

**INTONATION PATTERNS OF SELECTED BILINGUAL EDUCATED
SPEAKERS OF ENGLISH IN EBONYI STATE**

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**INTONATION PATTERNS OF SELECTED BILINGUAL EDUCATED
SPEAKERS OF ENGLISH IN EBONYI STATE**

**A PROJECT REPORT SUBMITTED IN PARTIAL FULFILMENT OF THE
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BY

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APRIL, 2019

APPROVAL PAGE

THIS PROJECT HAS BEEN READ AND APPROVED AS HAVING MET THE REQUIREMENTS FOR THE AWARD OF MASTER OF ARTS DEGREE IN ENGLISH AND LITERARY STUDIES, OBTAINED FROM UNIVERSITY OF NIGERIA, NSUKKA.

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DEDICATION

This work is dedicated to the Holy Spirit; my greatest friend and teacher, in whose help I relied on from the inception of this research to this point.

To my parents- lovers of knowledge and diligence- who painstakingly enrolled me for a second degree

And to every lover of scholarship.

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ABSTRACT

The intelligibility of everyday speech is built on the mastery and the use of appropriate intonation patterns. This makes intonation the music of everyday speech of which its appropriate use has been the final hurdle that the majority of the speakers of English as a second language have not crossed. This study, therefore, investigated the intonation patterns of the randomly selected 45 bilingual educated speakers of English, from diverse educational backgrounds representing the three (3) senatorial zones, in Ebonyi State. The test material given to them was a paragraph from Roach (2010). The utterances of interest to the research were segmented into three (3) tiers on a text grid window on Praat including sentence, word and tone. Pierrehumbert's Autosegmental Metrical approach to intonation served as the theoretical framework and the transcription was done using ToBI. The study revealed a low level of proficiency in the use and assignment of accurate patterns of intonation in the speeches of the participants, in spite of the recorded levels of educational attainment. Aside the widely known and commonly used intonation patterns of fall (L*), rise (H*), rise-fall (H*+L) and fall-rise (L*+H), it was observed that there was the presence of the use of low pitch accent, low boundary tone (L-L%) in the speeches of the participants. There was also a record of a preponderant use of unidirectional tones with a great inclination towards the use of the falling tone. Appropriate use and assignment of intonation patterns were discovered to have little or nothing to do with an individual's bilingual make up or educational qualification.

TABLE OF CONTENTS

Title Page-	-	-	-	-	-	-	-	-	-	i
Approval Page-	-	-	-	-	-	-	-	-	-	ii
Certification-	-	-	-	-	-	-	-	-	-	iii
Dedication-	-	-	-	-	-	-	-	-	-	iv
Acknowledgement-	-	-	-	-	-	-	-	-	-	v
Abstract	-	-	-	-	-	-	-	-	-	vi
Table of Contents-	-	-	-	-	-	-	-	-	-	vii
List of Tables-	-	-	-	-	-	-	-	-	-	ix
List of Figures-	-	-	-	-	-	-	-	-	-	x
Chapter One: Introduction										
1.1	Background to the Study	-	-	-	-	-	-	-	-	-1
1.1.1	Bilingualism	-	-	-	-	-	-	-	-	-4
1.1.2	Intonation	-	-	-	-	-	-	-	-	-4
1.1.3	Intonation Patterns	-	-	-	-	-	-	-	-	-5
1.1.4	Educated Speakers of English	-	-	-	-	-	-	-	-	-6
1.2	Statement of the Problem	-	-	-	-	-	-	-	-	-6
1.3	Aim and Objectives of the Study	-	-	-	-	-	-	-	-	-7
1.4	Research Questions	-	-	-	-	-	-	-	-	-8
1.5	Significance of the Study	-	-	-	-	-	-	-	-	-8
1.6	Scope of the Study	-	-	-	-	-	-	-	-	-9
Chapter Two: Review of Related Literature										10
Chapter Three: Theoretical Framework and Methodology										
3.1	Theoretical Framework	-	-	-	-	-	-	-	-	28
3.1.1	Autosegmental- Metrical Approach	-	-	-	-	-	-	-	-	28
3.1.2	ToBI System	-	-	-	-	-	-	-	-	30

3.2 Population of the Study -	-	-	-	-	-	-	-	33
3.3 Method of Data Collection -	-	-	-	-	-	-	-	34
3.4 Method of Data Analysis -	-	-	-	-	-	-	-	34

Chapter Four: Data Analysis and Discussion of Findings

4.1 Socio-cultural Profile of Participants-	-	-	-	-	-	-	-	-36
4.2 Acoustic Analysis of Intonation Patterns of Bilingual Educated Speakers of English in Ebonyi State-	-	-	-	-	-	-	-	-40
4.3 The Pitch Contours and Text Grid Samples for the 45 Participants at the Word Level Examination-	-	-	-	-	-	-	-	-45
4.4 Discussion of Findings-	-	-	-	-	-	-	-	-62
4.4.1 Distribution of Tonal Patterns in Syllables-	-	-	-	-	-	-	-	-62
4.4.2 Performance of Participants in Intonation-	-	-	-	-	-	-	-	-63
4.4.3 Distribution of Patterns of Intonation-	-	-	-	-	-	-	-	-64
4.4.4 Summary of Intonation Patterns of Participants-	-	-	-	-	-	-	-	-65

Chapter Five: Summary and Conclusion

5.1 Summary of Major Findings-	-	-	-	-	-	-	-	-73
5.3 Conclusion-	-	-	-	-	-	-	-	-74

References

Appendices

LIST OF TABLES

Table 1: Group Breakdown-	-	-	-	-	-	-	-	-37
Table 2: Distribution of Tonal Patterns	-	-	-	-	-	-	-	-44
Table 3: Participants' Performance in Intonation-	-	-	-	-	-	-	-	-60
Table 4: Distribution of Patterns of Intonation in Percentages-	-	-	-	-	-	-	-	-61
Table 5: Summary of Intonation Patterns of the Participants -	-	-	-	-	-	-	-	-62
Table 6: Distribution of Patterns of Intonation According to Senatorial Zones	-	-	-	-	-	-	-	-66
Table 6.1: Ebonyi North-	-	-	-	-	-	-	-	-66
Table 6.2: Ebonyi Central-	-	-	-	-	-	-	-	-68
Table 6.3: Ebonyi South-	-	-	-	-	-	-	-	-69

LIST OF FIGURES

Figure 1: Control

Figure 2: Pitch Contour and Text grid Sample for Participant 1

Figure 3: Pitch Contour and Text grid Sample for Participant 2

Figure 4: Pitch Contour and Text grid Sample for Participant 3

Figure 5: Pitch Contour and Text grid Sample for Participant 4

Figure 6: Pitch Contour and Text grid Sample for Participant 5

Figure 7: Pitch Contour and Text grid Sample for Participant 6

Figure 8: Pitch Contour and Text grid Sample for Ebonyi North, Abakaliki LGA Participant

Figures 9-10: Pitch Contours and Text grid Samples for Ebonyi North, Ebonyi LGA participants

Figures 11-15: Pitch Contours and Text grid Samples for Ebonyi North, Ohaukwu LGA participants

Figures 16-19: Pitch Contours and Text grid Samples for Ebonyi North, Izzi LGA participants

Figures 20-24: Pitch Contours and Text grid Samples for Ebonyi Central, Ikwo LGA participants

Figures 25-27: Pitch Contours and Text grid Samples for Ebonyi Central, Ishielu LGA participants

Figures 28-31: Pitch Contours and Text grid Samples for Ebonyi Central, Ezza South LGA participants

Figures 32-36: Pitch Contours and Text grid Samples for Ebonyi South, Afikpo North LGA participants

Figures 37-41: Pitch Contours and Text grid Samples for Ebonyi South, Afikpo South LGA participants

Figures 42-43: Pitch Contours and Text grid Samples for Ebonyi South, Ivo LGA participants

Figures 44-47: Pitch Contours and Text grid Samples for Ebonyi South, Ohaozara LGA participants

Figures 48-52: Pitch Contours and Text grid Samples for Ebonyi South, Onicha LGA participants

CHAPTER ONE

INTRODUCTION

1.1 Background to the Study

The English language, from its time of arrival in Nigeria, has been nativized to accommodate the thought patterns of its users. It is one language spoken all over the world either as a native, second or a foreign language. Unconsciously, it is acquired by the native speakers while it is learnt formally by those who speak it as second and foreign languages. In Nigeria where English serves official purposes, effective communication cannot be compromised and its importance cannot be over emphasized. Its purpose to foster the cultural and linguistic unity of the country cannot be complete if the actual message is not passed on. However, competence in pronunciation is neither optional for any language learner nor an educated individual. If one's aim is to talk intelligibly to others, then a level of mastery of pronunciation of the words that make up the speech is important but one's intonation to a large extent becomes a serious challenge in acquiring an expected proficiency in the targeted language.

Intonation remains the music of everyday speech and it is the rise or fall in voice quality which encompasses pitch. Pitch as described by Ufot (2009) is "...the relative height or depth indicated in the level of voice as speech is made." Intonation carries grammatical meaning in English and becomes fundamental as it plays a significant role in all aspects of speech and as well provides linguistic information. In particular, intonation can signal the distinction between questions and statements. Besides conveying linguistic information, Suciu (2016) views intonation as that which also enables us to express our thoughts and feelings, as well as to understand the feelings and thoughts of our interlocutors. However, it goes without saying that

poor pronunciation may hinder communication, but poor intonation skills may make conversation really frustrating and may lead to misunderstanding. This reiterates the view of Jowitt (1991) that intonation plays an essential role in the encoding and decoding of the meaning of English utterances. In the same vein, he laments that until recently, intonation has not been given its due weight in the Nigerian English compared to the overwhelming attention given to the proper articulation of vowels and consonants. Little wonder Banjo in Atoye (2005) describes it as "...the final hurdle which a vast majority of speakers of English as a foreign language never manage to cross."

It is striking that in spite of the fact that the English language has a highly extolled status and an invaluable number of years of usage in Nigeria, its use among the so called educated members of society is still with prevalent errors. It is on this note that Emeka-Nwobia and Onu (2016) remarked that these errors are usually ascribed to mother tongue interference. This interference which is birthed by bilingualism according to Weinreich (1968) is as a result of languages in contact. Therefore, in languages in contact, Weinreich (1968) focuses on determining the possibilities and limits of influence by one language on another on the level of an individual speaker. This interference, he further asserts, has its interest on linguists. Ramirez - Verugo (2006), in the same vein, pointed out that the first language intonation is learned in the first stage of language acquisition and becomes automatic after some periods. He further said that second language speakers will generalize the first language intonation rules over the second language and in turn, open possibilities for miscommunication or sometimes unintelligibility.

However, Emeka-Nwobia and Onu (2016) argued that in spite of this pervasive situation, the study of oral English has received less attention when compared with the study of its grammatical forms. Suffice it to say that obtaining proficiency in reading and writing may not be

a rigorous exercise. Irrespective of exposure, therefore, pronunciation issues have been the bane of Standard English all over the world. While most non-native speakers of English have been able to cross the hurdle of learning the syntax and semantics of Standard English, a recurrent issue has been their inability to approximate the native-like accentual competence (Olajide & Olaniyi, 2013). This research is not oblivious of the fact that to the Nigerian student, who has to learn under challenging circumstances, the English language is not a very easy medium of communication because the learner has to grapple with a lot of factors; his mother tongue, teacher induced errors, apathy to language learning, peer group pressure, and many other factors (Ononiwu & Njemanze 2015). These phenomena have not placed the Nigerian student on a good pedestal to communicate in the English language. These factors notwithstanding, intonation remains the music of everyday speech as it plays a vital role in everyday communication as well as in the interpretation of speech.

Worthy of note is that the goal of the study is not to have the bilingual speaker of English in Ebonyi State to speak the way native speakers do, but to approximate towards proficiency, fluency and good communicative competence and performance. This becomes necessary because in the words of Akindele (2015), speaking English without the approximate stress and intonation tunes is like speaking most Nigerian languages which are tonal with the wrong tone which in turn leads to breakdown in communication. In a nutshell, having Ebonyi State as a case study where indigenes have a special kind of intonation despite the fact that a number of speakers of English are exposed to the use of English in their early lives, this work seeks to examine the intonation patterns of the actual observable utterances on statements from selected bilingual educated speakers of English in Ebonyi State and analyze them perceptually and acoustically. For clarification purposes, important concepts to the study which will provide necessary

background information for the study are discussed below. They include bilingualism, intonation, intonation patterns and Educated Speakers of English.

1.1.1 Bilingualism

Being a bilingual means different thing to different persons. Rampton (1990) argues that the definition of bilingualism ranges from a minimal proficiency in two languages to an advanced level of proficiency which allows the speaker to function and appear as a native like speaker of two languages. A person may, however, be described as a bilingual but on the note of having the ability to converse and communicate orally. Others may be proficient in reading two or more languages while others may be bilingual by the virtue of having grown, learning and using two languages simultaneously or by learning a second language sometime after their first language.

1.1.2 Intonation

Intonation brings melody to all languages and it is something that one probably does not think about when speaking ones native language. In everyday language, intonation is referred to as speech melody or sentence melody. It is the melody of supra-segmentals which is also seen as the pattern of speech contours. These speech contours include the rise and fall of the pitch of the voice. The pitch, sentence stress, and rhythm are the key components as identified by Nolan (2014) on which intonation is based. On this note, Roach (2010) submits that no definition of intonation is completely satisfactory, but any attempt at definition must recognize that the pitch of the voice plays the most part. The Pitch is, however, described as the degree of height of our voice in speech. It is the extent to which a sound is high or low which depends on the rate of vibration of the vocal cords. It adds significance to that which is said. The utterance is made understandable to the listener through sentence stress by stressing the important words in the

sentence, making it clear and higher in pitch, and by shortening and obscuring the unstressed words. Sentence stress provides rhythm in connected speech. Rhythm is also the supra-segmental stress pattern which looks at the relationship between stressed and unstressed syllables and further studies them.

1.1.3 Intonation Patterns

This is the basic unit of intonation. The intonation pattern contains one nucleus and may contain other stressed or unstressed syllables normally preceding or following the nucleus. The boundaries of an intonation pattern may be marked by stops of phonation, that is, temporal pauses. The two main patterns of intonation include the rising and falling patterns.

- **Falling Intonation Pattern:** This occurs when the voice lowers its pitch at the end of the sentence. It is further used for regular statements and questions that are not yes or no. It is used in the last stressed syllables of the sentence in declarative statements, special questions, commands, exclamatory sentences and last part of alternative questions. Roach (2010) also points out that it is used to give an impression of finality.
- **Rising Intonation Pattern:** This occurs when the voice raises its pitch at the end of the sentence. It is used when one is asking a yes or no question or to show disbelief or anger. It conveys an impression that there is something more to say. Rising intonation pattern is used when the sentence is answerable by yes or no. It can express various emotions, such as non-finality, incompleteness, questions, surprise, doubt, hesitation, interest, request and suggestion, politeness, readiness to continue a conversation, lack of confidence and security.

Roach (2010) further identifies fall-rise and rise-fall among the patterns of intonation. The fall-rise intonation describes how the voice falls and rises. It is used at the end of statements when we want to say that we are not sure, or we may have more to add, we use fall-rise intonation with questions, especially when we request information or invite somebody to do or to have something. This intonation pattern makes the question sound more polite. The rise-fall intonation on the other hand, indicates enthusiasm/ encouragement. It shows feelings of strong approval/ disapproval and as well indicates emphasis.

1.1.4 Educated Speakers of English

While education has to do with a deliberate discovery and development of understanding, an educated speaker of English is one who has deliberately discovered and developed an understanding of the use of English and has the capacity of sustaining conversation in English.

1.2 Statement of the Problem

Generally speaking, spoken English does not receive adequate attention when compared to the amount of attention received by other areas of English. From the Secondary school, the supra-segmentals are very challenging to both teachers and learners, little wonder, it is usually left untaught. Researches show that the attitude given to intonation practice is disheartening; having its root from the foundational laying stage. Little wonder Banjo (1979) contends that the appropriate use of English intonation is the final hurdle which the vast majority of speakers of English as a second language find difficult to cross. In spite of the early introduction of the English language in Nigeria, the level of mastery of the appropriate use of intonation patterns in speeches is still low. The questions to be addressed then are, how well does exposure translate to the everyday speeches of those who have been accredited to possess some academic competence

by the award of the first degree? How has the subsequent pursuit of a higher degree in diverse fields of study, albeit bilinguals, contributed to competency of speakers of English? Previous studies have not brought to limelight the identity of the educated bilingual speakers of English as well as what happens to English among its educated bilingual speakers in Ebonyi State. It is in this regard that it becomes important to describe the patterns of intonation in the speech of bilinguals who have been exposed to some levels of education in Ebonyi State, and to describe how these patterns of intonation define them in terms of their socio-linguistic backgrounds.

Existing scholarships have attempted a generalized study on the intonation of Nigerian English (Udofot, 2002), native speaker perception of intonation in Yoruba (Atoye, 2003), rhythmic and intonational patterns of NN24's news casting (Melefa, 2011), patterns of Nigerian English intonation (Jowitt 2000), non-native perception and interpretation of English intonation (Atoye, 2005), intonation and attitude in Nigerian English (Akinjobi and Oladipupo, 2010) among others. It is worthy of note that existing scholarships have not explored the specific intonation patterns in the spoken English of educated bilinguals in Ebonyi State neither has any study described how these patterns of intonation define the linguistic backgrounds of these educated bilinguals. To this end, this is the gap that this study seeks to fill in literature.

1.3 Aim and Objectives of the Study

The aim of the study is to explore the patterns of intonation of selected educated speakers of English in Ebonyi State. Specifically, the objectives of the study are:

1. To describe the patterns of intonation in the speech of educated bilingual speakers of English in Ebonyi State.

2. To describe how the educated bilingual speakers of English in Ebonyi State are defined by their patterns of intonation.

1.4 Research Questions

1. What patterns of intonation can be observed in the speech of bilingual educated speakers of English in Ebonyi State?
2. How do the intonation patterns of the educated speakers of English in Ebonyi State define them?

1.5 Significance of the Study

The importance of competence in the use of English in communication by an educated fellow cannot be over-emphasized. There is no gainsaying the fact that people are oblivious of the patterns of intonation recurrent among educated bilinguals in Ebonyi State. However, upon completion of this study, the findings would contribute to the body of knowledge. It will bring to limelight what happens to intonation among the educated speakers of English in Ebonyi State. It will be relevant to all speakers of English who are bilinguals as they will come to terms with the reality of education in speaking competence which will in turn aid effective communication irrespective of the languages in contact.

Primarily, it will be relevant to students, more importantly indigenes of Ebonyi State who are bilingual speakers of English from diverse educational backgrounds, to help them realize their areas of deficiencies, see the need to adjust and develop interest in working on themselves. Teachers will see the need to look at peculiar areas of difficulties among their students, knowing that secondary school is actually a foundation laying stage. This will help them achieve complete

intelligibility in order to improve the patterns of their intonation in speech. Students and teachers will also be brought to a point where they will appreciate the teaching and learning of intonation as a feature of English. Finally, it will be relevant to existing scholarship on the note that features of English intonation patterns would be easily observed in speech.

1.6 Scope of the Study

The would be carried out among a cross section of educated indigenes of Ebonyi State who are bilinguals, from diverse educational backgrounds including Universities, Polytechnics, and Colleges of Education among others, having the participants drawn from the three senatorial zones. It would be limited to the analysis of the production of intonation patterns and does not include other supra- segmental features such as stress and rhythm. Perceptual and acoustic analyses of the study would be done using the ToBI system; a transcription system under the Auto- Segmental Metrical approach to intonation.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

There are a number of studies on Nigerian English intonation, though with varying areas of focus. Various attempts have been made by few scholars to explore this prosodic feature called intonation from the perspective of describing the intonation of the variety of English spoken by a cross section of Nigerians (Udofot 2002), intonation and attitude in Nigerian English (e.g Akinjobi and Oladipupo, 2010), rhythmic and intonational patterns of NN24's news casting (Melefa 2011), patterns of Nigerian English intonation (Jowitt 2000) among others. In this chapter, therefore, literatures will be reviewed specifically on Nigerian English intonation taking scholarly bearings on opinions or views of scholars in relation to the purpose of this study.

Jowitt (2000) sought to describe the systematic differences between the intonational patterns of Nigerian English and British English, having Nigerian final year undergraduate students as his participants, who were made to read thirty (30) dialogues. He observed patterns of intonation which were in turn transcribed with the use of O'Conor and Arnold (1973) intonation system. Tone, the specific pitch movement on a stressed syllable, was his basic unit of analysis. He proposed that on the characteristics of the Nigerian English intonation system, there was the predominance of falling nuclei in statements, wh-questions, and commands; predominance of rising nuclei in yes-no questions and commands; rare productions of complex nuclei and the high pitch on lexical words. It is worthy to note that his work catered for a variety of contour tones, as against the traditional system of classifying intonation patterns but his data remains questionable because there are yet users of English in Nigeria who are more proficient than the participants of the study and there are also those who despite their levels of exposure are still not proficient of

which this study did not cater for. The findings, though appear plausible, were limited to Nigerian final year undergraduate students of which the regions where they were selected from were not specified by the researcher. These in turn leave a gap for the current study which goes beyond the undergraduate students to selected bilinguals in Ebonyi State who have been exposed to any higher level of education and expected to have the capacity of sustaining communication.

