of interlanguage development, which concern assessing the proficiency level of L2 learners, this study examines the production and interpretation of accentual intonation tunes by selected L2 learners. It attempts to find out whether or not L2 learners can identify and produce syllables of accented words in the English utterances given. To achieve this goal, the following objectives guide the study:

1. to examine the extent to which L2 learners can appropriately interpret and produce accentual tunes in English sentences;
2. to explore whether or not L2 learners' accentual intonation pattern conforms to Standard English form;
3. to determine the performance of respondents in the accentuation of tunes on the basis of sex;
4. to explain the implication of respondents' performance in the interpretation and production of accentual tunes for the Nigerian spoken English accent.

Methodology

Final-year university students of the Department of English, Osun State University, Nigeria, constituted the participants. Through the survey method of data collection, data were gathered with the consent of the students. Using the random sampling technique, the study sampled fifty students (25 males and 25 females) to serve as respondents. Questionnaires were administered to assess the respondents' knowledge of intonation tune interpretation. Complementarily, to test respondents' knowledge of the usage of accentual intonation, respondents were made to read aloud ten sentences into a speech analysis software (Huckvale's Speech Filing System/WASP) for acoustic analysis. The recorded voices of the participants were later played back by the researchers. The researchers were actively engaged in listening to and rating the recorded production of the respondents. The first rater and principal author is a trained L2 phonologist and phonetician with over a decade of experience in spoken English teaching and training L2 university students. The second author and rater is also a Nigerian L2 speaker and postgraduate student who has been undergoing speech training in L2 learning for over six years. Both raters independently listened to the recordings, and their perceptual results were compared. Aspects of divergence required joint listenership, and further disparity necessitated the intervention of another trained phonologist before a consensus was reached. Tokens of occurrences of appropriate and inappropriate accentuation were generated and converted to simple percentages. The highest number of occurrences of inappropriate accentuation was taken as the emerging trend in participants' use of accentual intonation. The voice productions of the participants were also subjected to acoustic analysis with the use of SFS/WASP to show the pitch track of participants and to ascertain if prominence was articulated on the syllable of the accented word as expected in Standard English form. This helped to know how participants were able to accentuate intonation variations. The productions were analysed using tables to show the statistics of the production of respondents' English intonation patterns. The acoustic analyses were done to corroborate the perceptual/statistical analysis.

Findings and discussion

This section of the study presents findings and discusses the analysed data in statistical and acoustic forms in accordance with the research objectives. It examines the statistical score of the administered and filled-out questionnaires that were returned. The questionnaire contained multiple-choice questions that aimed to test how respondents interpreted intonation tunes.

Table 1: Overall performance of interpreted tunes by the respondents

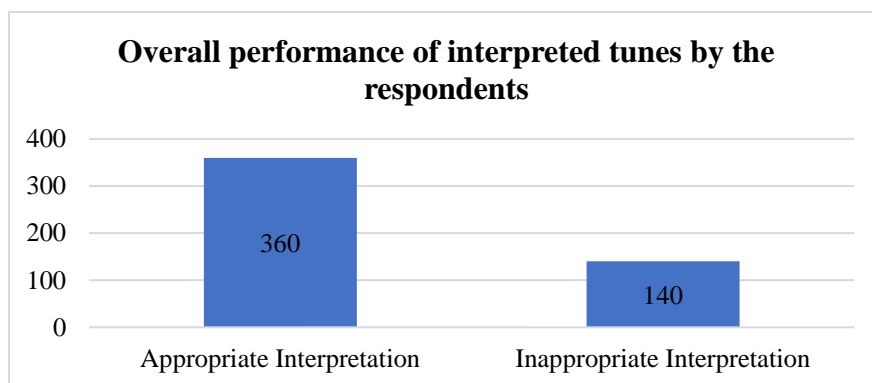| No of Respondents	No of Items	Potential Scores	Appropriate Interpretation	%	Inappropriate Interpretation	%
50	10	500	360	72%	140	28%

Fig.1: Overall performance of interpreted tunes by the respondents

Table 1 above reveals the overall performance of students in the interpretation of accentual intonation tunes. Out of 500 potential scores, the appropriate interpretation of intonation tunes amounts to 360 instances (72%), while the inappropriate interpretation stands at 140 instances (28%). This implies that respondents proved to have more competency in interpreting accentual tune than in articulating accentual tune in their utterance.