Further examination on the form and frequency of intonation patterns in educated Nigerian Spoken English, Jowitt (2000) insists that certain patterns which have high frequency constituted a system in Nigerian usage which differs in important respects from that of the native speaker's systems, though lack stability. He further provided a simple test in a bid to ascertain the patterns used in Nigerian English speeches to twenty Nigerians who agreed to take part in the reading of four short dialogues. Among them were twelve College of Education students and eight (8) university graduates. Among the eight were two Corps members who had recently graduated as at when the research was carried out and one lecturer who had graduated more than twenty years previously. Seven of the participants came from Northern States and thirteen from Southern States. The study showed that the difference between graduates and non-graduates turned out to be irrelevant in defining the intonation pattern differences between one participant and the other. The study further revealed a preponderant use of the falling tone in the Nigerian English than in Standard British English. However, in Nigerian English, the falling tone was used where the Standard British English had a rising tone or a falling-rising tone. He concluded that Nigerian English had the tendency of regarding every utterance as having an inherent and fixed intonation pattern which for statements had a final falling tone and for questions, a final rising tone and tend not to vary this pattern for contrastive purposes such as the context of utterance might require. Suffice it to say therefore, that Nigerian users of English encounter

difficulties in the appropriate use of English intonation which further projects the need for further investigation on the concept of intonation patterns as well as to describe how these patterns define its educated users in Ebonyi State.

Udofot (1997), in her study on the aspects of intonation of the Nigerian accents of English, described Nigerian English intonation using Pierrehumbert's (1980) intonation transcription system and concluded that the speech tempo of British English was generally faster than Nigerian English. The pauses between intonation groups were observed to be shorter in Nigerian English than in British English and she further argued that Nigerian English speakers divide their utterances into intonation phrases than the British English speakers. This study, therefore, revealed that both in read and spontaneous speeches, about 80% falling tones were predominant in Nigerian English, about 10% rising tones were relatively rare and about 9% fall-rise tones were rare, whereas rise falling tones were only produced by variety III speakers. When, however, compared with the British English control, she submitted that bidirectional tones which is also known as fall rise tones were produced significantly less in Nigerian English. Also, pitch range as observed by her across the utterance was smaller in Nigerian English than in British English. This study, even though worth noting as one of the detailed pioneering efforts on the description of the intonation of Nigerian English, was observed in Melefa (2016) that the method of data analysis was not spelt out such that the reader would be able to empirically examine her findings in relation to the data. More so, the study did not cater for contextualized issues such that it did not spell out the participants whom the study was carried out on. It, therefore, makes room for the present study to explore and identify the patterns of intonation of selected bilingual educated speakers of English in the context of Ebonyi State.

Eka (1985) further described Nigerian English intonation using parametric model adapted from Crystal (1969) and found a distribution of 93.3% simple tones and 6.6 % complex tones in a British control speaker. Moreover, the pitch range was discovered to be smaller in the Nigerian speakers than the British speakers. This study can be discredited on the note that it is not detailed enough to give one access to its empirical facts which in turn gives credence to the current study. However, based on the concept of divergence and convergence, Okon (2001) recorded the utterances of Nigerian speakers of English and examined the intonational similarities and differences between spoken British English and spoken Nigerian English. She posited that Nigerian speakers of English displayed an emerging pattern in the constant use of falling tones irrespective of when other types of tones are required. She concluded that Nigerian male speakers of English differ significantly in their tone selection from their female counterparts. Also, she concluded that age and education were determinants in the choice of intonation patterns among Nigerian speakers of English. She argued that patterns of indigenous languages influenced the intonational structure of Nigerian English. Albeit that her findings were significant, a major deficiency was her methodology which did not point out the participants whose utterances were recorded for the study as well as their numerical strength. Nonetheless, the study identified competence in the usage of English tied to gender. Having age and education as determinants of the choice of intonational patterns among bilingual Speakers of English projects the need for further investigation on the impacts of education on the communication of the educated bilingual speakers of English in Ebonyi State and to further investigate how their intonation patterns define them.

Ibrahim and Faleke (2013) further investigated patterns of intonation tones in the marking of attitudes in Nigerian English. They examined why, in spite of the important role that

intonation plays in the expression of attitude in the English utterances, the status, and significance of intonation in Nigerian schools and colleges have consistently and persistently been at the lowest ebb of academic concern. The participants were a total of eighteen (18) respondents comprising eight (8) Nigerians who were selected from different professional backgrounds and ten native speakers of Received Pronunciation (RP) in British English. Being context dependent, the Standard British English was used as a norm against which the intonation patterns of Nigerian English were compared. Using the random sampling technique, spoken data from native speakers' interaction on the television were collected; data collection were further from chats between friends in a dental clinic and a surprise meeting to observe the use of tunes in utterances of some Nigerians. In the findings, it was indicated that the use of tunes in Nigerian English was low; where the differences lie minimally in the utterances with falling pitch and appear significantly in utterances with rising pitch. It, therefore, revealed that whereas the Standard British English employs a rising pitch in the production of information seeking questions, Nigerian English would prefer to use the falling pitch pattern. This study is similar to the present study on the note that the present study also seeks to identify the deviations in the patterns of intonation observed in the speech of some selected bilingual educated speakers of English in Ebonyi State from that of the Received Pronunciation, but differs on the participants of the study. Whereas the study did not specify the classes of education of the participants but randomly accommodated everyone from different spheres of life, hence, its generalization. Therefore, we are in doubt of his participants because it is possible that the researchers' choice of participants did not include those from Ebonyi State. This therefore opens up the need to cater for those in Ebonyi State.

Akinjobi and Oladipupo (2010) looked at the place of intonation as not only being that which is said but how it is said. In their research on intonation and attitude in Nigerian English, they sought to ascertain the extent to which Nigerian speakers of English use English intonation tunes to express the attitude as it is in Standard British English. Their data were collected from twenty two (22) subjects comprising television reporters who use English for their professional assignments and also have been exposed to basic training in English intonation. Their analysis showed that the respondents were deficient in the use of English intonation tunes to express attitudes as they only scored 15.5% overall appropriate production of intonation tunes in the utterance items. They further concluded that Nigerian television reporters made use of intonation in their communication but lacked competence in assigning appropriate tunes to reflect the attitude of the speakers to the listeners on that which is said. Focusing on the use of the attitudinal function of English, their findings showed that Nigerian users of English encounter difficulties in the appropriate use of English intonation. This therefore confirms the saying that complex intonation tunes are put into restricted use among the speakers of English in Nigeria. It is on this note that the present study is set to investigate if there is any realistic outcome of education on the spoken English of bilingual educated speakers of English in Ebonyi State and further describe how they are defined by their intonation patterns.

Twenty Yoruba- English bilingual adult aphasics, who were patients at the University College Hospital, Ibadan were examined by Sunday (2010) in Melefa (2016). He sought to describe the supra-segmentals of their speeches. Their renditions of a normative text were tape recorded and were analyzed articulately, perceptually and acoustically in a bid to identify the prosodic peculiarities of the speeches of the aphasics. The researcher observed that at the level of intonation, the intonation patterns of the participants were discovered to be smaller to the ones as

deployed by Nigerian speakers of English. He also observed a complete absence of attitudinal use of intonation in the speech of the subjects and a predominance of the falling tone as well as the absence of the rising tone characterized their speeches. This work made efforts to describe the prosody of the English adult Nigerians aphasics but did not cater for the educated speakers of English, neither was its focus on Ebonyi State. It therefore, opens up the need to investigate and identify the intonation patterns of educated bilinguals who are also speakers of English in Ebonyi State.

In a bid to investigate the intonation patterns of the spoken English of eighty Nigerian primary school teachers, Sunday and Fadeyi (2016) selected teachers from four local government areas in Ibadan, Oyo State and assigned them a text material in form of a written dialogue between two people, which they read in form of a role play. Using perceptual and acoustic methods, it was observed that the falling tone, rising tone and fall rise tone were present whereas the rise-fall tones were not in existence in their spoken English. The study, therefore, showed that participants did not use intonation to express attitudes such as doubts, polite requests, and indifference. They rather employed a new intonation pattern; the raise tone, to indicate surprises. The researchers further proposed the raised tone as a pattern of intonation in Nigerian English. They defined the raise tone as the intonation used for indicating surprises. This study, though has plausible findings, was restricted to primary school teachers who were assumed to have undergone a certain level of education in Oyo State. The present study, however, goes beyond primary school teachers, to cater for bilingual educated speakers of English who have been exposed to diverse fields of study or career and levels of education in Ebonyi State.

Akinjobi (2011) aimed at investigating the relevance of academic competence to linguistic performance in the use of English intonation tunes in Nigeria. The thirty participants

for the study were randomly selected. They were made up of postgraduate students who emphasized language as opposed to literature and who have been exposed to basic knowledge of phonetics, English phonology, and spoken English. The participants have been considered academically competent enough to be awarded a first degree in the English language and admitted to a Master of Arts in the English language in the University of Ibadan. The instrument covers grammatical functions such as tone assignment to simple statements, commands, wh-questions, exclamations, polar questions, polite requests, statements to be changed to questions and attitudinal functions. The data were further analyzed perceptually by awarding scores for appropriate performance of which the scores were statistically converted to simple percentages. The acoustic analysis was done using Speech Filing System (SFS)/WASP version 1.3 computerized speech tools. The results revealed good performance of the participants in the assignment of the falling intonation tones to simple statements, commands, wh-questions and exclamation; the rising tones were reported to have been fairly mastered for polar questions. This, therefore, showed that the participant's performance as reflecting academic competence has little or no effect on the appropriate assignment of intonation tones. It is clearly evident that the study focused on a group of individuals who were to be viewed as models of the use of appropriate intonation patterns but limited to postgraduate students at the University of Ibadan. There is, therefore, no gainsaying the fact that the present study, though limited to selected educated bilinguals in Ebonyi State, goes beyond having postgraduate students of English as its participants, to having the final year students and first degree holders from diverse fields of study.

Akinjobi and Oladipupo (2005) further investigated the patterns of intonation of some Nigerian television reporters with the aim of identifying their intonation peculiarities and

ascertaining the extent to which their intonation patterns differ from that of the Standard British English. The focus of the study was on the grammatical functions of intonation of which live reports of forty Nigerian Television reporters from eight television stations in Lagos state, comprising three government and five private stations were recorded on air. Their reports were divided into five intonation groups which corresponded with certain syntactic units. The findings revealed a predominant use of the falling tune in sentence final intonation groups of declarative statements and with wh-questions and a preponderant use of the rising tune in yes/no interrogatives (polar questions) and in all instances of sentence non-final intonation groups used within declarative statements. This showed that the tunes were appropriately used by the participants. Generally, the reporters demonstrated deficiency in the use of complex tunes (fall-rise and rise-fall) as there were negligible instance of fall-rise in sentence non-final intonation groups and no record of rise-fall at all in the data. The rising tune was further used as substitute for fall-rise tune in sentence non-final intonation group. The study concluded that television reporters in Nigeria do not have challenges with the grammatical use of the simple intonation tunes of Standard English but with the complex combined tunes. There was also an exhibition of peculiar patterns of intonation in the result which can relatively be described within the Nigerian English linguistic and socio-cultural milieu. It is worthy to note that the study has its scope as Lagos State and its participants as Nigerian television reporters. It can, therefore, be deduced that the findings were made on generalization on the note that the television reporters' stations were not specified. It is not in doubt that newscasters from Ebonyi State were not represented in the study which gives the present study room to cater for bilingual educated speakers of English in Ebonyi State of which the newscasters are eligible to participate in.

Melefa (2011) carried out a perceptual, metrical, and acoustic analyses on the rhythmic and intonation patterns of NN24's newscasters and observed that there were prevailing patterns of strong (s) and weak (w) syllables alternation in the data. There were also consistent patterns of isochronous stressed syllables. The newscasters were observed to have assigned high tone to unstressed syllables, contrary to previous claims that only stressed syllables were assigned high tone in Nigerian English. He concluded and described the NN24's news casting range as monotonal or bi/multidirectional. This view is however, in contrast with that of Udofot's (2002) who described the variety of English spoken by a cross section of Nigerians, through the use of stratified random sampling technique. Examining sixty Nigerians of varied educational backgrounds, from twenty linguistic groups in Nigeria as the participants of the study, he observed that both perceptual and acoustic analysis of the data revealed that in spite of differing educational backgrounds, the intonation of Nigerian English is characterized by the use of more unidirectional tones than bi-directional ones. There is also the absence of characteristic fluctuation typical of English speech. Nevertheless, whereas Melefa (2011) focused on the intonation pattern of NN24's newscasters, Udofot (2001) did not focus on any specific group of persons, yet the later findings differs from the former. This gives credence to the present work which focuses on identifying the actual observable features of the spoken English of educated bilingual speakers of English in Ebonyi State.

Adejuwon (2003) further investigated the intonation patterns of some radio broadcasters in southern Nigeria and observed that majority of radio newscasters in some southern Nigeria neither understood how intonation works in speech nor did they use tunes appropriately in their newscasts. He further observed a general lack of mastery of intonation in the production of reporters in the region where his research focused. The study had its focus restricted to the

newscasters in the south western Nigeria and draws attention to the need to investigate the speeches but it did not account for the intonation patterns of other speakers of English who are not newscasters. It is not in doubt that every newscaster must be educated. This, therefore, brings a similarity between the study and the current study but they differ in their areas of focus. The present study has its focus beyond the newscasters who ordinarily are assumed to have attained a certain level of education. There is therefore a need to investigate the intonation pattern of the bilingual educated speakers of English from diverse educational background or levels of education as well as diverse fields of study or career, in Ebonyi State.

In like manner, a study carried out by Oladipupo (2010) on the intonation of noun phrase subjects and clause-modifying Adverbials in Nigerian English had about forty television reporters in Nigeria as the participants. The analysis of their intonation revealed a preponderance of rise tune as against fall-rise preferred in British English. It further revealed that the respondents used about 89.3% of rise tune for noun phrase subjects while 87.9% was used for clause modifying adverbials. The study concluded on the note that the overwhelming preference for rise tune in Nigerian English in syntactic structures is connected with the fact that many Nigerian speakers of English have difficulty in producing complex intonation tunes which is as a result of its presence in their linguistic repertoire. This study, though tried to measure the significance of the technical trainings and exposures given to television reporters which makes it plausible, is limited on the note that it did not take into account intonation patterns of other categories of educated speakers of English which the present study intends to cover, in Ebonyi State.

Strikingly, Atoye (2005) investigated the perception and interpretation of a sub-class of sentence intonation by some Nigerian users of English. His participants comprised one hundred and twenty third year university students of English whom a set of ten test sentences were

administered to, in a bid to determine their perception of English intonation. The investigated participants obtained 85.7% correct perception of changes in intonation while only 25.7% obtained correct interpretation of the meanings normally associated with the intonation contours on the ten sentences played back to them. The researcher, however, observed that the concept of intonation was well known to the participants, though the attempt to teach them English intonation through its structural analysis appeared not to have been very successful. There is, therefore, no gainsaying the fact that the research was an evaluative one on the note that it evaluated the performance of the participants studied. Nevertheless, it failed to identify their patterns of intonation, neither was it carried out beyond the undergraduate classes of the Nigerian universities nor were the universities where the participants were coming from accounted for. This, however, even though plausible, yet, projects the need for the investigation of the patterns of intonation spoken among the educated bilingual speakers of English in Ebonyi State.

Babalola (2014), drawing a comparison with a local language (South-West), investigated the different uses of tones in English language with the aim of locating major areas of linguistic problems confronting a learner of second language in a multi-lingual environment. The participants were one hundred and twenty (20) students of J.S.S. classes in Ekiti State. In determining the variation among the groups of the local dialects of Yoruba language, ANOVA was used while T-test was applied to determine the variations that existed between Received Pronunciation (RP) model of the English language and that of a local language (Yoruba). The result revealed a difference between the way the tones in the English language were applied and the way the local users of the language applied the tones in their various expressions in the English language. It further revealed that most students make use of falling tones in most cases where rising tone is required. Generally, it showed a poor application of correct intonation

because the use of intonation in Yoruba language does not follow a rigid pattern or convention like that of English. The tone in most cases was discovered to be flat. However, this study is limited to J.S.S. students in Ekiti State but the present study goes beyond secondary school students to include university graduates, postgraduate students and beyond. This is because it is assumed that having gone through rigorous exposure to education, there should be a realistic outcome and a visible difference in the speeches of the participants, based on their levels of education, and as well being defined by their patterns of intonation.

A research on a new experimental study of the nature of Yoruba intonation was further carried out by Fajobi (2011) with the aim of investigating a more sophisticated account of Yoruba intonation against the general notion in existing literature that the intonational system of the language has mutual effects of tones on each other. The researcher, however, did an acoustic analysis of the frequency patterns in some spoken Yoruba sentences in the categories of declarative and three types of interrogatives. The participants were final year Bachelor of Arts Yoruba students of the Obafemi Awolowo University, Ile Ife, Nigeria. The informants were two males and two females within the age range of 21 and 25 years and are speakers of Standard Yoruba who had in previous years taken courses in general phonetics and phonology in addition to studying the phonetics and phonology of Yoruba. They were further randomly selected from among those within average GPA of second class upper. The study showed that the intonation of question is distinct from the intonation of statements. Whereas the intonation of statement is characterized by a falling tune, that is, overall declination for statements, and overall rise for some types of questions in addition to the patterns of lexical tones. The study can be applauded on its contextualization which made its findings more effective and worthwhile. However, whereas the focus was limited to final year Bachelor of Arts Yoruba students of Obafemi

Awolowo University, Ile Ife, it is clearly evident that the intonation patterns of students from other fields of study, other universities and diverse levels of education were not accounted for. The present study, therefore, intends to cater for these categories of speakers of English in the context of Ebonyi State, having selected educated bilinguals as its participants.

Obianika (2014) investigated the acoustic analysis of tone in Abankeleke Igbo with the aim of investigating the truth or otherwise of the claim of the feature of the upset tone in Izii and Ezaa dialects. Data were collected through personal interviews which were collected from three randomly selected participants from Izii, Ezaa and Standard Igbo. The data were transcribed and analyzed electronically, using the speech tools analyzer version and phonology assistant. Its perceptual analysis revealed a feature of the high rising tone in Izii and Ezaa which was absent in other Igbo dialects. This study, though had its focus on two local government areas in Ebonyi State, could be said to have its findings dependent on generalization. This is because of the limited number of participants who were parts of the study. It further projects the need for an in-depth study of the patterns of intonation of educated bilingual speakers of English in Ebonyi State, having the three senatorial zones, fully represented.

Gut and Milde (2002) researched on the prosody of Nigerian English with the aim of comparing the prosody of Nigerian English with the prosody of British English and three West African tone languages. The participants comprised five speakers of Nigerian English. Four females and one male, who were chosen on the ground of their education and linguistic history as speakers of Standard Nigerian English. All, born and educated in Nigeria, had their university degrees. It was recorded that the Speaker NE1 spoke Ibibio, Efik and a little Igbo and Yoruba. Speaker NE2 spoke Igbo as mother tongue, NE3 is of Efik parentage, NE4 spoke Edo as mother tongue and a little Yoruba and speaker NE5 spoke Yoruba. The British English participants were

made up of two male and one female and they all spoke an approximation of Southern Standard and British English. The West African participants constituted two speakers of Anyi, one male and one female speakers of Ega and one female speaker of Ibibio. Using ESPS/WAVES+ for analysis, the result showed a distinct prosodic differences between the varieties of English spoken in Southern Britain and in Nigeria in terms of tones, contour tones occur in very restricted environment, mainly on pre-pausal syllables. There was no tendency for producing stressed syllables with a high tone and unstressed ones with a low tone. Rather, words of particular grammatical categories seemed to be a low tone while noun, verbs and adjectives were produced with a high tone. The study concluded that Nigerian English prosody was close to those tone languages that have tones associated with a grammatical rather than lexically contrastive function. It could be deduced that the context of study is not participant specific. There was no specification of the variety of Igbo spoken by the Igbo participants. This portrays the result of the study a generalized one and in turn gives credence to the present study.

A further study by Gut (2001) was with the aim of describing the tonal structure of Nigerian English without the presumption that description systems developed for intonation languages can be applied without alteration. He carried out an acoustic analysis on read and semi- spontaneous speech and analyzed the prosody of Standard Nigerian English and compared it to the prosody of Southern British English. The research participants were five speakers of Nigerian English comprising four female and one male. They were chosen as speakers of Standard Nigerian English on the grounds of their education and linguistic history. The data were analyzed using ESPS/WAVES+ and the study revealed that the tonal structure of Nigerian English showed a smaller pitch range and a distribution of tone is similar to tone languages. This

study failed to spell out the educational makeup of the participants, their location and the context in which the study was carried out. This, therefore, gives credence to the present study.

Nwaenyi (2010) had a study on the problems encountered in the use of English prosodic features by Igbo native speakers in Orlu education zone. The researcher had about 60 Orlu speakers of English, comprising 20 teachers and 40 students, as the participants of the study. The instruments which were used for data collection were the use of 25 words with more than one syllable to assess the pronunciation of English words stressed by the participants and a conversational passage which was used to assess the use of intonation in connected speech by the participants. The researcher, in depicting the performance of the participants on the use of intonation, observed that even though there was a clear use of intonation, in the speech of Igbo native speakers of English, only a very limited number of English intonation tunes could be identified in their speeches. The participants were not able to use intonation to a large extent to achieve its aim, giving subtle change in meaning to utterances. There was therefore, a general failure of intelligibility as a result of poor manipulation of intonation. It is worthy to note that one of the limitations of the study was seen in its method of data collection which could be said not to be very ideal for such a study. The researcher, therefore, made use of textbooks rather than recorded speech as his control. He further did not specify the levels of education of the teachers as well as the students who participated in the study to ascertain if the problem discovered is limited to the group of persons on whom the study was carried out. In turn, this gives credence to the present study.

One of the researches on the intonation of World Englishes was carried out by Lewis (2003). He researched on the typical intonation of yes/no question in American English with the aim of challenging the assumption that the intonation of these questions was different from that

of the Standard British English which is thought to occur with both rising and falling intonation. Its findings reported that the American speakers of English do not distinguish between the high-rising and low-rising intonation. The researcher further argued that the supposed differences in intonation between the varieties is not accurate for yes/ no questions and concluded that the intonation of yes/no questions should be an unimportant issue in the English language teaching. This was on the note that intonation on these questions appeared to play a minimal role in the success of interactions between speakers from different varieties of English. The study, however, tried to describe the procedure used to test whether American speakers of English attributed different meanings to yes/no with low-rising and high rising intonation. It revealed that whereas the low-rise is often called yes/no question intonation for British but not for American English, O'Connor and Arnold (1973) posited that the low-rise remained the normal way of asking yes/no questions. The Americans are however, thought to strongly prefer the high-rise. It is, therefore, worthy to note that the study looked at world Englishes but did not take into account the Nigerian Englishes which comprised studying participants within the context of Ebonyi State.

Beltran (2015) further investigated the distinction in utterances between falling and rising intonation of wh- questions and yes/no questions. He described the production of intonation patterns of non-English major student teachers, on campus teaching. The study revealed that the student teachers' mother tongue (Filipino) was commonly used in most of their verbal exchange activities. It is however, worthy to note that the utterances of the student teachers displayed evidences of intonation pattern variation on wh-questions and yes/no questions. This study, though had its participants as the speakers of Filipino, was limited to student teachers. This gives credence to the present study which goes beyond teachers to involve other careers. It further has its context as the three (3) senatorial zones in Ebonyi State.

From the foregoing, it can be deduced that the matter of intonation is recurrent in everyday speech. The area of supra-segmentals has further been projected as the most problematic among the Nigerian speakers of English and intonation as an aspect of the supra-segmental features remains that feature without which successful utterances in communication cannot be made. Related literatures have, however, been reviewed and one striking observation remains that previous studies have not particularly identified the specific intonation patterns in the speeches of the bilingual educated speakers of English within the context of Ebonyi State. Also, existing scholarships, to the best of the knowledge of the researcher, have not investigated how the intonation patterns of bilingual educated speakers of English in Ebonyi State describe them. Therefore, there arises the need for an investigation and identification of these features of which the present study is set to cater for.

CHAPTER THREE

THEORETICAL FRAMEWORK AND RESEARCH METHODOLOGY

This chapter discusses the theoretical framework and its relevance to the study. It further presents the methodological approach which explains the procedures and methods that will be employed in eliciting information for the study.

3.1 Theoretical Framework

The study employed the Auto-segmental Metrical approach to intonation and its application to the study was done through the use of a transcription system called ToBI.

3.1.1 Auto-Segmental- Metrical Approach

This approach to the study of intonation was developed on the basis of empirical evidence from speech production and perception. The essential tenets of the model are largely based on Janet Pierrehumbert's (1980) dissertation with additional refinements built on experimental research in a large number of languages. The term was coined by Ladd (1996) and reflects the connection between two sub-systems of phonology required for intonation, an auto-segmental tier representing intonation's melodic part, and metrical structure representing prominence. According to the basic principle of Auto-segmental Metrical approach, intonation is phonologically represented as a string of low (L) and high (H) tones and combinations thereof. The identity as Hs and Ls is largely determined by phonetic observation and defined in relative terms. "H" represents tones deemed to be high in a melody with respect to the speakers range and other tones in the same contour while "L" is used to represent tones deemed to be low by the same criteria.

It is worthy to note that Pierrehumbert's intonational phonology is in some ways the extension of Pike's (1945) theory which used a system of four tones numbered 1-4. With the use of a system of diacritics which distinguish tones located on accented syllables from those occurring at boundaries and between accents, Pierrehumbert reduced the description into High (H) and Low (L), positing two kinds of tones which include pitch accents (high or low) and boundary tones. The pitch accent can either be single or doubled, and it has starred (*) tones which implies the tone that is directly associated with the accented syllable. Double tone accents have an additional tone and referred to as a floating tone which is marked with a dash (-). These floating tones are not directly aligned with a stressed syllable, but are associated in a more indirect way. Each phrase requires at least one pitch accent and the possible pitch accents are H*, L*, or bi-tonal as H* + L, H+ L*, L+ H* and L* + H. These pitch accents are realized on the prominent syllables on the basis of the metrical pattern of the text.

The boundary tone, on the other hand, is found at the phrase boundaries, also known as the edge of the intonational phrase, which is marked with a % sign. Each phrase, therefore, ends with a boundary tone of H% or L%. These boundary tones are realized on the last syllables of an intonational phrase and determine the phrasing. The phrase tones, also called the intermediate boundary tones as added by Beckman & Pierrehumbert (1980), are used to show part of the contour from the last (nuclear) accent to the phrase boundary i.e. at the end of the intermediate phrase between the last pitch accent and the final boundary tone. This notion of intermediate boundary is also marked with a dash (-). Therefore, each phrase receives a phrase accent of H- or L- . These phrase accents are realized after the pitch accents and after a certain amount of time. They also determine the melody between the nuclear tone and the boundary tone.

It is worthy to note that the most important part of intonational patterns is the nuclear contour which goes from the last tonic syllable to the end of the utterance. Every utterance must have at least a nuclear pitch accent, an intermediate boundary tone or a phrase tone and a final boundary tone (Grice and Baumann, 2005). A widely used autosegmental metrical framework for the description of intonation is the Tones and Break Indices (ToBI) system which was originally developed as a transcription system for American English, but has since become a general framework for developing intonation systems.

3.1.2 ToBI System

This transcription system was first developed in order to reach a common standard system for transcribing the intonational pattern of English utterances and share the current data (Silverman et al., 1992; Beckman & Hirschberg, 1993; Pitrelli et al., 1994) and it was later adapted in other languages and dialects.

A ToBI transcription system applied in an utterance consists minimally a recording of speech, an associated record of the fundamental frequency contour and a proper transcription which is a symbolic label for events on the following four parallel tiers:

- An orthographic tier for transcribing words
- A tone tier for transcribing tonal events
- A break-index tier for transcribing boundaries between words
- A miscellaneous tier for recording additional observations.

It is worthy to note that one popular program for labeling and displaying ToBI transcription is Praat and the two core ToBI analyses are the tone tier and the break-index tier.

The orthographic tier is used for the transcription of orthographic words. It contains straight forward transcription of all the words in the utterance, and transcriptions are aligned with their location in the speech waveform. With the use of praat, the orthographic label for a word is placed between two marks that delineate the approximate time interval in the signal that corresponds to the utterance of that word and placing <SIL> to mark silence between words, if any. The tone tier is the part of the transcription that corresponds most closely to a phonological analysis of the utterance's intonation pattern. It consists of labels for distinctive pitch events, transcribed as a sequence of high (H) and low (L) tones marked with diacritics indicating their intonation functions. Tones function either as prominence markers called pitch accents, as parts of pitch accents, or as boundary related events called phrase accents and bound tones, that mark the edges of two types of phrases; these are based on the work of Janet Pierrehumbert (1980) and joint work by Mary Beckman and Janet Pierrehumbert (1986).

The break-index tier according to Beckman and Hirschberg (1993) represents a rating for the degree of juncture perceived between each pair of words and between the final word and silence at the end of the utterance. They are to be marked after all words that have been transcribed in the orthographic tier. All junctions must be assigned an explicit break index value. On the other hand, the miscellaneous tier is the common comment tier that can be used to mark events such as breaths, coughs, laughter, long silence, and other non-speech events. They are traditionally marked with angle brackets < >. Many events here are important in interpreting the analysis on the tone tier and break –index tier because they disrupt the smooth rhythm of the utterance or interrupt the intonation contour. Labels here mark the beginning and end of an event interval.

ToBI, notably, does not try to transcribe all aspects of prosody. Interestingly, one of the categorical aspects of prosody captured by this system is the intonation pattern which is the sequence of contrastive pitch events also called pitch accents, phrase accents, and boundary tones which in turn determines the frequency contour of the utterance. The focus of the study, however, is to determine the use of intonation of the participants, through the intonation patterns of rise, fall, rise-fall, and fall-rise. Gussenhoven (1984) posits that within the auto-segmental-metrical theory, a combination of pitch accent and an intonation phrase boundary which mark the beginning and end of prosodic phrases, determine the intonational contour of a phrase. The study is however concerned with the edge tones of phrase accents by which the intonational patterns of the Ebonyi State educated speakers of English will be determined. A set of symbols has been provided by ToBI for the transcription of intonation phenomena. Thus:

- H*: high pitch accent
- L*: low pitch accent
- L+H*: bitonal pitch accent with low tone followed by high tone prominence
- L*+H: bitonal pitch accent with low tone prominence followed by high tone
- H*+L: bitonal pitch accent with high tone prominence followed by low tone
- !H*: down-stepped high pitch accent
- L+!H*: bitonal pitch accent with low tone followed by a down-stepped high tone prominence
- L*+!H: bitonal pitch accent with low tone prominence followed by down-stepped high tone
- H+!H*: bitonal pitch accent with high tone followed by down-stepped high prominence

- H*+!H: bitonal pitch accent with high tone prominence followed by a down-stepped high tone.
- L-L%: low phrase accent, low boundary tone
- H-H%: high phrase accent, high boundary tone
- L-H%: low phrase accent, high boundary tone
- H-L%: high phrase accent, low boundary tone
- !H-L%: down-stepped high phrase accent, low boundary tone
- H-: high phrase accent
- L-: low phrase accent
- !H-: down-stepped high phrase accent

Therefore, a pitch extraction software, Praat will be used for labelling and displaying ToBI transcription and its analysis will be focused on the two core ToBI analyses which include the tone tier and the break index tier.

3.2 Population of the Study

The population of this study comprised sixty (60) participants from the three senatorial zones in Ebonyi State who have attained a certain level of exposure to education. Ebonyi State is one of the thirty six (36) states in Nigeria, created in October 1, 1996 from Enugu and Abia States. It shares its boarder with Benue State to the north, Enugu State to the west, Imo and Abia States to the south and Cross River State to the east. The towns in Ebonyi State include Abakaliki, Afikpo, Ikwo, Izzi, Onicha, Edda, Onueke, Ezzamgbo, Nkalagu, Uburu, Amasiri and Okposi. The state is further divided into three senatorial zones including:

- Ebonyi North comprising Abakaliki, Ebonyi, Ohaukwu and Izzi LGAs.
- Ebonyi Central comprising Ikwo, Ishielu, Ezza North and Ezza South LGAs.
- Ebonyi South comprising Afikpo North, Afikpo South, Ivo, Ohaozara and Onicha LGAs.

The choice of educated bilingual speakers of English, who were randomly selected as the participants of this study, was because of the level of necessity laid on those who have been exposed to certain levels of education to confidently produce sound speeches and communicate appropriately. From the three senatorial zones, participants were randomly selected from each local Government Area and a descriptive approach was adopted for the analysis of the data which implies that the characteristic features of the audio taped speeches of the participants were described and not prescribed. This, in turn, helped for adequate and proper representation.

3.3 Method of Data Collection

The participants of the study were randomly selected, using the stratified random sampling technique method, from the three senatorial zones in Ebonyi State. The participants were required to speak freely for some minutes, guided by some extracts from Roach (2010). The melody of their utterances was listened to and recorded, resulting from their ability to pause at relevant positions and their use of appropriate intonation tone to express themselves in a given paragraph and sustain communication as a native speaker would do. The major yardstick of stratification was the level of education in which the participants have been exposed to, irrespective of the career.

3.4 Method of Data Analysis

The participants' responses were graded based on their appropriate production of each utterance appraised against the model of production which was provided in English phonetics and phonology by Roach (2010). The recorded utterances were converted to WAVE audio with the use of Any Audio Converter after which it was constantly played, listened to, and analyzed both perceptually and acoustically. The utterances containing the tones of interest of the researcher were extracted through the use of Sony Sound Forge. A pitch extraction software, Praat, was used for displaying the Tone and Break Indices (ToBI) transcription and the data was analysed using Tones and Break Indices (ToBI), a framework of Auto-segmental metrical approach to intonation.

CHAPTER FOUR

DATA ANALYSIS AND DISCUSSION OF FINDINGS

This chapter analyses the intonation patterns of the randomly selected bilingual educated speakers of English in Ebonyi State. It looks at the presentation of detailed analysis of each of the randomly collected data from the 13 Local Government Areas of Ebonyi State which constitute the three Senatorial Zones. The utterances were recorded and converted to WAVE audio with the use of Any Audio Converter after which the utterances which were of interest to the researcher were extracted with the use of Sony Sound Forge. These utterances were acoustically analyzed with the use of pitch extraction software, Praat and were further transcribed using the ToBI system of representing intonation patterns.

4.1 SOCIO-CULTURAL PROFILE OF PARTICIPANTS

A bio-data form was used to gather information on the socio-cultural profile of the participants. A paragraph, which guided a speech recording performed with samples of connected speech from Roach (2010), was also given to the participants. These were administered to 60 participants. It was observed that three (3) participants who were willing to identify with the study were still undergraduates and were not yet in their final years. Three (3) other participants further declined from lending their voices for recording due to the recurrent social insecurity experienced all over the nation. About nine (9) other participants who were willing to participate in the study observed that their Local Government Areas had already been covered by the researcher as each Local Government Area had a maximum of five (5) participants who were

randomly selected to represent them. A total of forty five (45) participants responded positively to the study.

However, the three senatorial zones were evenly represented in the study. Hence, a total number of twelve (12) participants represented Ebonyi North, twelve (12) participants represented Ebonyi Central while twenty one (21) participants represented Ebonyi South. Their recorded utterances were further subjected to a perceptual and acoustic analysis, fully presented in this chapter. The analysis of the responses are represented in tables. The three Senatorial Zones comprising the thirteen (13) Local Government Areas of Ebonyi State are represented below:

- Ebonyi North: Abakaliki, Ebonyi, Ohaukwu and Izzi LGAs.
- Ebonyi Central: Ikwo, Ishielu, Ezza North and Ezza South LGAs.
- Ebonyi South: Afikpo North, Afikpo South, Ivo, Ohaozara and Onicha LGAs.

The table below contains the participants' age category, sex, educational qualification, occupation, course studied/studying (as in the cases of degree in view) and additional languages spoken with English. The table further shows that the participants are bilinguals and educated, from diverse fields of study. The percentages were got based on the general number of frequency (45) of each variable.

Table 1: Group Breakdown

S/N	Variable	Frequency	Percentage
1	AGE CATEGORY		
	21-30	28	62%
	31-40	13	29%
	41-50	3	7%
	51 AND ABOVE	1	2%
	TOTAL	45	
2	SEX		

	MALE	31	69%
	FEMALE	14	31%
3	EDUCATION QUALIFICATION		
	PhD	1	2%
	PhD IN VIEW	2	4%
	MASTERS	3	7%
	MASTERS IN VIEW	17	38%
	BACHELORS	22	49%
4	OCCUPATION		
	STUDENTS	16	36%
	PUBLIC SERVANTS	6	13%
	CIVIL SERVANTS	10	22%
	FARMER	1	2%
	CLERGY	1	2%
	LEGAL PRACTITIONERS	2	4%
	TEACHERS	5	11%
	BUSINESS	1	2%
	APPLICANTS	3	7%
5	INSTITUTIONAL CATEGORY		
	UNIVERSITY	45	100%
	COLLEGE OF EDUCATION	-	-
	POLYTECHNIC	-	-
6	ADDITIONAL LANGUAGE SPOKEN WITH ENGLISH		
	IGBO	45	100%
7	COURSES OF STUDY		
	MASS COMMUNICATION	2	4%
	ELECTRICAL/ ELECTRONIC ENGINEERING	2	4%
	HUMAN RESOURCE MANAGEMENT	1	2%
	BUSINESS EDUCATION	2	4%
	PUBLIC ADMIN	3	7%
	MARKETING	1	2%
	HOME ECONOMICS EDUCATION	1	2%
	REELIGION AND PHILOSOPY	1	2%
	ENGLISH & LITERARY STUDIES	4	9%
	ECONOMICS	2	4%
	LAW	2	4%
	ACCOUNTANCY	2	4%
	LINGUISTICS	2	4%
	AGRIC ENGINEERING	1	2%
	MATHS & STATISTICS	2	4%
	PSYCHOLOGY	4	9%
	THEOLOGY	1	25
	ARIC SCIENCE	1	2%
	EDU. ADMIN. AND PLANNING	1	2%
	MEDICAL MICROBIOLOGY	1	2%

	FOOD & NUTRITION	1	2%
	MEDICAL & HUMAN ANATOMY	1	2%
	APPLIED PHYSICS	1	2%
	SCIENCE LABORATORY TECHNOLOGY	1	2%
	SOCIOLOGY & ANTHROPOLOGY	1	2%
	NURSING	1	2%
	HUMAN KINETICS & HEALTH EDU.	1	2%
	MEDIVAL & LABORATORY SCIENCE	1	2%
	UNSPECIFIED	1	2%

Table 1 above shows the age categories of the participants who were part of the research. The percentage(s) show that the allocation of the bio-data form to various participants in different senatorial zones was in no way influenced by any form of biasness. It is, therefore, a true reflection of the researcher's impartiality in the distribution of the form. On the sex, however, 69% of the participants were male while 31% of females participated in the study. It is worthy to note that the research was not gender biased neither was the bio-data form shared with biased mind. It was rather as a result of the availability and willingness of the participants. Different degrees and levels of education were also covered as there were 49% of Bachelor degree holders, 38% Masters in view, 7% Master's degree holders, 4% PhD in View and 2% PhD holders. This, therefore, implies that the study was not limited to a certain degree of education apart from those who are yet to have their first degree. The Occupation of the participants further reveals that different spheres of life, within the reach of the researcher, were represented. Also, it was observed that the participants had different courses of study which in a way implies that a level of perfection in their use and appropriate assignment of intonation patterns may not be realized.

It is worthy to note that the 100% of the university attendance by the participants was coincidental. There was no level of biasness associated with its selection as the researcher was open to having graduates from different categories of institution as participants. More so, the bilingual make-up of the participants was only English and Igbo. While there were 100% of

bilingual speakers of English and Igbo, It is, therefore, not in doubt that all the participants were educated bilinguals.

Interestingly, making reference to the debate on the issues involved in the standardization of Nigerian English, it is worthy to note that Banjo's (1971) Variety 3 (V3) classification of Nigerian English, which is the widely accepted criteria for describing the standard Nigerian English, described the V3 speakers of English as those with greater exposure to the standard variety and as set of speakers who are assumed to have achieved their fluency in English at the end of their university education. Among them also were those who achieved their fluency before the end of secondary education and others who have their home backgrounds to have contributed to their fluency. Others also have their exposure through quality education which they were exposed to. All of these make up a set of speakers who have vocabulary strength and phonology, though not RP but share deep structure with RP. This goes a long way in describing them as educated and having the ability to sustain conversation. It is on this note, however, that the participants of the study can be described as educated speakers of English.

4.2 ACOUSTIC ANALYSIS OF THE INTONATION PATTERNS OF BILINGUAL EDUCATED SPEAKERS OF ENGLISH IN EBONYI STATE

Making reference to ToBI, a framework of Auto-segmental Metrical Phonology which was adopted in the study for the transcription of intonation patterns, the extracted utterances were analyzed for pitch accents. The pitch accents seen as the tone which the stressed syllable of a word is associated with include H*, L*, H*+ L, L*+H among others with the starred tone representing the stressed syllable. For the sake of this study, these pitch accents would be used interchangeably as rise, fall, fall-rise and rise fall, in the course of the study. In a bid to test the Intonation Patterns used by the participants, the paragraph below was adapted from Roach

(2010) which served as the control of the study and the underlined utterances had the intonation patterns which were of interest to the study.