Table 2: Overall performance of accentuated tunes by respondents

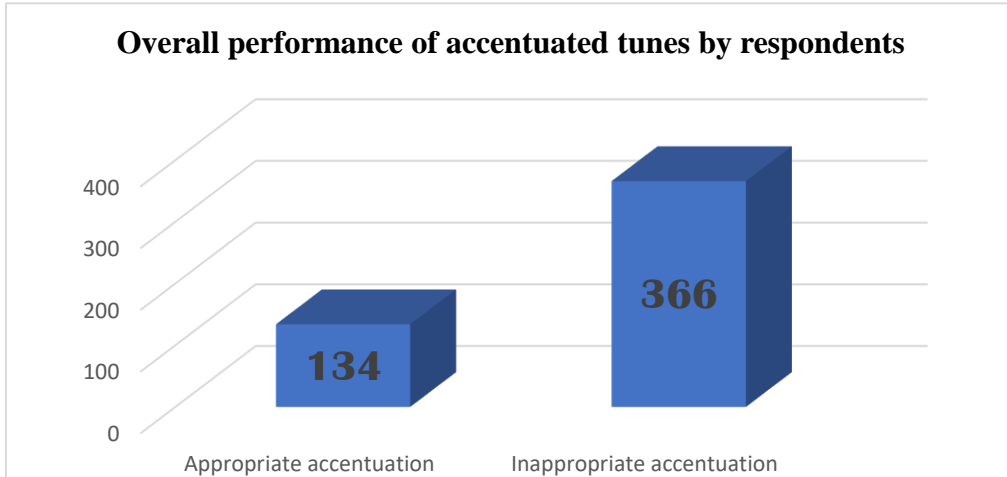| Respondents	Items	Expected Use	Appropriate Accentuation	%	Inappropriate Accentuation	%
50	10	500	134	26.8%	366	73.2%

Fig.2: Overall performance of accentuated tunes by respondents

Having transcribed and perceptually evaluated the voice productions of the respondents, the overall statistical assessment of the respondents' voice productions is presented in this section. In Table 2 and Fig.2 above, the statistical report of respondents' performance in tune accentuation is presented. Of the total expected potential use of 500, the number of instances of inappropriate accentuation (366 instances, amounting to 73.2%) outweighs 134 instances of appropriate accentuation (26.8%). Unlike the level of competency demonstrated in interpreting accentual tune appropriately, as revealed in Table 1, respondents appear to struggle with appropriate accentuation of intonation tune.

Table 3: Overall performance on tunes tested for respondents' accentuation and interpretation

Respondents	Items	Expected Use	Appropriate Accentuation	Inappropriate Accentuation	Appropriate Interpretation	Appropriate Interpretation
50	10	500	134 (26.8%)	366 (73.2%)	360 (72%)	140 (28%)

Table 3 above shows the overall performance of the participants. More significantly, Research Objective 1 is addressed in the section. Out of the overall expected production test of 500 overall use, appropriate production use was 134 (26.8%), while inappropriate use was 366 (73.2%). Interpretation of the accented syllables was higher for the participants. Out of 500 expected interpretation use, participants had 360 (72%) instances of appropriate interpretations, while 140 (28%) instances of inappropriate interpretations were recorded. There seems to be an opposite performance rate between production performance and interpretation performance in participants' results. The implication of this

is that participants seem to understand the use of prominence on the accented syllables of the focus expression, but articulating it is problematic. This finding aligns with Atoye (2005), who averred that non-native speakers of English in Nigeria have relatively better perceptual ability than interpretation of intonation tunes. Inference can be drawn that if the interpretation of intonation tune is not well understood by L2 learners, performance in accentuation will be more difficult. Similarly, knowing that accentuation is evaluated in natural spontaneous speech, this study coheres with the submission of Adejuwon (2019) that there is an absence of consistency in educated Nigerian English speakers' intonation choices in spontaneous speech both in interactional and non-interactional contexts.