They're building \underline>wind farms | all over the /area | where we \underline>live | We can see long lines of them along the tops of the hills | and down by the \underline>coast | there are wind turbines out at /sea and along the shore | They only build them where there's plenty of \underline>wind | \u00c2\u00b0\u00b0\u00b0\u00b0\u00b0\u00b0 | We certainly get a lot of \underline>that near us | You \underline>could say the landscape's been completely transformed | but most people don't seem to mind |

The utterances of interest to the research were segmented into three (3) tiers on a text grid window on Praat including sentence, word and tone which according to the theory are known as the orthographic tier (for sentence and word) and tone tier respectively. Relying on audio-visual clues, the utterances were labelled, with the instances of noise and interruptions from the environment represented as 'N' and silence between words represented as <SIL>. The transcription of the patterns of intonation using ToBI system was done following the pitch contour observed on Praat segmentation windows for various utterances. The intonation patterns were segmented and categorized at the syllable level first, examining 6 participants, two from each senatorial zone after which it was categorized at the word level examining the 45 participants for the study. Below are samples of pitch contour and text grid showing the distribution of intonation patterns, one for each of the 6 participants as well as the control:

Figure 1: Control

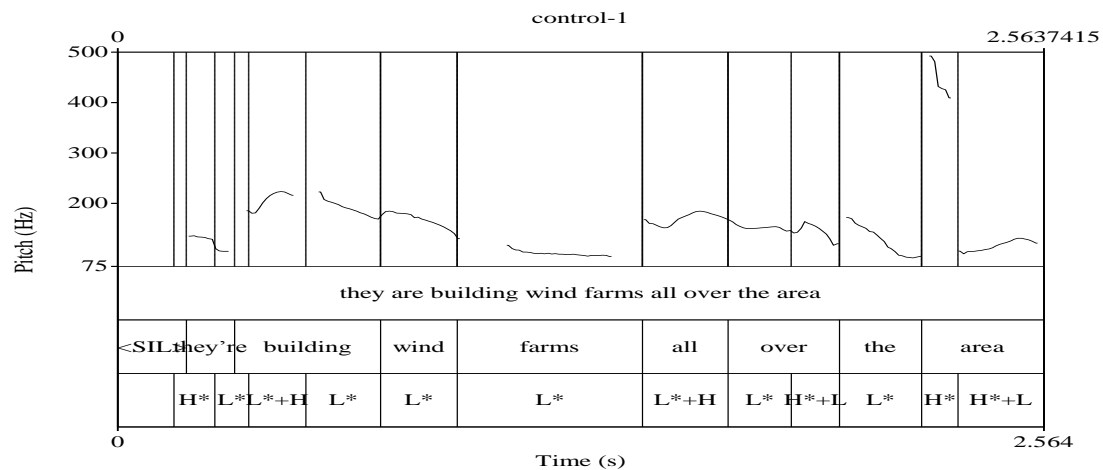


Figure 2: Pitch contour and textgrid sample for participant 1

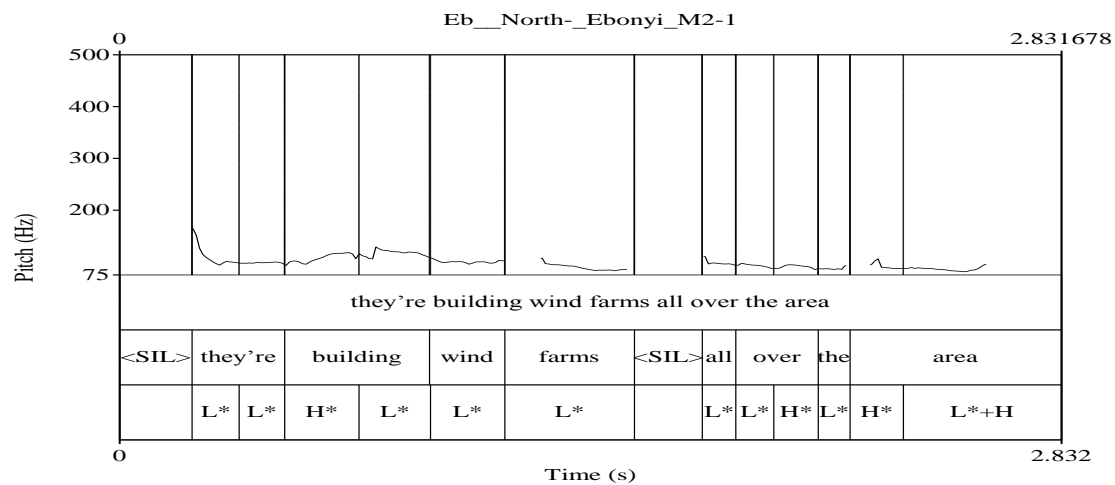


Figure 3: Pitch contour and textgrid sample for participant 2

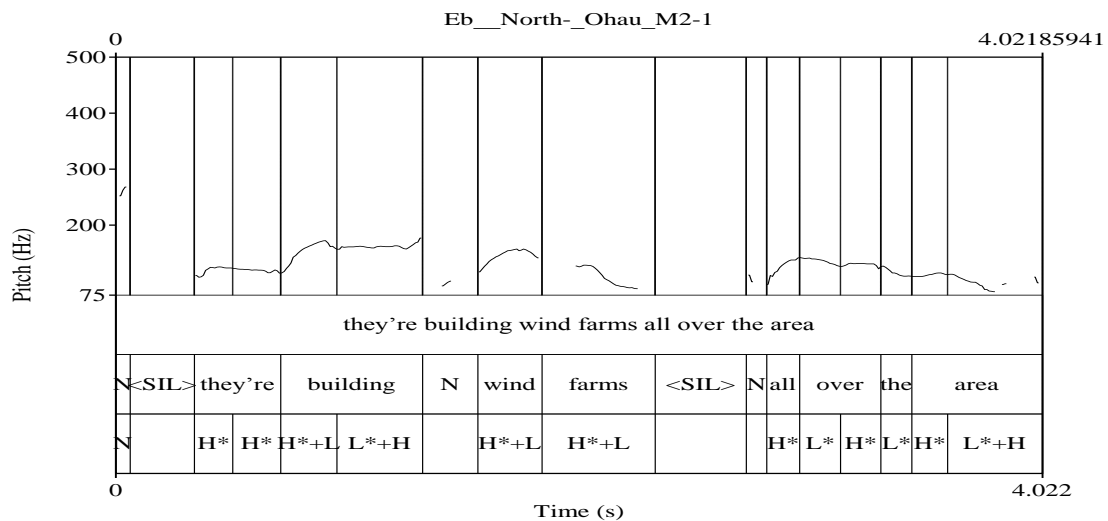


Figure 4: Pitch contour and textgrid sample for participant 3

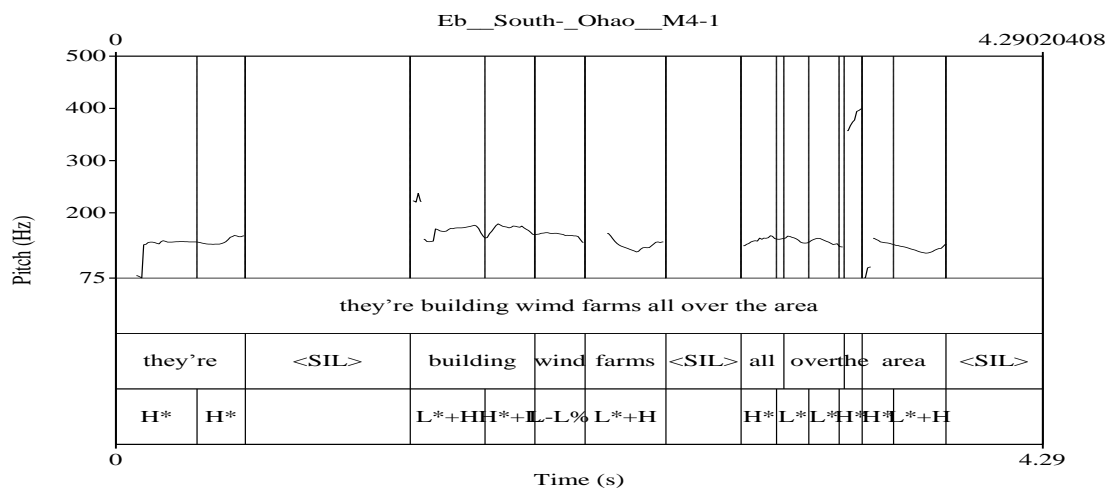


Figure 5: Pitch contour and textgrid sample for participant 4

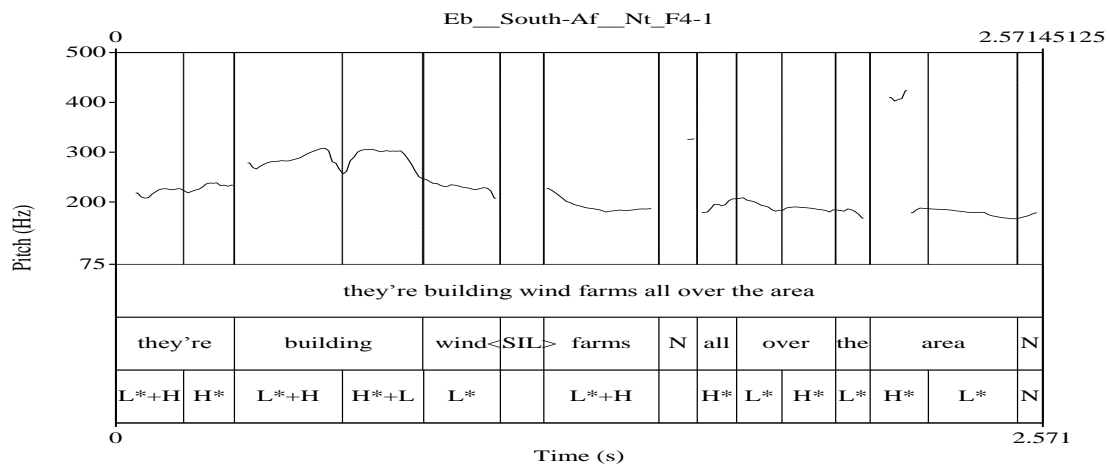


Figure 6: Pitch contour and textgrid sample for participant 5

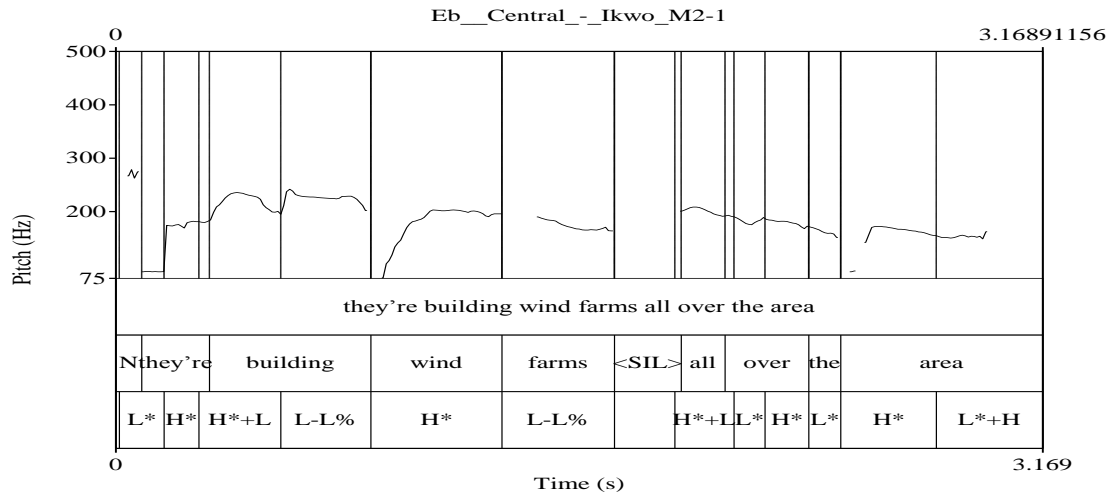
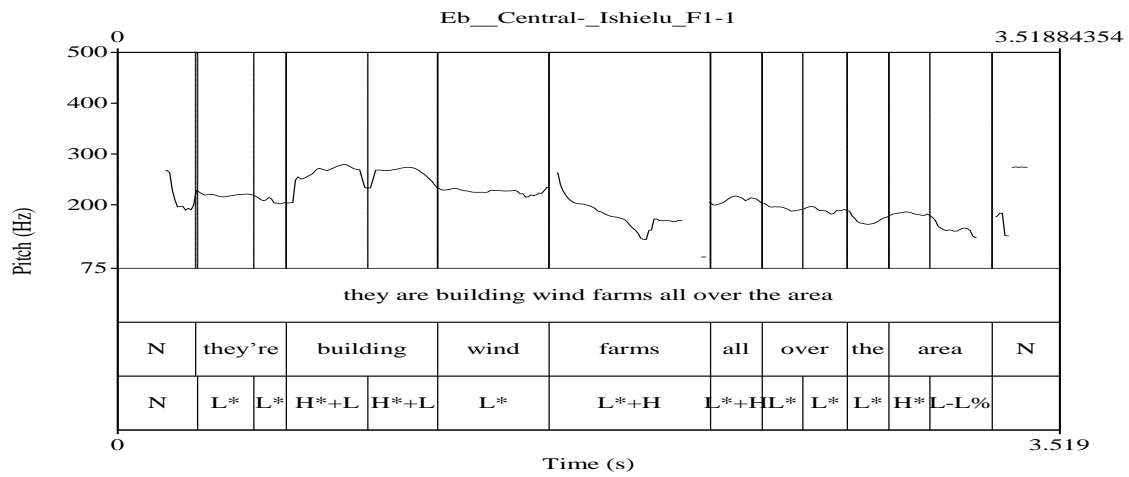


Figure 7: Pitch contour and textgrid sample for participant 6



These utterances were further analyzed and represented in the Table below.

Table 2: DISTRIBUTION OF TONAL PATTERNS

Participants	Utterances in Syllables					
P1	They L*	are L*	build- H*	-ing L*	wind L*	farms L*
	All L*	o' L*	-ver H*	the L*	a- H*	-rea L*+H
P2	they H*	are H*	build- H*+L	-ing L*+H	Wind H*+L	farms H*+L
	All H*	o' L*	ver H*	the L*	a- H*	-rea L*+H
P3	They H*	are H*	build- L*+H	-ing H*+L	wind L-L%	farms L*+H
	All H*	o' L*	ver L*	The H*	a- H*	-rea L*+H
P4	They L*+H	are H*	build- L*+H	-ing H*+L	wind L*	farms L*+H
	All H*	o L*	-ver H*	the L*	a- H*	-rea L*
P5	They L*	are H*	build- H*+L	-ing L-L%	wind H*	farms L-L%
	All H*+L	o' L*	ver H*	the L*	A H*	Rea L*+H
P6	They L*	are L*	build- H*+L	-ing H*+L	wind L*	farms L*+H
	All L*+H	o L*	ver L*	the L*	a- H*	-rea L-L%

Note: P=Participant

Furthermore, other utterances which were extracted from the paragraph read by the participants gave rise to the samples of pitch contour and text grid in 4.3 below, showing the distribution of intonation patterns, one for each, of the 45 randomly selected bilingual educated speakers of English in Ebonyi State as they were examined at the word level.

4.3 THE PITCH CONTOURS AND TEXT GRID SAMPLES FOR THE 45 PARTICIPANTS AT THE WORD LEVEL EXAMINATION

EBONYI NORTH

Figure 8 ABAKALI KI LGA

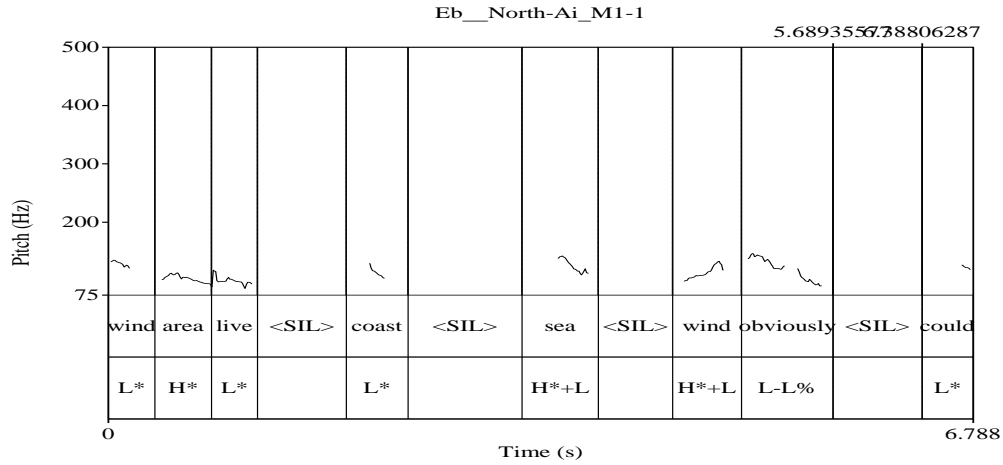


Figure 9 EBONYI LGA

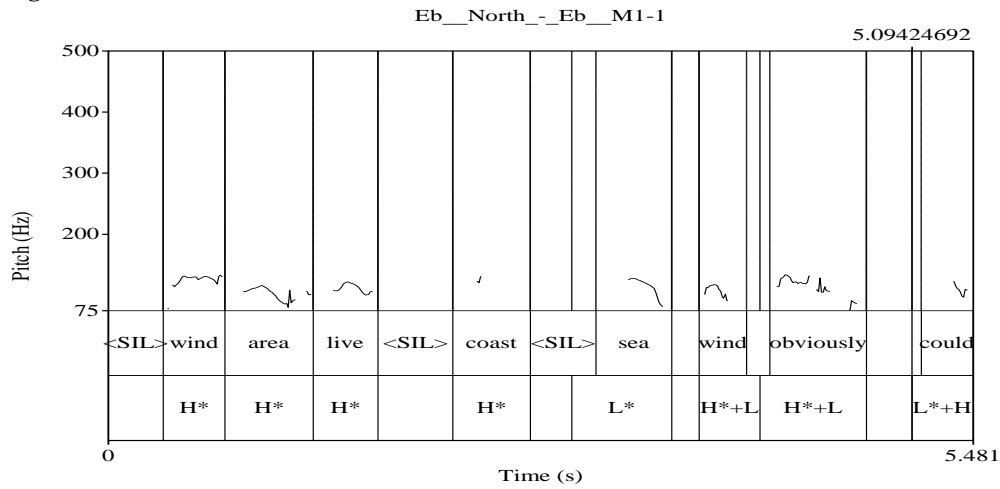


Figure 10

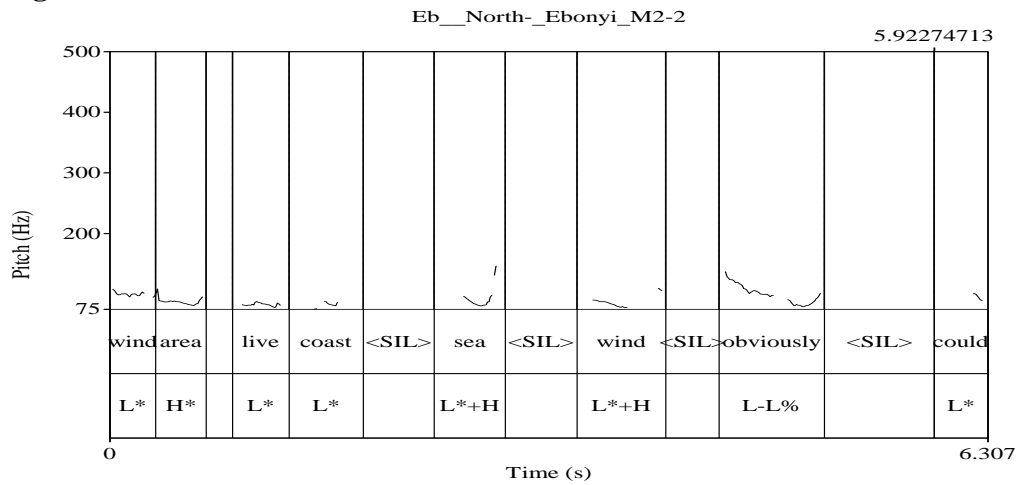


Figure 11 OHAIKWU LGA

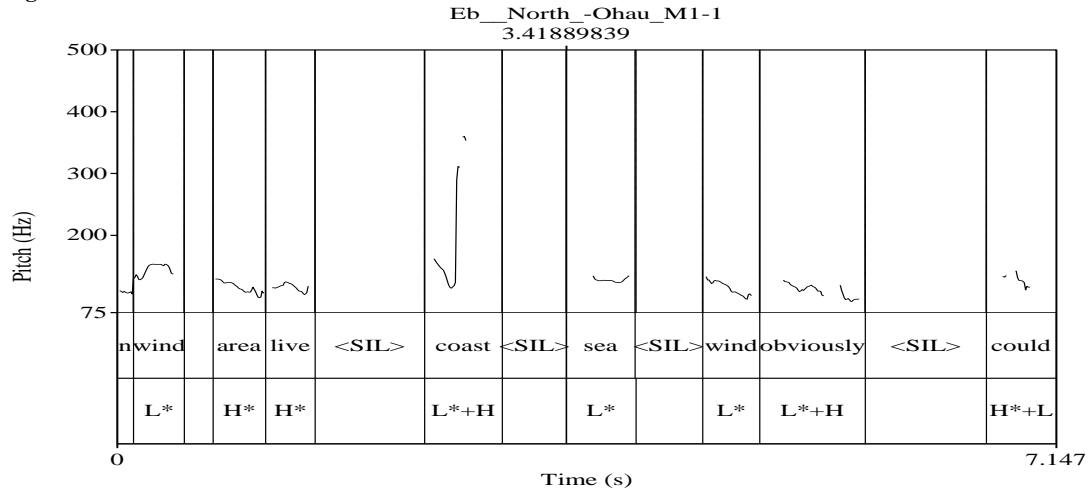


Figure 12

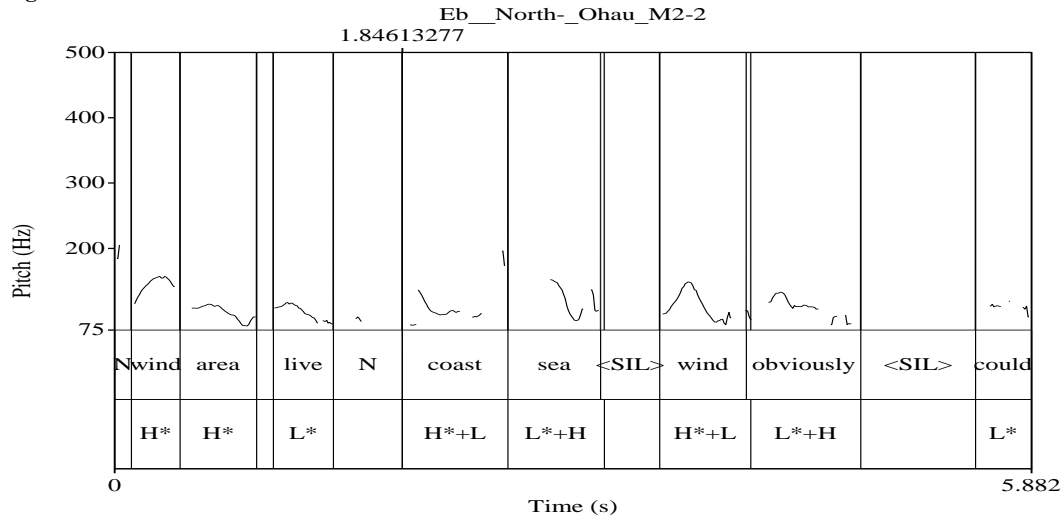


Figure 13

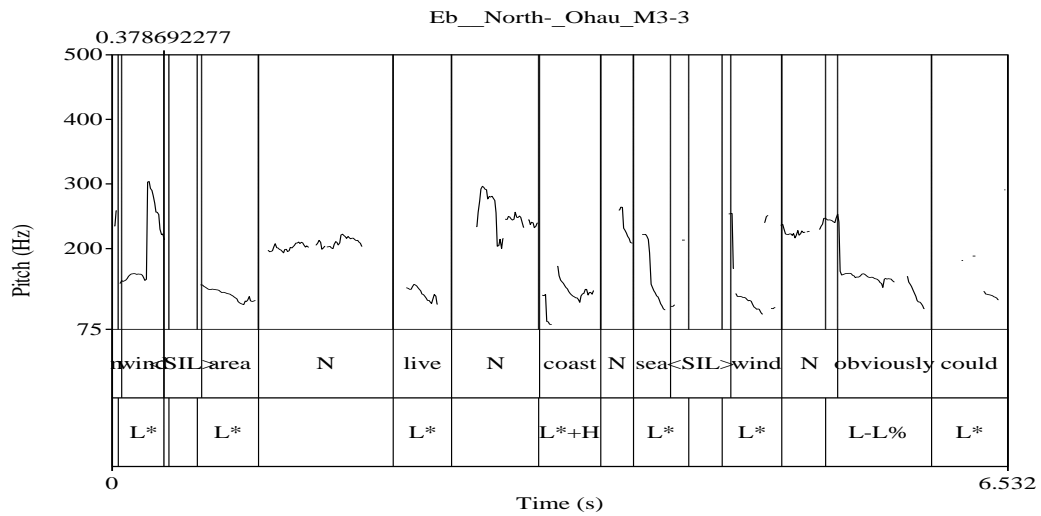


Figure 14

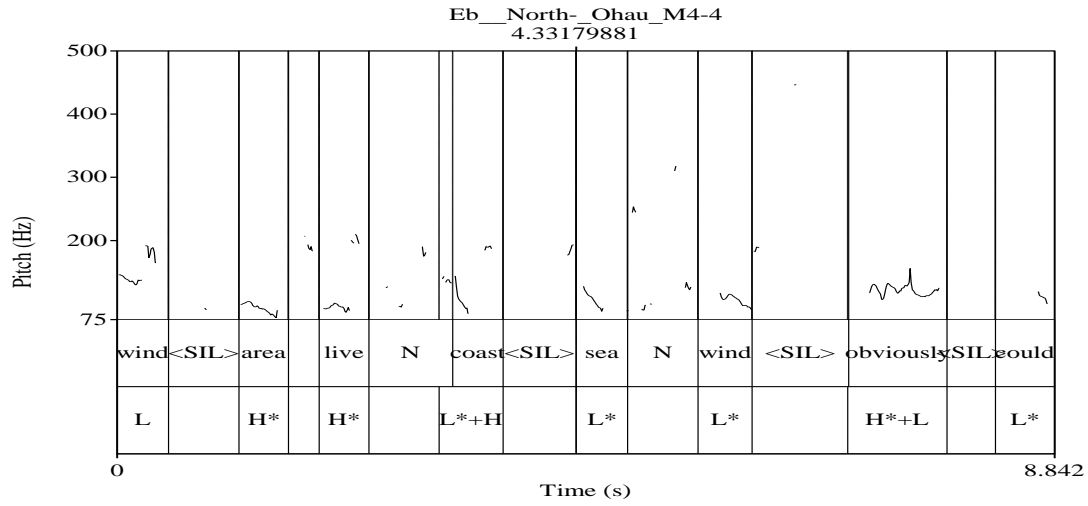


Figure 15

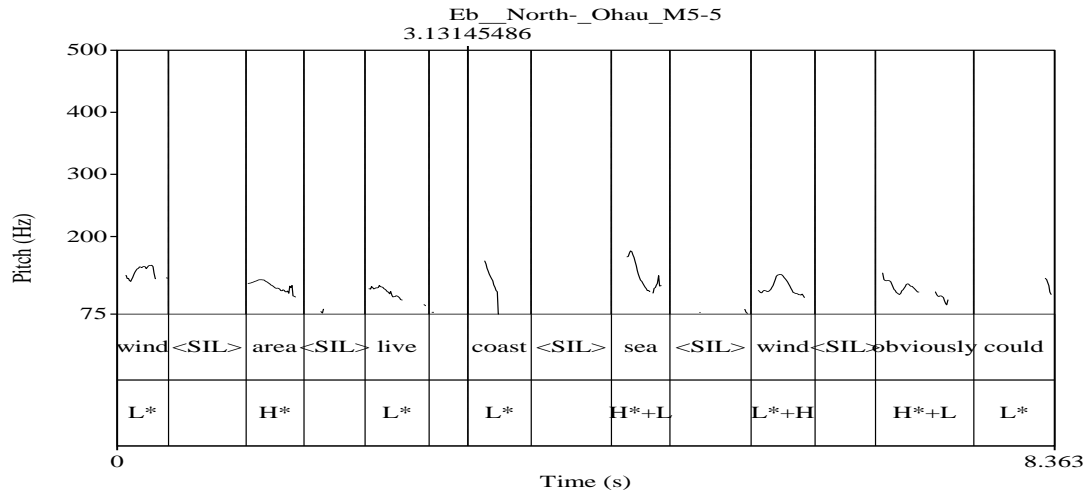


Figure 16 IZZI LGA

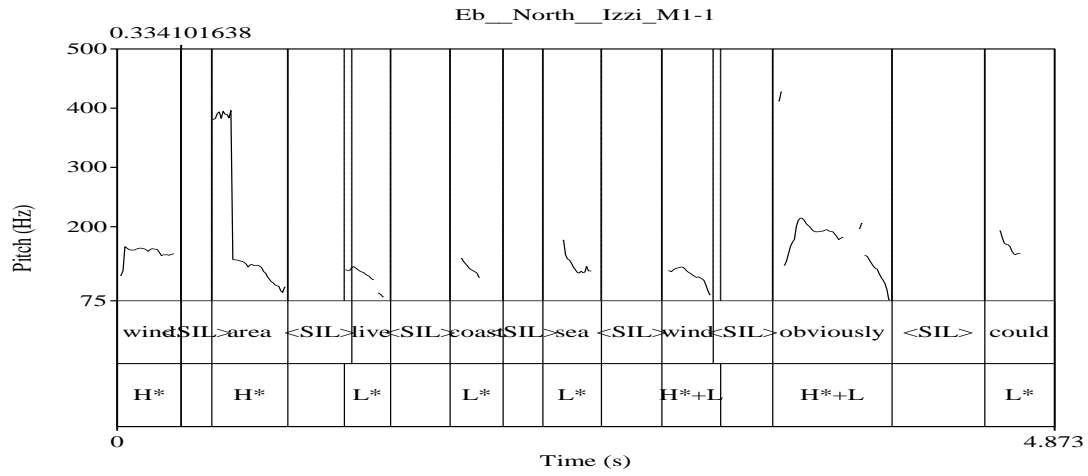


Figure 17

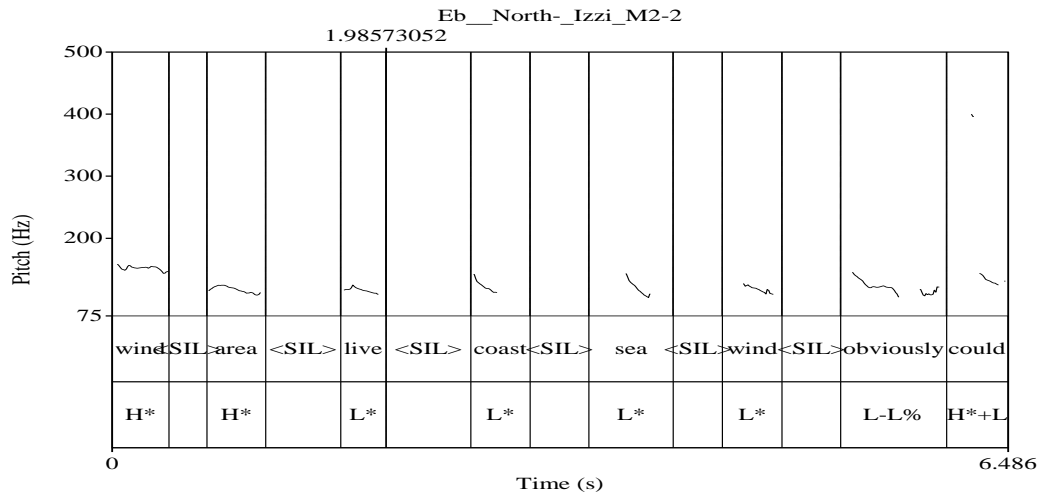


Figure 18

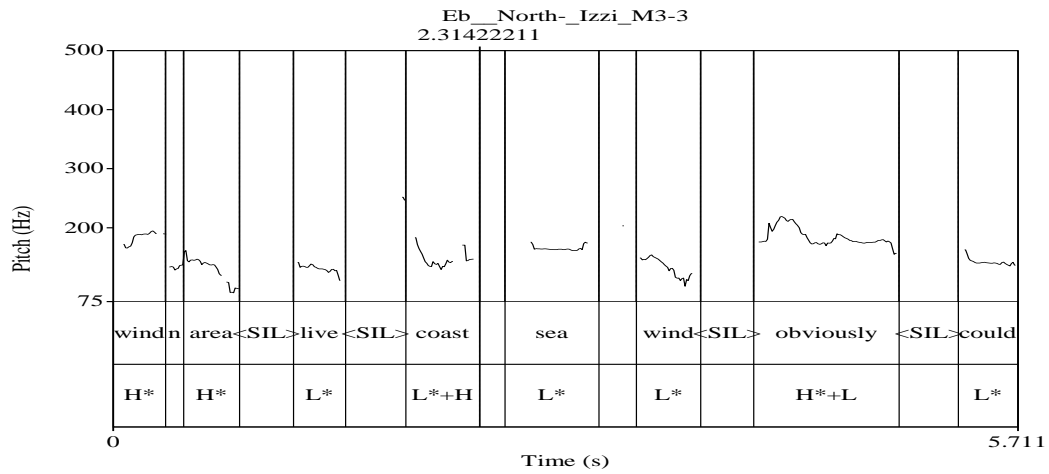
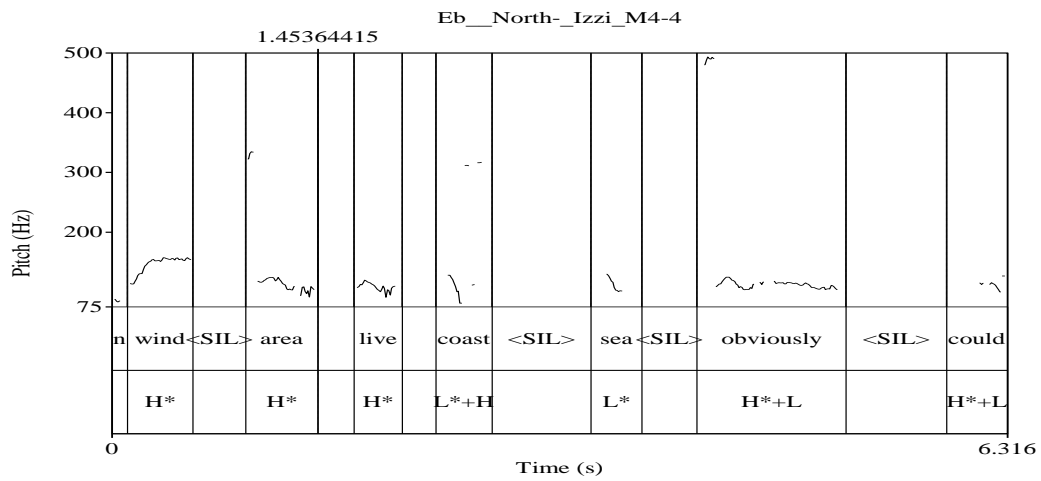


Figure 19



**EBONYI CENTRAL
IKWO LGA
Figure 20**

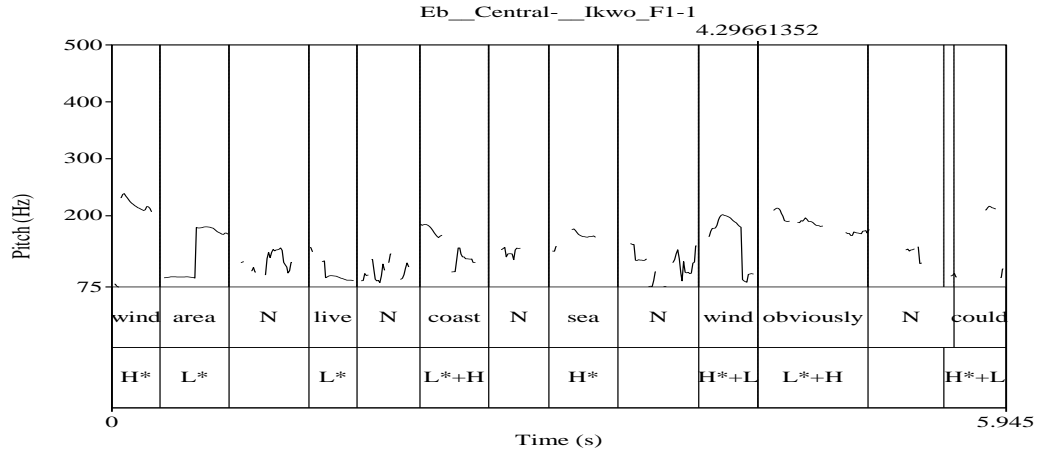


Figure 21

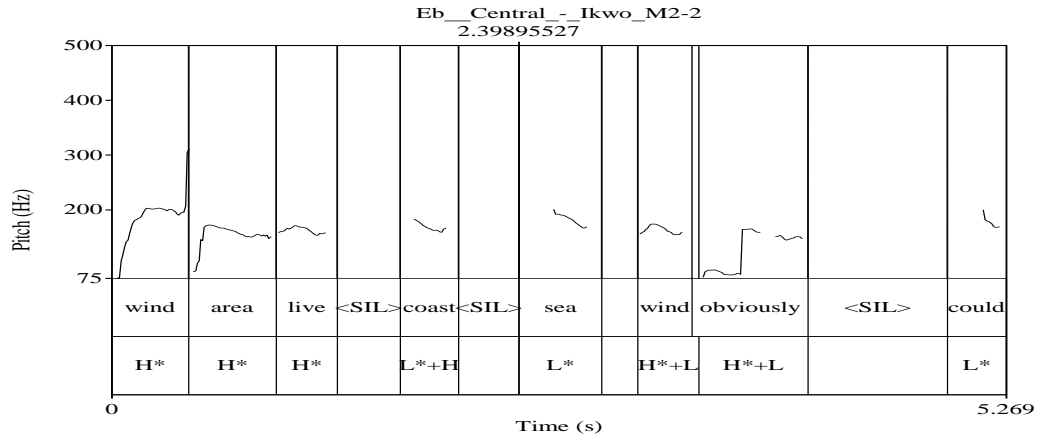


Figure 22

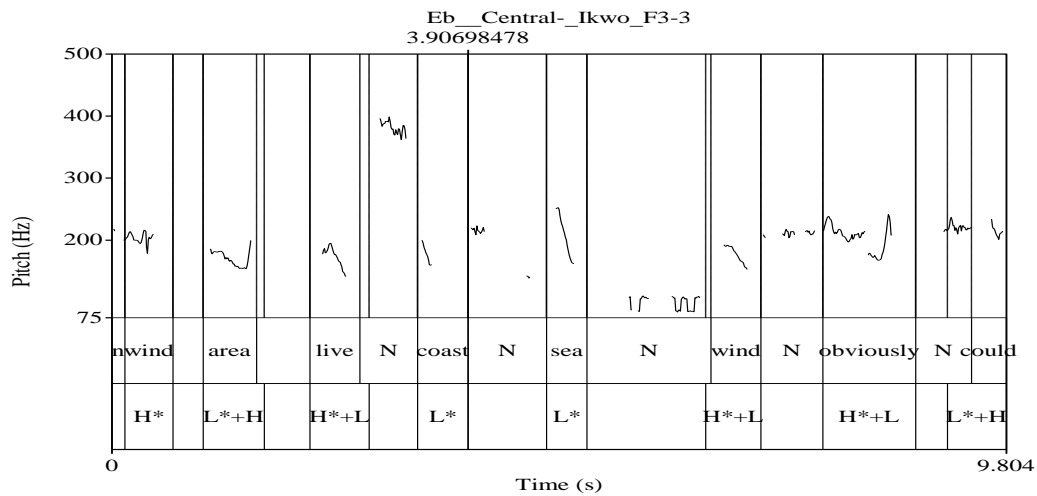


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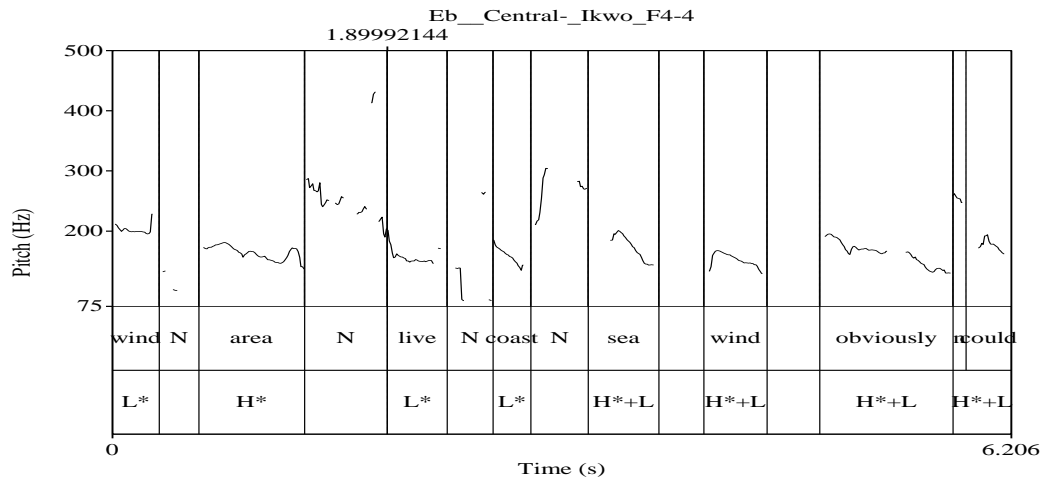
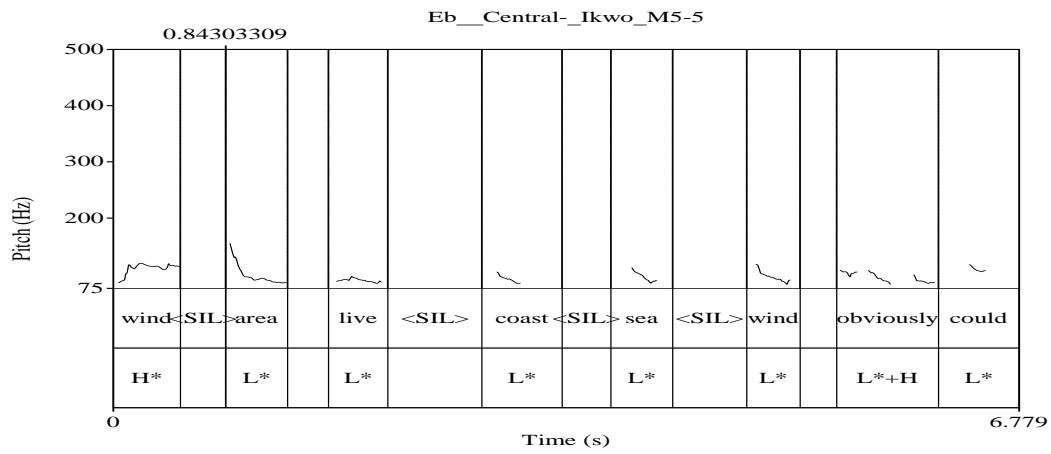