Table 4: Performance of respondents' accentuated tune on the basis of sex

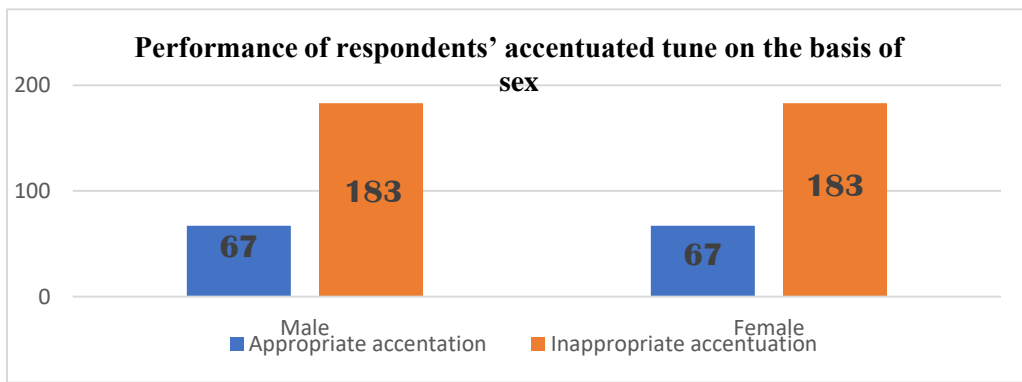| Respondents	Items	Expected Use	Appropriate Accentuation	%	Inappropriate Accentuation	%
25 Males	10	250	67	13.4%	183	36.6%
25 Females	10	250	67	13.4%	183	36.6%

Fig.3: Performance of respondents' accentuated tune on the basis of sex

Table 4 and Fig.3 consider contrasting respondents' performance based on sex, knowing the linguistics-oriented arguments on sex roles and phonological variation. Table 4 shows the performance of respondents on the accentuation of tunes on the basis of sex. In response to Research Objective 3, both sexes perform at the same level: 67 instances (13.4%) of appropriate use and 183 instances (36.6%) of inappropriate accentuation. Both sexes' performance on the accentuation of intonation tunes show the challenge they are embattled with, concerning the accentuation of tunes. Although the result generated in Table 3 is not sufficient enough to take positions on the ongoing debate on sex performance in Nigerian spoken English, some extant studies (Akinjobi & Oladipupo, 2010; Akindele, 2011; Oladipupo & Akinjobi, 2015; Obasi, 2022) have claimed that females tend to be more

accurate in speech articulation than their male counterparts. This could mean that Nigerian female L2 learners are more diligent and focused on learning and practising accentuation during classroom engagements. This, according to Trudgill (1972) and Kunsmann (2000), could mean that females use standard linguistic forms (RP in this case) more frequently than men to mark social prestige.

Following efforts on perceptual assessment of the participants' recorded voices, table 5 is presented to show how respondents accentuate syllables of the focus words. The performance of the participants showed that out of the expected 500 instances, only 174 instances of tunes were appropriately used. The inappropriate use of tunes was higher, with a production use of 326 (65.2%). This seems to be one of the reasons why participants cannot emphasise the focus items in the sentences. Addressing Research Objective 2, there is a fundamental challenge with the use of tunes by L2 participants. Many of them cannot produce the tunes appropriately. This has a great effect on the comprehension of English sentences at both perceptual and production levels. This result corroborates Akinjobi and Oladipupo's (2010) position that non-native speakers are deficient in appropriate accentuation, and this therefore grossly affects their ability to mark attitude with intonation tunes. In the same vein, the result in Table 5 echoes and maintains the view of Asadu, Okoro and Kadiri (2019), who decry the low level of proficiency in the articulatory use and assignment of accurate patterns of intonation by Nigerian speakers of English. In succinct terms, Nigerian L2 users need to be intentional in dedicating time to the development of intonation and communicative skills.

Table 5: Participants' Production/Accentuation Performance

Sentences	Participants	Expected Tune	Realised Tunes	Accented words	Appropriate Accentuation	Inappropriate Accentuation
↓James likes singing juju music.	50	\Fall	18	JAMES	14 (28%)	36 (72%)
I will ↓celebrate Amina if she makes a first-class degree.	50	↓fall/rise↑	12	CElebrate	12 (24%)	38 (76%)
…. while she ↓volunteered to clean the house, she could not complete the task before dinner.	50	↑rise/↓fall	18	VOlunteered	12 (24%)	38 (76%)
Is there going to be an in↑crease in the fuel pump in October?	50	rise↑	20	INcrease	12 (24%)	38 (76%)

Nigeria is a ↓multi-ethnic nation, isn't it↑?	50	↓fall/↑rise	11	MULti-ethnic	11 (22%)	39 (78%)
I wish to become a re↓nowned professor in future.	50	↓fall	22	ReNOWNed	12 (24%)	38 (76%)
Is she ↓wearing a black shirt↑? I mean↓ John	50	rise↑/fall↓	13	WEARing	17 (34%)	33 (66%)
↓Intonation can be problematic for non-native speakers of English	50	↓Fall	20	intoNAtion	20 (40%)	30 (66%)
Regular ↓exercise keeps the body fit.	50	Fall	26	Exercise	12 (24%)	38 (76%)
Do you think regular walk can make a person lose some ↑weight?	50	↑rise	14	REgular	12 (24%)	38 (76%)
Total	**500**		**174 (34.8%)**	**326 (65.2%)**	**134 (26.8%)**	**366 (73.2%)**