Figure 24



ISHIELU LGA

Figure 25

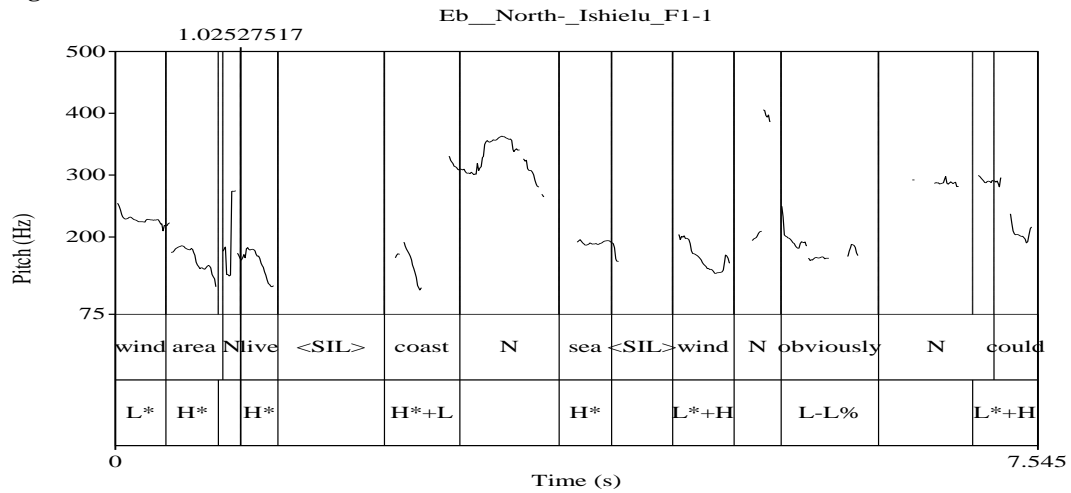


Figure 26

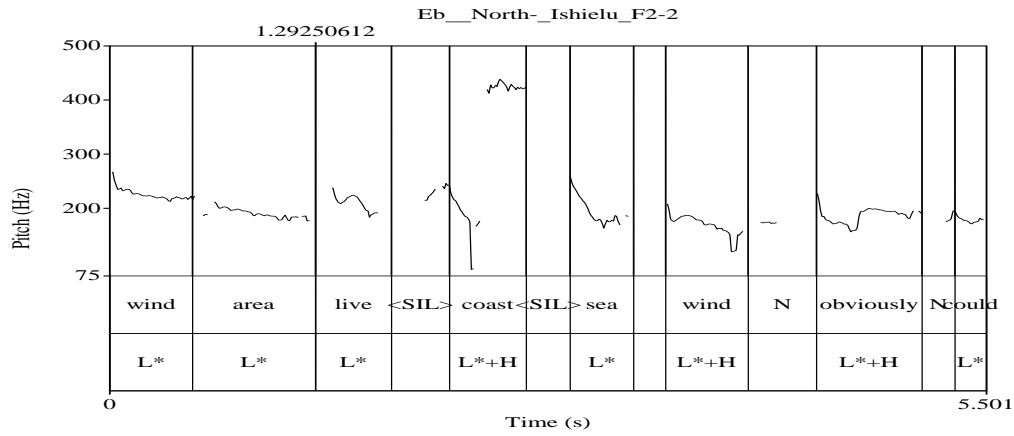
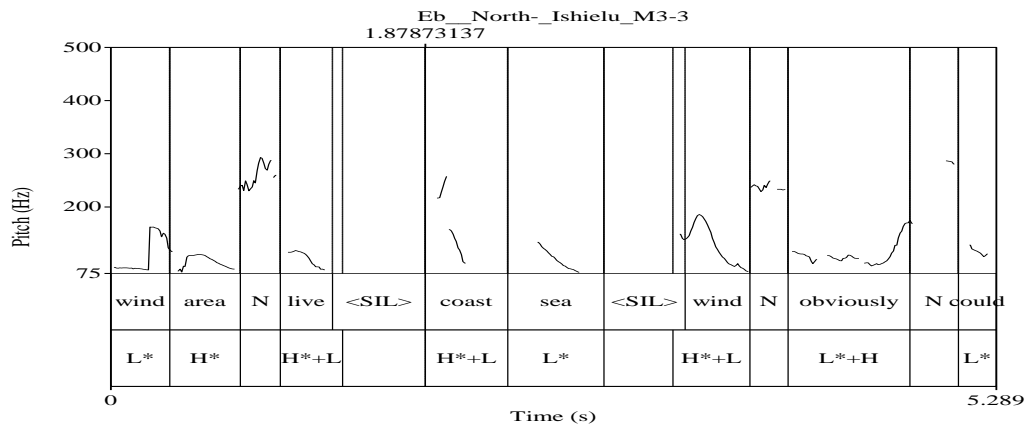


Figure 27



EZZA SOUTH LGA

Figure 28

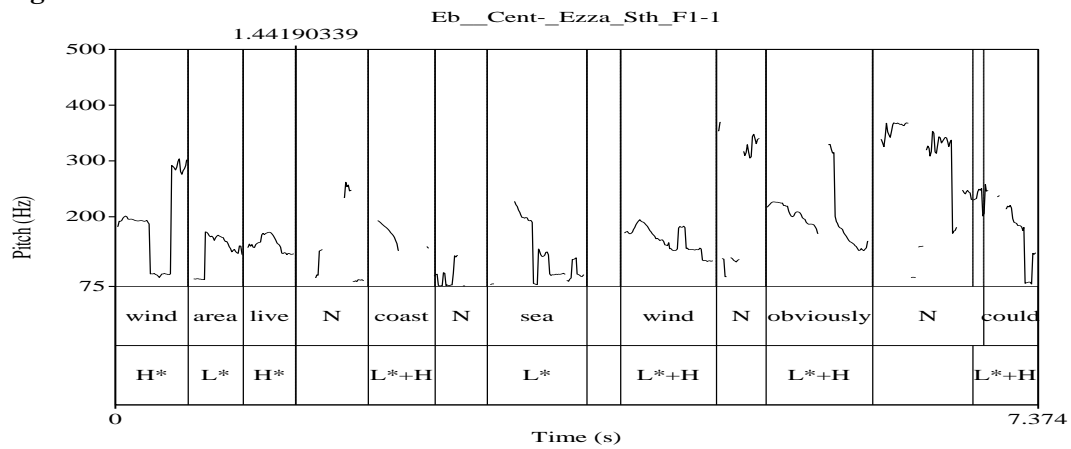


Figure 29

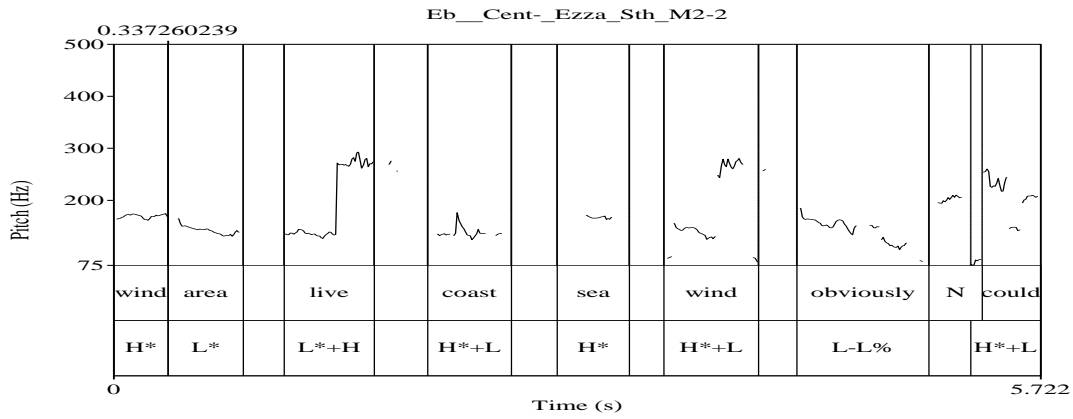


Figure 30

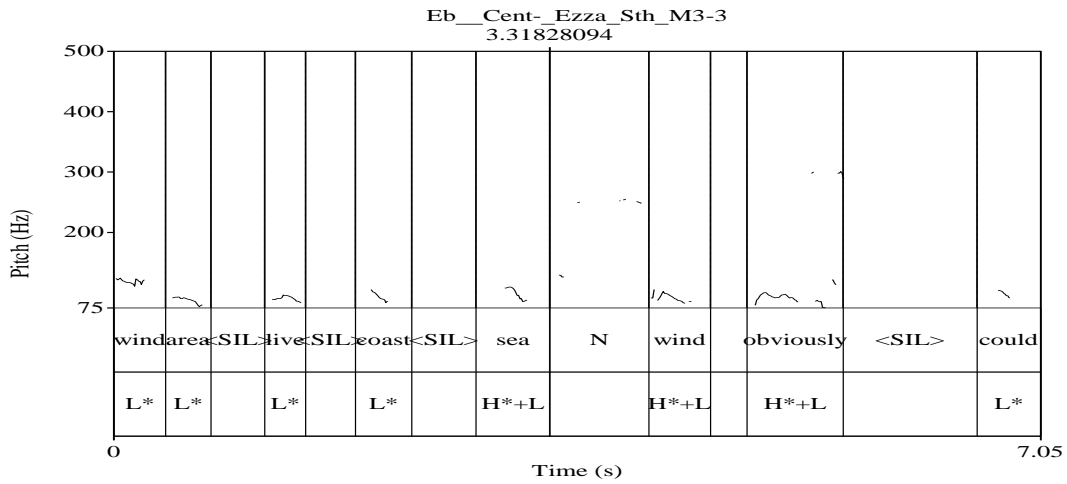
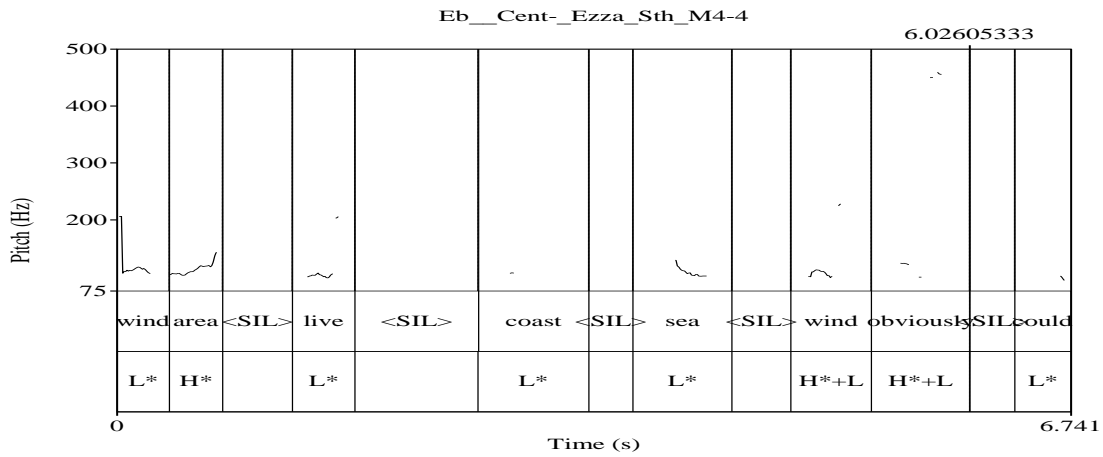


Figure 31



**EBONYI SOUTH
AFIKPO NORTH LGA**

Figure 32

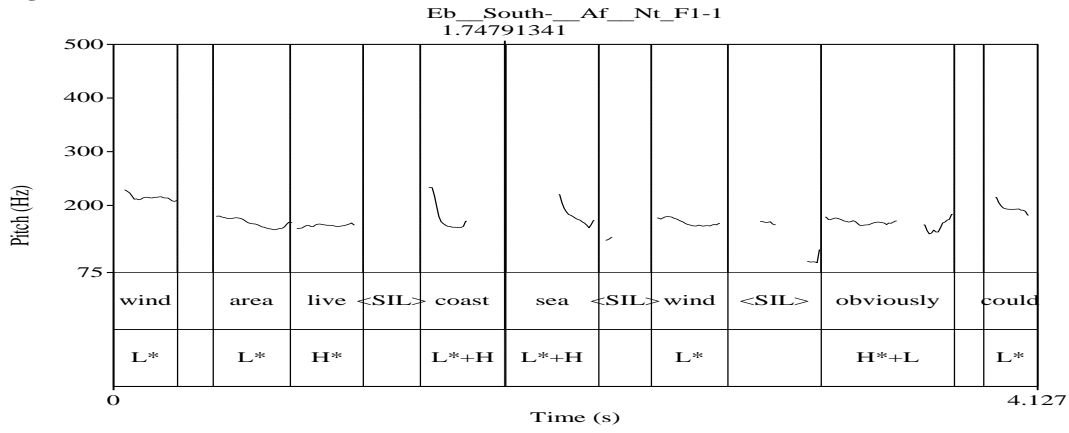


Figure 33

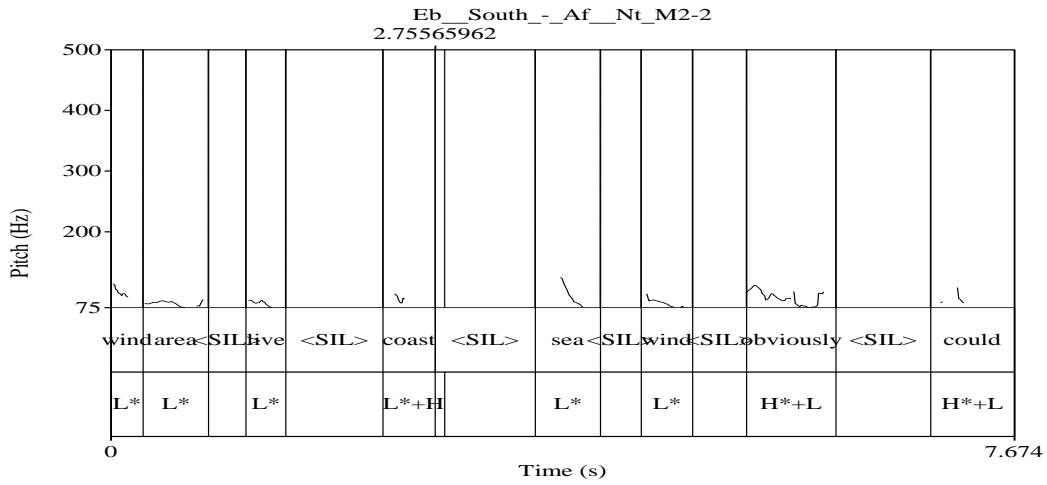


Figure 34

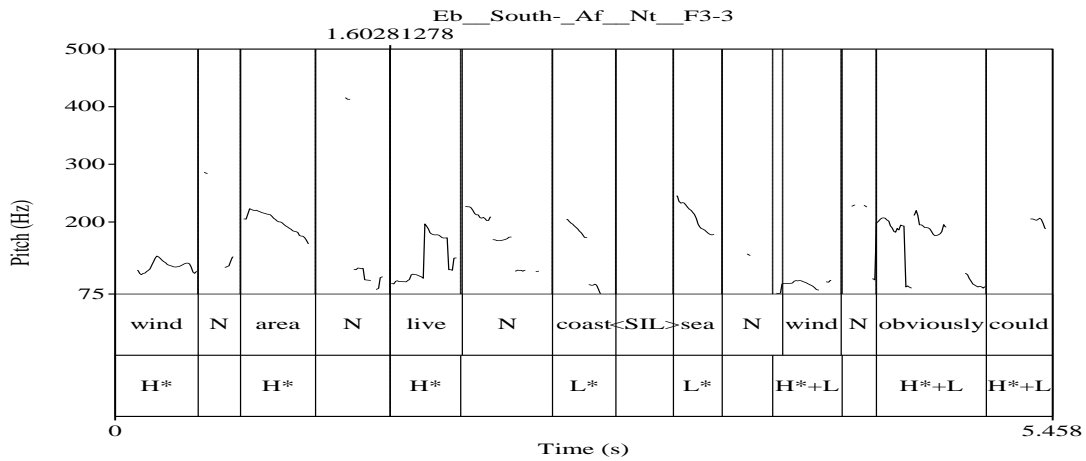


Figure 35

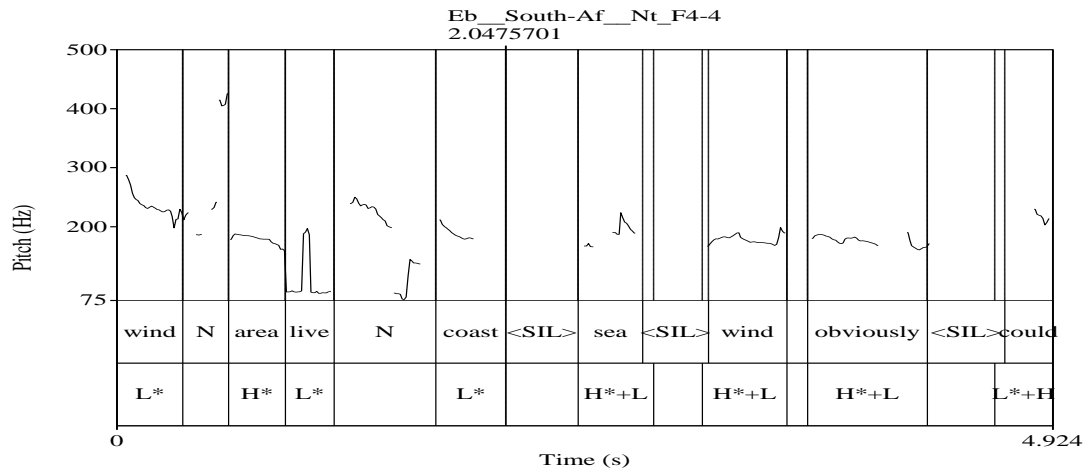
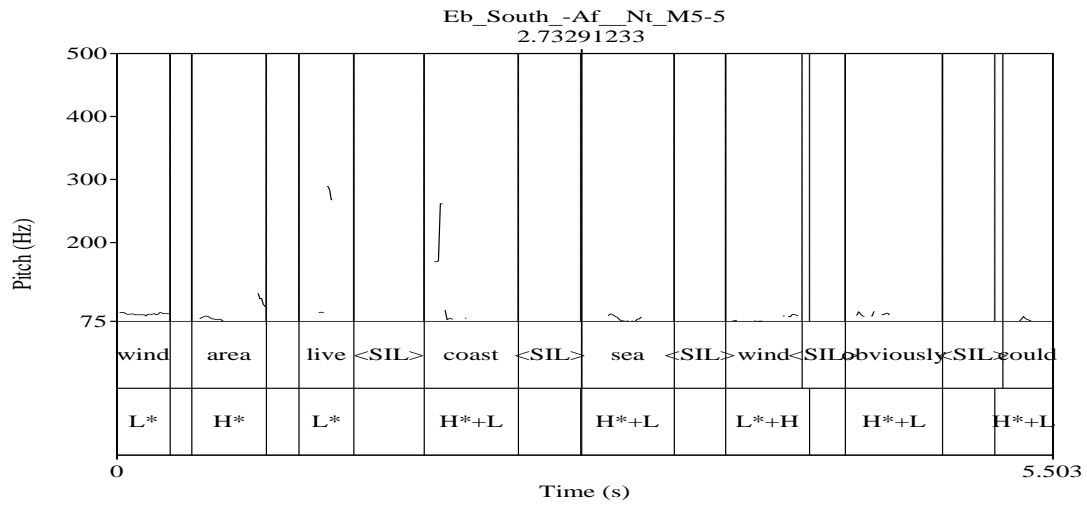


Figure 36



AFIKPO SOUTH LGA

Figure 37

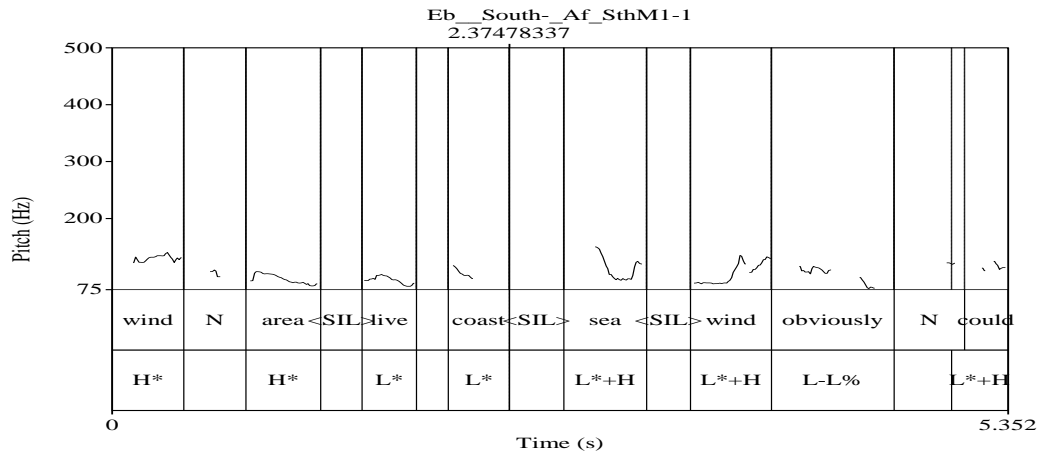


Figure 38

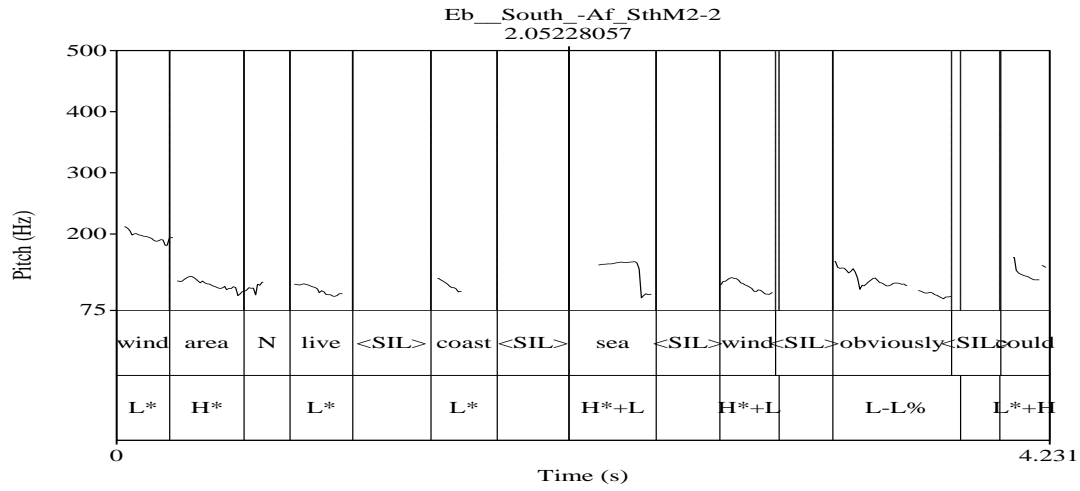


Figure 39

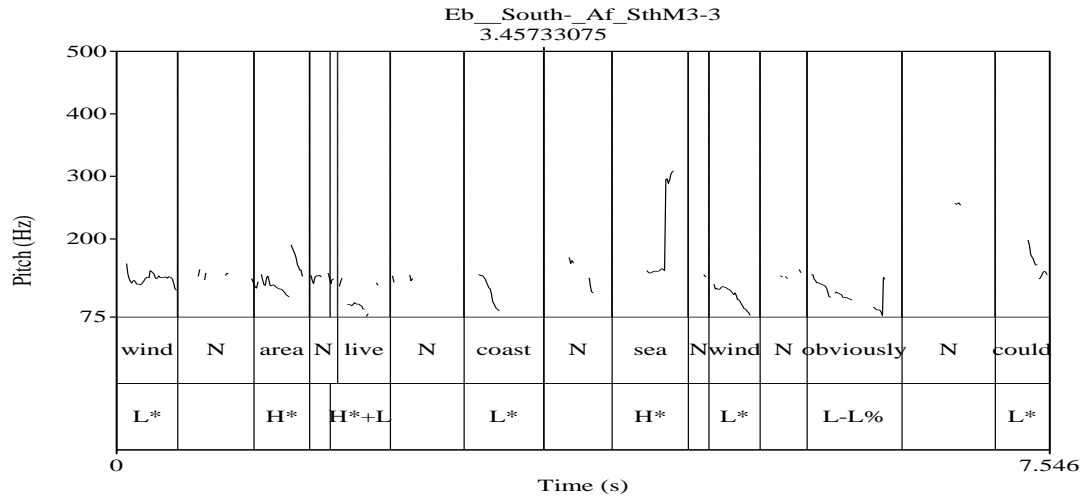


Figure 40

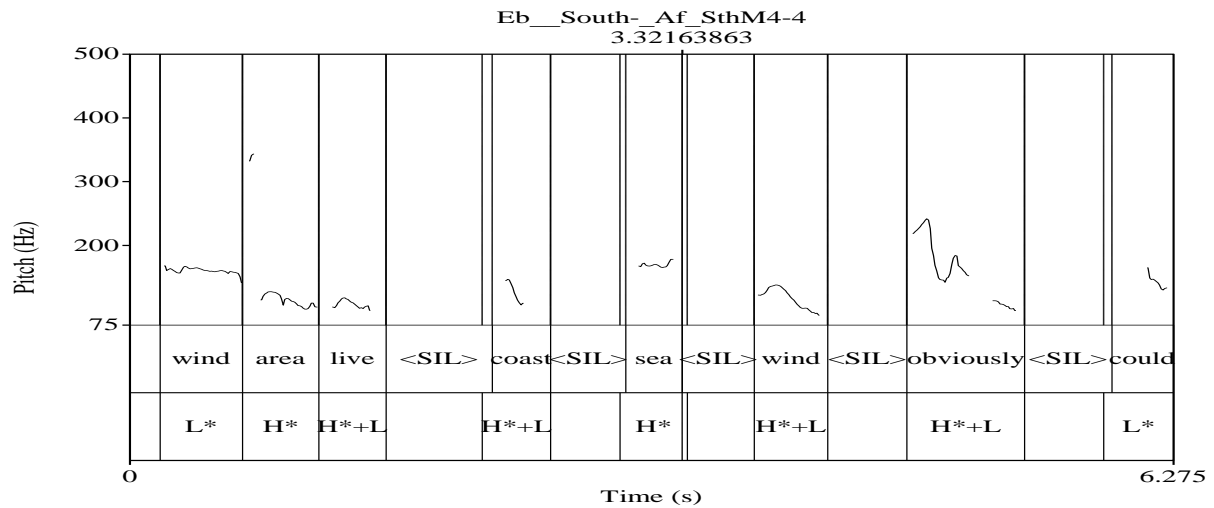
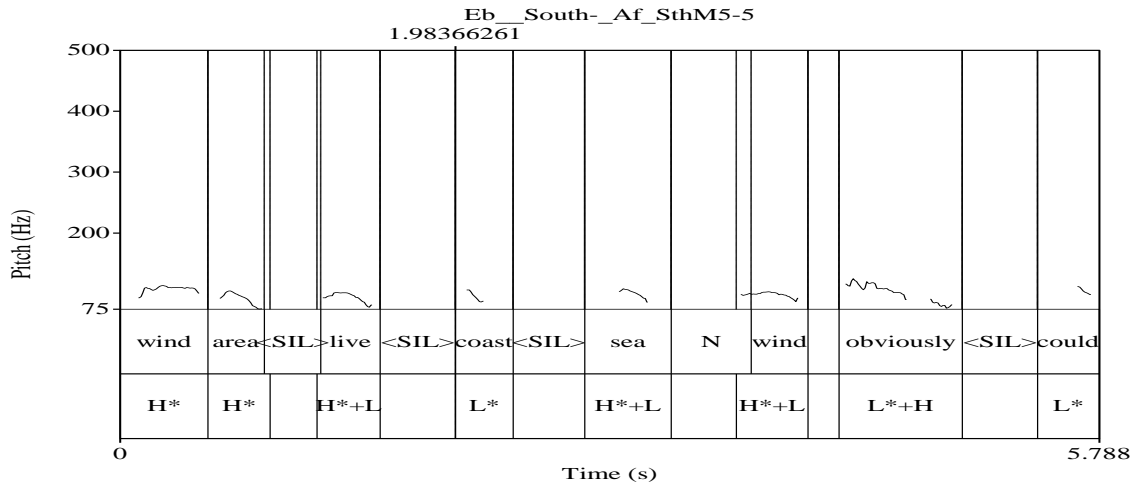


Figure 41



IVOLGA
Figure 42

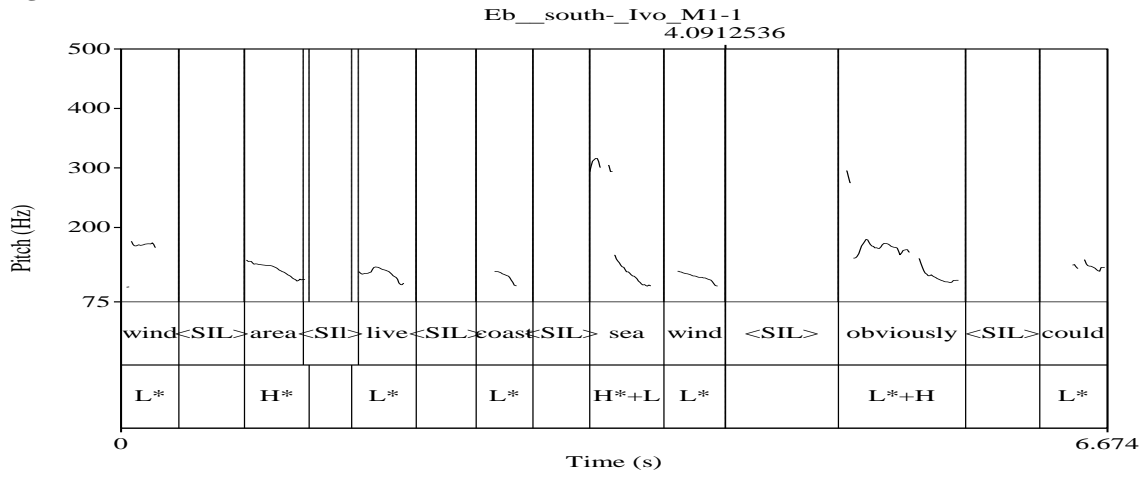
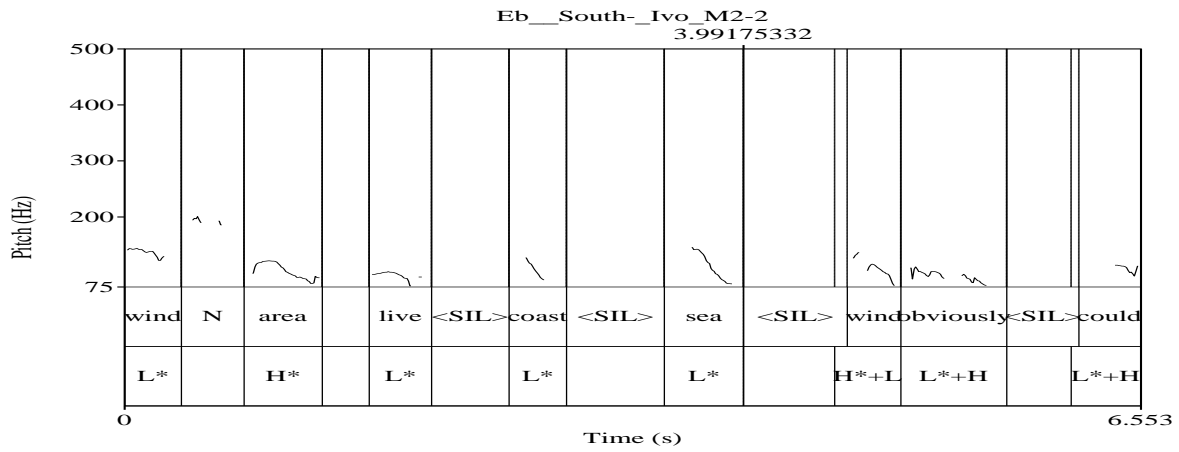


Figure 43



OHAOZARA LGA

Figure 44

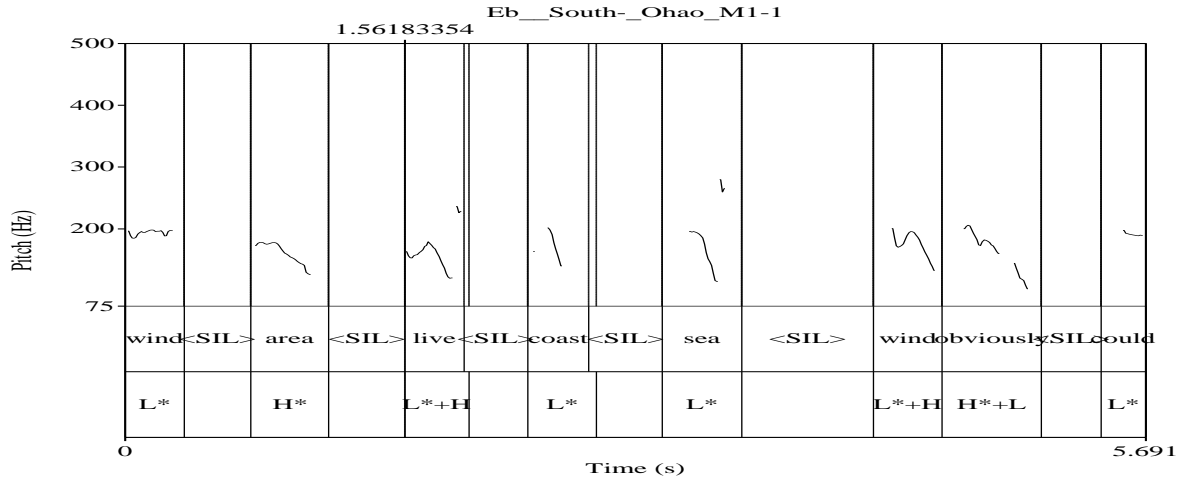


Figure 45

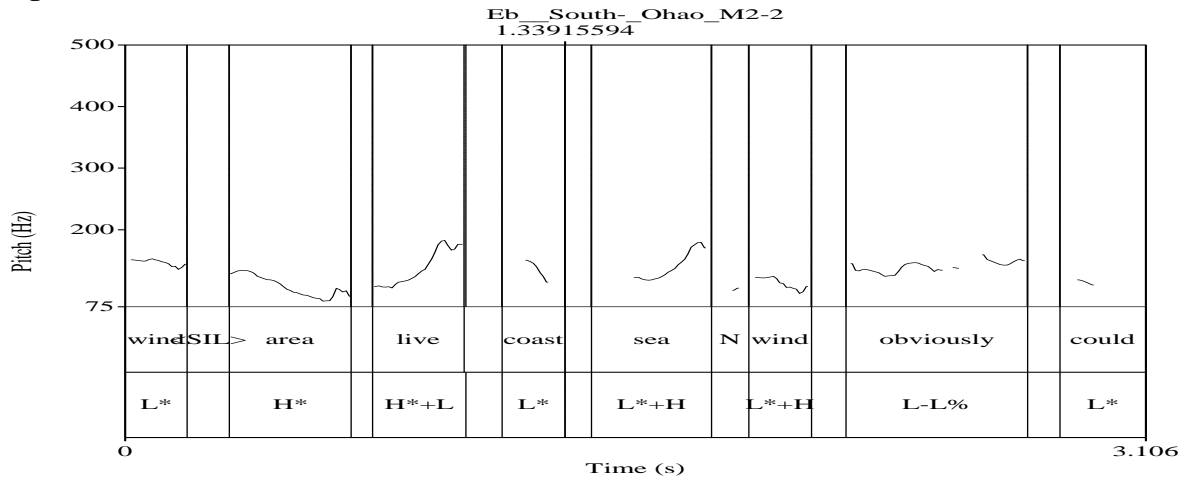


Figure 46

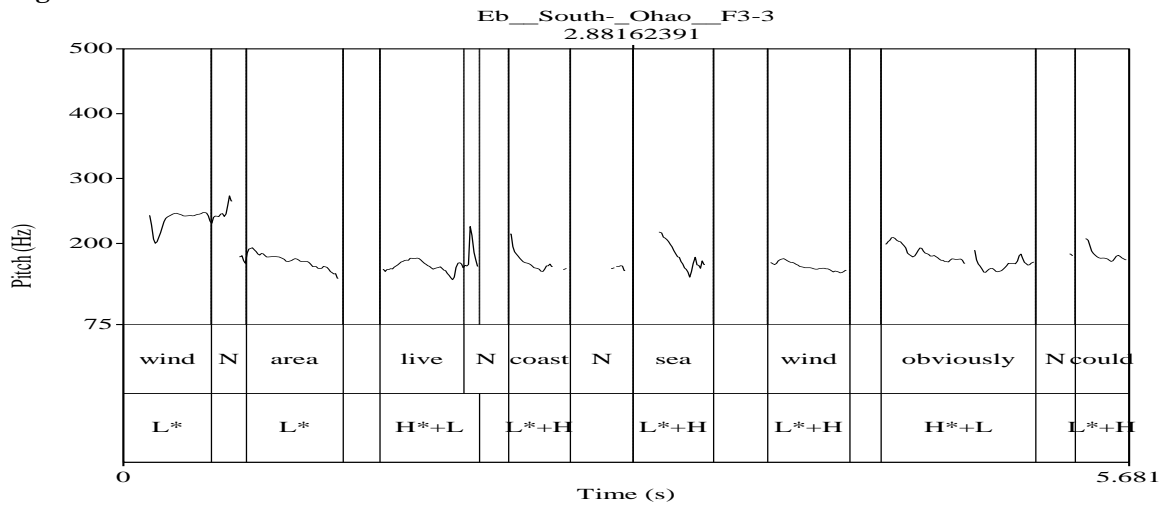
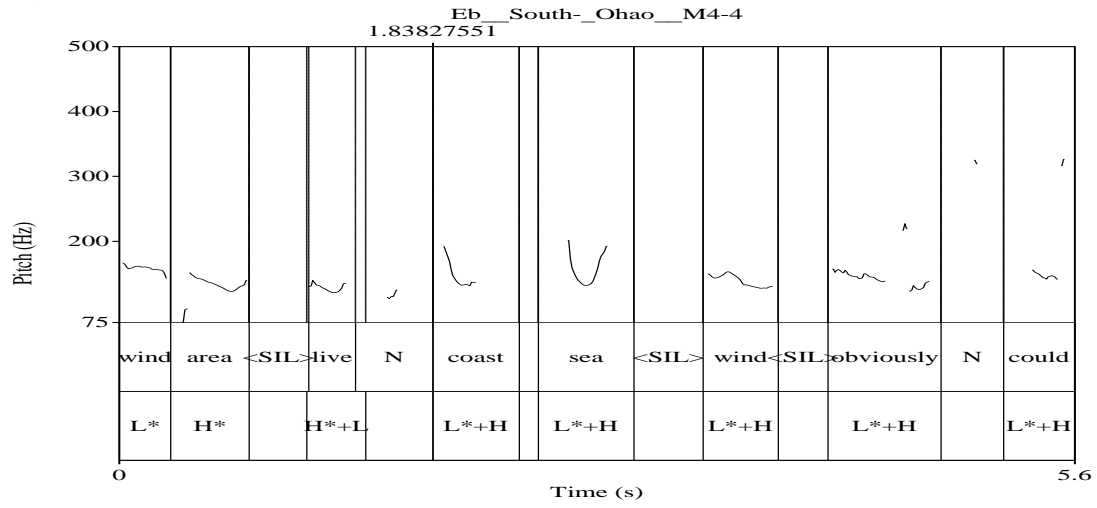