Acoustic analysis

The perceptual/statistical analysis of the data shows that the inappropriate realisation of accentual intonation tune (73.2%) in the production of respondents outweighs instances of appropriate realisations (26.8%). Corroborating this discovery, the spectrograms below provide a graphic representation of respondents' production in two categories: the near-accurate and the total deviant. This establishes the findings in the analysis that there were both appropriate and inappropriate instances of accentual tune in respondents' utterances. In the charts below, "InA" stands for "Inappropriate Accentuation" while "NaA" signifies "Near-accurate Accentuation".
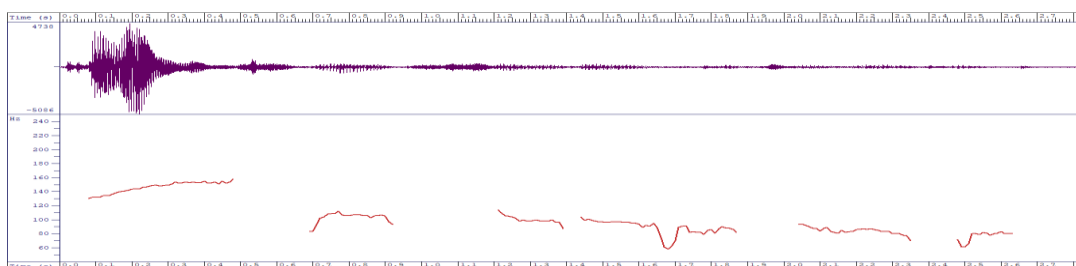

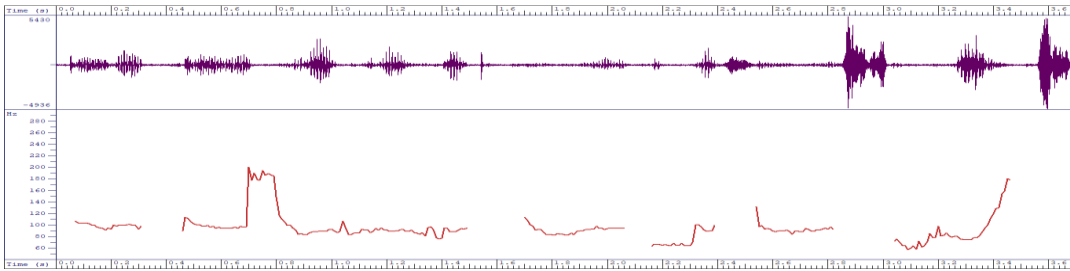Fig. 4:   InA - //James likes singing Juju music//

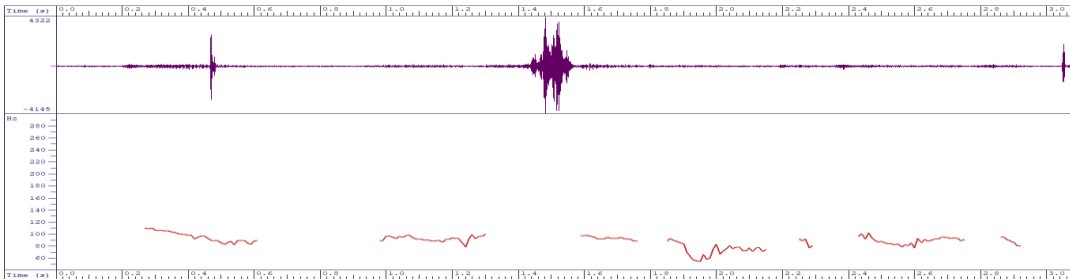Fig. 5: NaA - //James likes singing Juju music//

Fig.6: 'InA' - //Do you think regular work can make a person lose some weight?//

The test item "James likes singing Juju music" is a declarative sentence providing information. According to the rules of intonation tunes, it is an instance of a "fall tune". Fig.4 is presented as an instance of inaccurate accentuation. It does not convincingly show the first tone unit, "James" being accented to rise above other tone units, and to orchestrate the fall or downward glide of pitch on other tone units. Each of the tone units maintains equal modulation, which does not represent a fall tune. While the pitch contour in Fig.4 marks a departure from the rules of English intonation, Fig.5 shows near conformity to the SBE intonation. As required, the pitch rises on the accented first tone unit "James" and falls gradually onto the last tone unit "music".

The test item "Do you think regular exercise can make a person lose some weight?" is a question that exemplifies the rising tune. In the above charts. Fig.6 marks an instance of an inappropriate accentual tune. As shown in the pitch contour, the rising of the pitch should have climaxed at the last tone unit "weight", but on the contrary, the pitch falls on it. However, Fig.7 marks contrariwise and shows near-accurate accentuation of the test item. To mark an instance of rising tune, pitch contour shows modulation as the pitch rises on "re", the accented syllable in the first tone unit and climaxes at the final tone unit "weight".
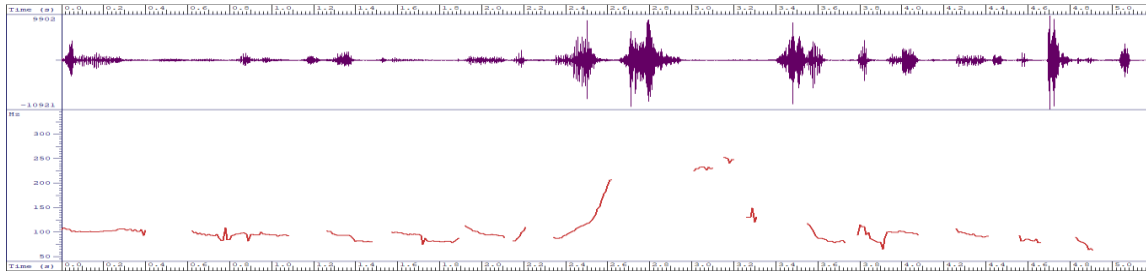
Fig.7: 'NaA' -//Do you think regular work can   make a   person   lose   some weight?//
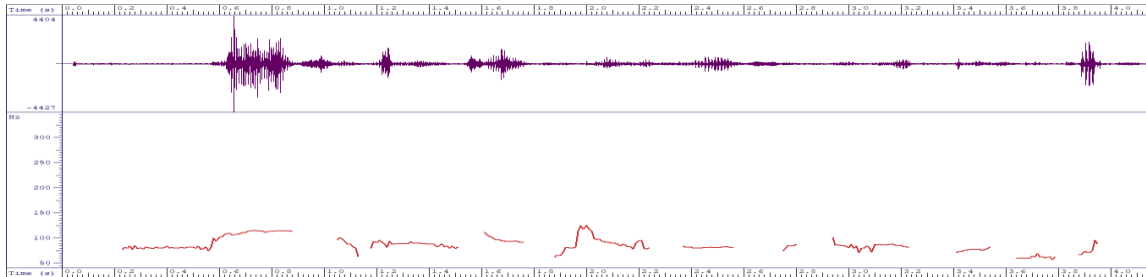

Fig.8:'InA'://While she volunteered to clean the house she could not finish the task//
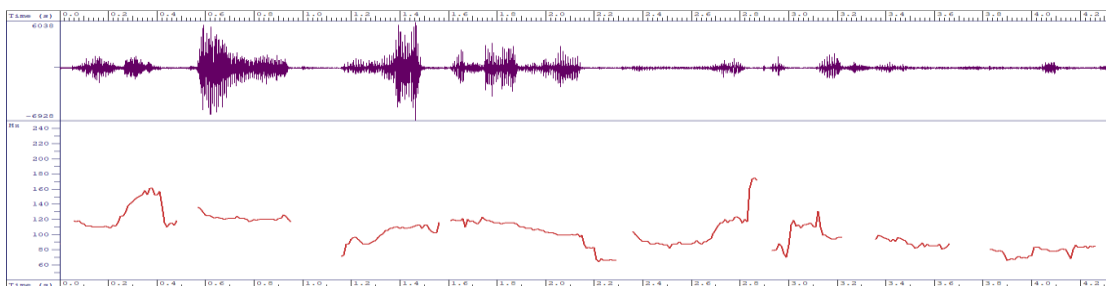

Fig.9: 'NaA' -//While she volunteered to clean the house, she could not finish the task//

Furthermore, the test item "while she volunteered to clean the house, she could not finish the task" is a complex sentence expected to be accentuated in the rise-fall intonation tune. While Fig.8 shows near accurate production, Fig.9 shows deviation. As captured in the pitch contour of Fig.9, the pitch modulation does not indicate the accented word that should have triggered a rise in tune. Conversely, the pitch rises on the last word in the first dependent clause "house", and falls on the first word of the main clause "she". Although

Fig.8 does not perfectly conform to the SBE rules of intonation, it instantiates near-accurate accentuation where the pitch should have risen on "VO" in volunteer, the first syllable of the first tone unit. Based on the explanation offered on these spectrograms, accentual intonation is considered problematic for Nigerian non-native users of English, specifically university undergraduates considered in this study, although very few of them seem to have a fairly good understanding of the application of English intonation rules. This has been earlier observed by Amayo (1981) and later attested by Akindele and Oladipupo (2022), who take the position that, within the phonological realities of Nigerian English bilinguals, intonation continues to be difficult for them to articulate both in conscious and spontaneous speech activities unless attention is paid to non-enculturation sources and technology-driven models to stimulate speech production and learning in L2 context (Adesanya, 2021; Akindele & Oladipupo, 2022).

Conclusion and Recommendations

Respondents' frequency of occurrence at the production level showed appropriate use amounting to 134 instances (26.8%), while inappropriate use was 366 (73.2%) out of 500 expected results of accentual tunes. Out of 500 expected interpretation use, participants had 360 instances of appropriate interpretation (72%), while 140 (28%) inappropriate interpretations were recorded. There seems to be an opposite relationship between production performance and interpretation performance results. Though the results of respondents revealed competence in the interpretation of accentual intonation tunes (72%), at the production level, respondents did not apply accentual tunes (26.8%) to English expressions. To corroborate the perceptual analysis, spectrograms showed the pitch contours of some respondents' production. The pitch modulation expected on the focus syllable of the accented word was not applied by participants, as observed from the acoustic /instrumental analysis. The implication of this is that participants seem to understand the use of prominence on the accented syllable of the focus items in the given sentences, but articulating the accented syllables was problematic. It also reinforces existing positions that the Nigerian spoken English accent differs significantly from native English and should be described as the outer circle English. Also, the performance of production on sex basis revealed males' and females' appropriate use at 67 (13.4%) each and inappropriate use at 183 (36.6%). Although very rare, findings showed that both males and females showed no difference in accentual tune use at the production level.

There is a significant difference in the production and interpretation of accentual intonation tunes among L2 learners, as affirmed by the results. Results also confirm that L2 acquisition in accentual intonation tunes tilts towards excellent performance in the written interpretation of accentual tunes. However, at the production level, where respondents are expected to produce the accented syllables in the English sentences given, the respondents had a very low performance (26.8%). This has some pedagogical implications for L2

acquisition, as demanded in Research Objective 4. It implies that at the pedagogical level, a gap exists between L2 competence on the subject matter and reality. This implies that there is a gap between the application of classroom knowledge and the actual production of this knowledge, especially because L2 is learned within the classroom setting. This is in response to Research Objective 2, which states that L2 learners' accentual intonation pattern differs from the SBE form. Also, many of the L2 learners are from tone language backgrounds. The phenomenon of interference or negative transfer in L2 learning at the phonetic and phonological levels plays out, especially when L2 learners are made to produce some English sounds that cannot be found in the sound system of their native language. This aptly captures the position of Tench (1996) that intonation is put to limited use by tonal languages, unlike its elaborate use in stressed-timed languages like English. This also corresponds with the submission of Mohamad, Hanafi and Dako (2021) that mother tongue influence is responsible for the disparity in most L2 learners' production of some English sounds. On this basis, the linguistic background of L2 learners influences NigE accentuation.

The core areas of the English prosody of stress and intonation should be introduced to L2 learners as early as possible. Some elite institutions in Nigeria currently expose some L2 learners to native English accents through non-enculturation sources (Akinjobi, 2013; Adesanya, 2021), such as video tapes, cable networks where native English accents are domiciled (cartoon networks), and materials from native accents in spoken English classes. This exposure should also be emulated and inculcated by government-owned institutions across the educational strata. Adequate provisions should be made by institutions for efficient and effective digital language laboratory drills. Comprehension is very important in speech utterances. When communication is distorted, intelligibility problems set in. Therefore, in L2 acquisition, the pedagogical target should be geared towards proper spoken English drills at the perceptual and production levels. This will eventually help to improve spoken English that is locally, nationally, and internationally intelligible.

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