Figure 47



ONICHA LGA

Figure 48

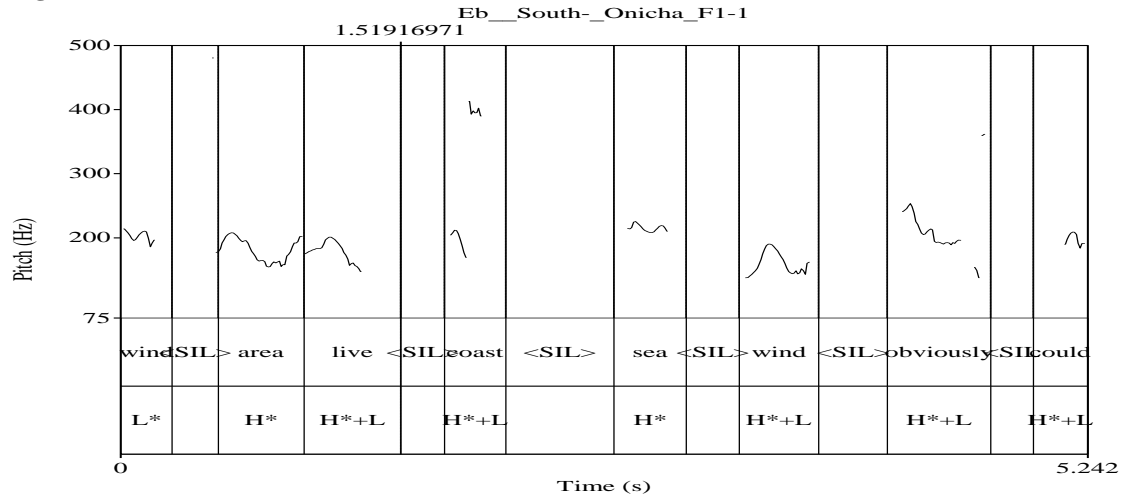


Figure 49

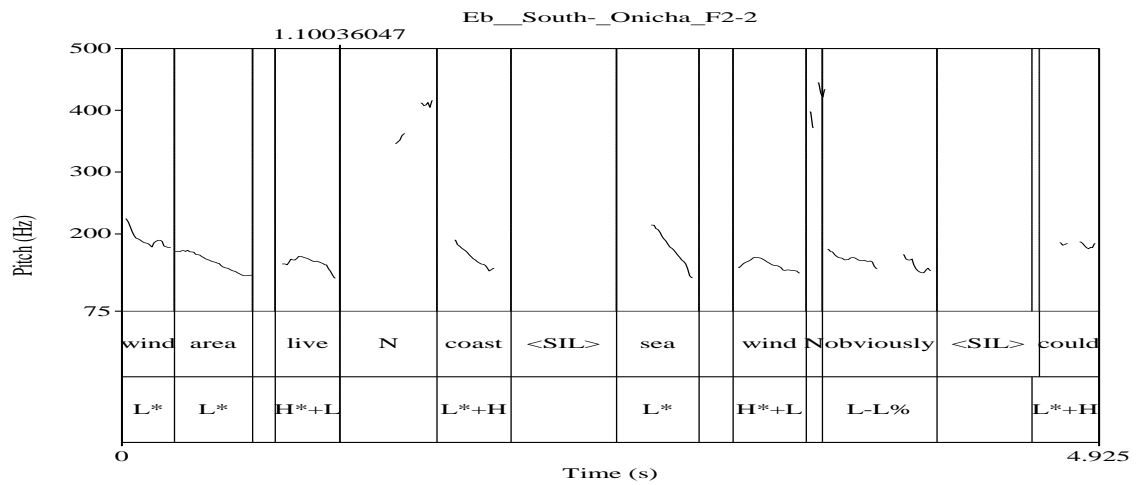


Figure 50

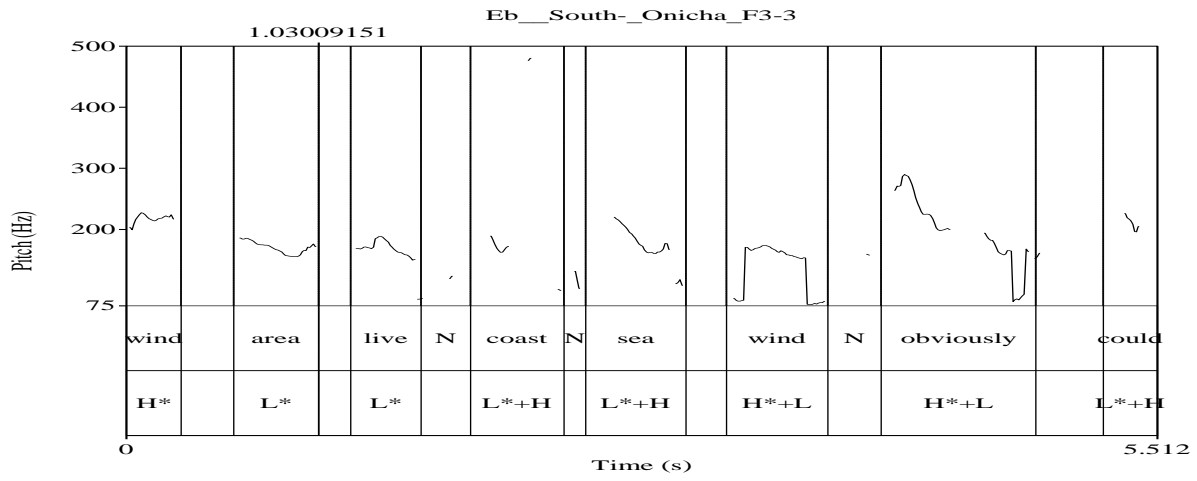


Figure 51

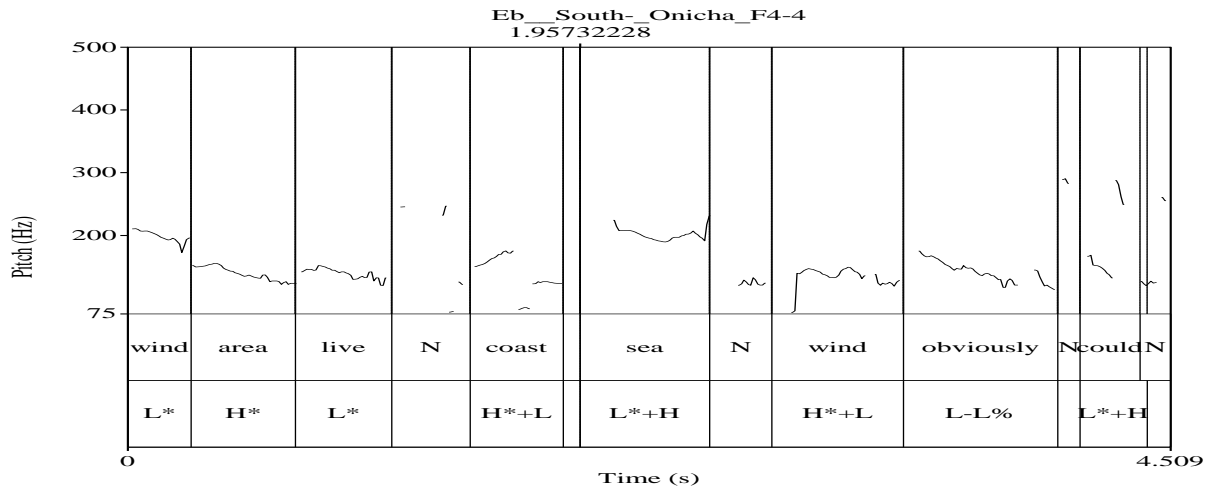
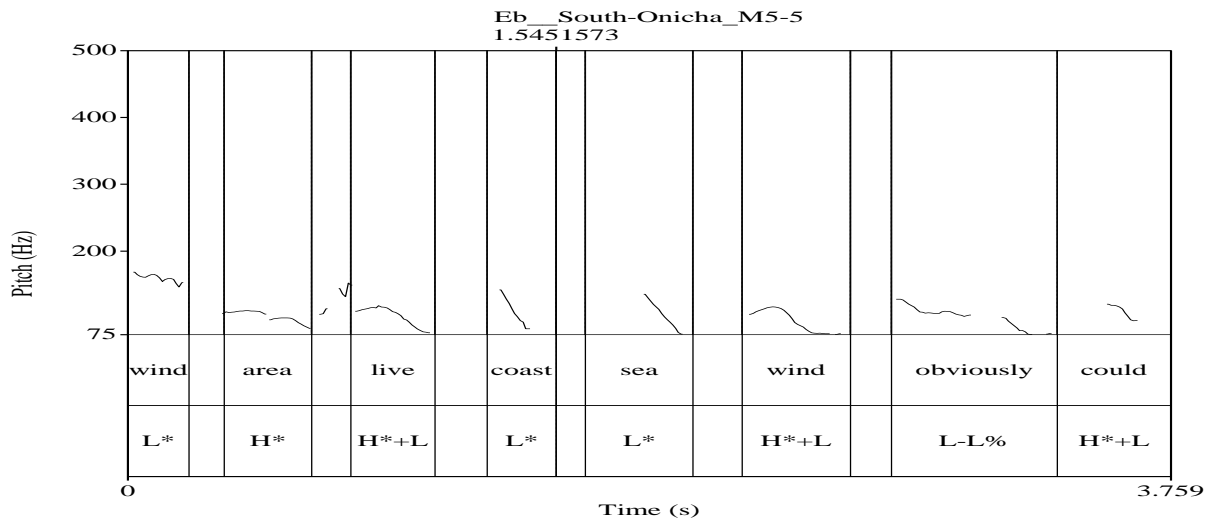


Figure 52



These samples of pitch contour and text grid above are further represented in the table below showing the performance of the participants on intonation according to senatorial zones. The essence of the distribution according to senatorial zones is for easy identification of the patterns of intonation as well as clear description of the participants according to their use of intonation.

Table 3: PARTICIPANTS' PERFORMANCE IN INTONATION

RESPONDENTS	SEN. ZONES/ LGA	WIND	AREA	LIVE	COAST	SEA	WIND	OBVIOUSLY	COULD
CONTROL		L*	H*	L*	L*+H	H*	L*+H	H* + L	L*+H
EBONYI NORTH									
1	ABAKALIKI	L*	H*	L*	L*	H*+L	H*+L	L-L%	L*
2	EBONYI	H*	H*	H*	H*	L*	H*+L	H*+L	L*+H
3	EBONYI	L*	H*	L*	L*	L*+H	L*+H	L-L%	L*
4	OHAUKWU	L*	H*	H*	H*+L	L*	L*	L*+H	H*+L
5	OHAUKWU	H*	H*	L*	H*+L	L*+H	H*+L	L*+H	L*
6	OHAUKWU	L*	L*	L*	L*+H	L*	L*	L-L%	L*
7	OHAUKWU	L*	H*	H*	L*+H	L*	L*	H*+L	L*
8	OHAUKWU	L*	H*	L*	L*	H*+L	L*+H	H*+L	L*
9	IZZI	H*	H*	L*	L*	L*	H*+L	H*+L	L*
10	IZZI	H*	H*	L*	L*	L*	L*	L-L%	H*+L
11	IZZI	H*	H*	L*	L*+H	L*	L*	H*+L	L*
12	IZZI	H*	H*	H*	L*+H	L*	H*+L	H*+L	H*+L
EBONYI CENTRAL									
13	IKWO	L*	L*	L*	L*+H	H*	H*+L	L*+H	H*+L
14	IKWO	H*	H*	H*	H*+L	L*	H*+L	H*+L	L*
15	IKWO	H*	L*+H	H*+L	L*	L*	H*+L	H*+L	L*+H
16	IKWO	L*	H*	L*	L*	H*+L	H*+L	H*+L	H*+L
17	IKWO	H*	L*	L*	L*	L*	L*	L*+H	L*
18	ISHIELU	L*	H*	H*	H*+L	H*	L*+H	L-L%	L*+H
19	ISHIELU	L*	L*	L*	L*+H	L*	L*+H	L*+H	L*
20	ISHIELU	L*	H*	H*	H*+L	L*	H*+L	L*+H	L*
21	EZZA NORTH	-	-	-	-	-	-	-	-
22	EZZA SOUTH	H*	L*	H*	L*+H	L*	L*+H	L*+H	L*+H
23	EZZA SOUTH	H*	L*	H*	H*+L	H*	H*+L	L-L%	H*+L
24	EZZA SOUTH	L*	L*	L*	L*	H*+L	H*+L	H*+L	L*

25	EZZA SOUTH	L*	H*	H*	L*	L*	H*+L	H*+L	L*
EBONYI SOUTH									
26	AFIKPO NORTH	L*	L*	H*	L*+H	L*+H	L*	H*+L	L*
27	AFIKPO NORTH	L*	L*	L*	L*+H	L*	L*	H*+L	H*+L
28	AFIKPO NORTH	H*	H*	H*	L*	L*	H*+L	H*+L	H*+L
29	AFIKPO NORTH	L*	H*	L*	H*+L	H*+L	H*+L	H*+L	L*+H
30	AFIKPO NORTH	L*	H*	L*	L*	H*+L	L*+H	H*+L	H*+L
31	AFIKPO SOUTH	H*	H*	L*	L*	L*+H	L*+H	L-L%	L*+H
32	AFIKPO SOUTH	L*	H*	L*	L*	H*+L	H*+L	L-L%	L*+H
33	AFIKPO SOUTH	L*	H*	H*	H*+L	H*	H*+L	H*+L	L*
34	AFIKPO SOUTH	L*	H*	L*	L*	H*	H*+L	L-L%	L*+H
35	AFIKPO SOUTH	H*	H*	H*+L	L*	H*+L	L*+H	L*+H	L*
36	IVO	H*	H*	L*	L*	H*+L	L*	L*+H	L*+H
37	IVO	L*	H*	L*	L*	L*	H*+L	L*+H	L*
38	OHAOZARA	L*	H*	L*+H	H*+L	L*	L*+H	H*+L	L*
39	OHAOZARA	L*	H*	H*+L	L*	L*+H	L*+H	L-L%	L*
40	OHAOZARA	L*	L*	H*+L	L*+H	L*+H	L*+H	H*+L	L*
41	OHAOZARA	L*	H*	H*+L	L*+H	L*+H	L*+H	L*+H	L*+H
42	ONICHA	L*	H*	H*+L	H*+L	H*	H*+L	H*+L	H*+L
43	ONICHA	L*	L*	H*+L	L*	H*+L	H*+L	L-L%	L*+H
44	ONICHA	H*	L*	L*	L*+H	L*+H	H*+L	H*+L	L*+H
45	ONICHA	L*	H*	L*	H*+L	L*+H	H*+L	L-L%	L*+H
46	ONICHA	L*	H*	H*+L	L*	L*	H*+L	L-L%	H*+L

The table below further shows the distribution of the patterns of intonation which were obtained from the utterances of the participants according to their performances, in percentages.

Table 4: DISTRIBUTION OF PATTERNS OF INTONATION IN PERCENTAGE

S/N	INTONATION PATTERNS	FREQUENCY	PERCENTAGE	EXPECTED FREQUENCY
1	L*	124	36%	90
2	H*	68	20%	90
53	L*+H	58	17%	135
4	H* + L	81	24%	45
5	L-L%	13	4%	-
	TOTAL	344		

Table 5: SUMMARY OF INTONATION PATTERNS OF THE PARTICIPANTS

S/N	UTTERANCES/ EXPECTED TONES	RISING TONES		FALLING TONES		FALL-RISE TONES		RISE-FALL TONES		OTHERS		TOTAL PARTICI -PANTS
1	Wind (L*)	16	36%	29	64%	-	-	-	-	-	-	45
2	Area (H*)	32	71%	12	27%	1	2%	-	-	-	-	45
3	Live (L*)	13	29%	23	51%	1	2%	8	18%	-	-	45
4	Coast (L*+H)	1	2%	21	47%	12	27%	11	24%	1	2%	45
5	Sea (H*)	6	13%	20	44%	9	20%	10	22%	-	-	45
6	Wind(L*+H)	-	-	9	20%	12	27%	24	53%	-	-	45
7	Obviously(H*+L)	-	-	-	-	11	24%	21	47%	13	29%	45
8	Could (L*+H)	-	-	20	44%	13	29%	12	27%	1	2%	45
	Total Tones	68		134		59		86		15		

4.4 DISCUSSION OF FINDINGS

4.4.1 Distribution of Tonal Patterns in Syllables

From the summary of the performance of the participants as shown in the Table on the distribution of tonal patterns in syllable, it was observed that the participants read the sentence with a great inclination towards the mixture of low pitch accent ‘L*’ and high pitch accent ‘H*’. Of a total of 72 (seventy two) patterns of intonation, about 47 (66%) tones were unidirectional, with the predominance of the low pitch accent, 25 (35%), and high pitch accent, 21 (29%). While 12 (17%) utterances were realized as bitonal pitch accent with low tone prominence, followed by high tone, 9 (13%) utterances were realized as bitonal pitch accent with high tone prominence, followed by a low tone. There was also the use of the low pitch accent, low boundary tone which were realized in 4(6%) utterances, even though not appropriately assigned.

Worthy to mention is that a proper observation of the Table indicates a record of very low scores in the assignment of the appropriate tone to the syllables ‘-ing’ and ‘all’ which have only 17% accurate assignment each. Also the syllables ‘they’, ‘are’ and ‘build’ had a poor

performance of 33% each by the participants while there was no record of appropriate assignment of patterns of intonation to the syllables ‘farms’, ‘-ver’ and ‘-rea’. The participants, however, realized a different pattern of intonation to these words. The use of a different pattern of intonation suggests what Okon (2001) interpreted as restriction. She stated that intonation in the indigenous native languages of L2 users of English is restricted. This she said on the note that information is usually neglected by Nigerian speakers of English because they see communication as less informative which may as well sound needless and unintonational owing to the absence of linguistic competence of the language.

A further intent look at the pitch contour of the control and that of the participants shows a level of perfection in the assignment of the patterns of intonation as their performances in the syllables ‘the’, ‘-o’ and ‘a-’ had a record of 83%, 100% and 100% respectively. This could suggest that the participants had come to terms with the appropriate use and assignment of tones to the weak syllable ‘the’. Also the assignment of the appropriate pattern to the syllable ‘a-’ in the word ‘area’ and ‘o-’ in the word ‘over’ is further worth noting. It was observed that these syllables recorded 100% performance from each of the six participants unlike other syllables. It is therefore not in doubt that there is a level of competency in the assignment of tones to strong vowels in the initial position of a word, by bilingual educated speakers of English in Ebonyi State. However, it is pertinent to note that there was a preponderant use of the unidirectional tones by the participants especially the falling tones. Nevertheless, the use of the bitonal pitch accent of rise-fall ‘H*+L’, fall-rise ‘L*+H’ and low phrase accent, low boundary tone ‘L-L%’, were not in lack among the participants, even though not appropriately assigned.

4.4.2 Performance of Participants in Intonation

The performance of participants in intonation, as shown in Table 3, reveals that some participants could not realize the appropriate intonation patterns of the utterances properly. It further reveals that aside the widely known and commonly used intonation patterns of fall, rise, fall-rise and rise-fall, another pattern of intonation which was obtainable was the low pitch accent, low boundary tone 'L-L%'. With further reference to the Auto-segmental Metrical Phonology, about five (5) intonation patterns were observed to be predominant in the speech of the selected bilingual educated speakers of English in Ebonyi State. Nonetheless, the fact that other patterns of intonation were ignored and not accounted for does not delineate their existence. They were rather not accounted for because their occurrences did not significantly gain prominence in the intonation patterns of the selected bilingual educated speakers of English in Ebonyi State. Hence, there is no such extensive treatment. However, it is needful to point out that there were predominant patterns of low pitch accent 'L*', high pitch accent 'H*', bitonal pitch accent with low tone prominence followed by a high tone 'L*+H', bitonal pitch accent with high tone prominence followed by a low tone 'H*+L', and low phrase accent, low boundary tone 'L-L%' with 36%,20%,17%,24% and 4%, respectively.

4.4.3 Distribution of Patterns of Intonation

Worthy of note is that the occurrence of 36% of the low pitch accent 'L*', in Table 4 on the distribution of patterns of intonation in percentages reveals its predominance among the other patterns realized by the participants. It further shows that majority of the bilingual educated speakers of English in Ebonyi State have no difficulty in its actualization. However, if at all there were any form of difficulty, then it could be seen in its inappropriateness in assignment which is clearly shown in Table 5 as seen in the words 'wind' and 'live' with 64% and 51% performances

respectively, as appropriately assigned. This shows a mastery of falling tones among the participants. Strikingly, only 36% and 29% respectively realized the words as high pitch accent while 2% and 18% of the participants, in realizing the word 'live', further gave prominence to fall-rise tone and rise-fall tone, respectively. There was also a record of 20% use of high tones, 44% use of bitonal tones.

Furthermore, the 4% record of the Low pitch accent, low boundary tone L-L%, which was not obtainable in that of the control, shows a replacement of tones. It further indicates its presence in the indigenous languages of the participants, little wonder it replaced other appropriate tones while it was not in any way obtainable in the control. However, a side by side placement of the actual performance and the expected performance of the participants indicates a high level of discrepancy between the control and the general performance of the educated bilingual speakers of English in Ebonyi State.

4.4.4 Summary of Intonation Patterns of Participants

With regard to assigning the rising tone, that is the high pitch accent, to utterances, it was observed that the participants were proficient in its assignment to the word 'area' with the record of 71% but less proficient in the word 'sea' which has a record of 13%. An intent study of these two words reveals a significant difference in their respective performances. It is, therefore, not a costly assumption to say that the 71% appropriate assignment of the high pitch accent by the participants were based on the fact that the word 'area' is a bi-syllabic word and the interest was on the first. It was further observed that rather than assigning the appropriate intonation patterns to words like 'coast', 'sea', and 'could' which have their intonation patterns as L*+H, H* and L*+H respectively. 47% of the participants realized 'coast' as low pitch accent, that is the falling tone and 44% realized it with a low pitch accent. It is further in this vein that it can be deduced

that the bitonal pitch accent with a low tone prominence, followed by a high tone (L*+H) and the high tone prominence, followed by a low tone (H*+L), even though significantly used among the bilingual educated speakers of English in Ebonyi State, have a level of inappropriateness in their assignment. This is seen as there is no significant difference between the 20% and 22% fall rise and rise fall respective realization of the word ‘sea’ which has its actual realization as a high tone accent ‘H*’ and 27% and 24% fall- rise and rise-fall respective realization of the word ‘coast’ which has its actual realization as a fall-rise, that is the bitonal pitch accent with a low tone prominence, followed by a high tone ‘L*+H’.

However, these bitonal pitch accents were not observed to be scarce as there were yet educated speakers of English in the focus area who appropriately assigned this tone as in the case of 27% realization of fall rise in the words ‘coast’, and ‘wind’, and 29% realization in the word ‘could’. It is further worthy to mention that 47% of the participants appropriately assigned the rise-fall tone to the syllable of interest in the word ‘obviously’. In a bid to avoid a generalized conclusion, it becomes necessary that the description of the participants’ performances in the use of patterns of intonation would be distributed according to their senatorial zones to evidently show the prevalent intonation patterns among the educated speakers of English in each zone.

Table 6: DISTRIBUTION OF PATTERNS OF INTONATION ACCORDING TO SENATORIAL ZONES

Table 6.1 EBONYI NORTH

S/N	INTONATION PATTERNS	FREQUENCY	PERCENTAGE
1	L*	40	42%
2	H*	22	23%
3	L*+ H	11	12%
4	H*+L	19	20%
5	L-L%	4	4%
TOTAL		96	

Worthy of note is that only twelve (12) participants from Ebonyi North Senatorial Zone participated in the study, realizing a total number of 96 patterns of intonation of low pitch accent, high pitch accent, bitonal pitch accent with low tone prominence followed by a high tone, bitonal pitch accent with high tone prominence followed by a low tone and low phrase accent, low boundary tone. Six (6) and eight (8) participants appropriately assigned the falling intonation pattern to the words ‘wind’ and ‘live’, respectively. While a good number of eleven (11) participants realized ‘area’ as having the high pitch accent. However, none realized ‘sea’ as a high tone accent. Rather the participants realized it as a bitonal pitch accent as well as low pitch accent. As earlier stated, it could be observed that realizing the appropriate tone in the first syllables, in unidirectional tones of bitonal words are not difficult tasks as in the case of ‘area’.

Interestingly, Table 6 above has a general record of 42% of low pitch accent, 23% of high pitch accent, 12% of bitonal pitch accent with low tone prominence followed by high tone, 20% of bitonal pitch accent with high tone prominence followed by low tone and 4% of low phrase accent, low boundary tone. This implies that there is a preponderant use of the low pitch accent in the speeches of the educated bilingual speakers of English in Ebonyi North Senatorial Zone, irrespective of its level of inappropriateness. However, the negligible use of the rise tone except on bi-syllabic words, fall-rise tone and rise-fall tone suggest that a considerable number of the participants are deficient in the use of these tones. This is deduced on the note that there were yet a reasonable number of erroneous use of tones which were identified as some intonation patterns were substituted for others. This inappropriate assignment of patterns of intonation could further be seen as being situational which further affirms Gimson’s (1977) argument that intonation could be situational depending on the attitude of the speakers to his audience and to the general situation of utterance. There is, therefore, every tendency that assigning appropriate patterns of

intonation was by chance depending on their general emotions when the researcher had met them.

However, inappropriate assignment of patterns of intonation could make a speaker sound unintelligible as stated in the words of Atoye (2005). He further asserted that Nigerian speakers of English have the tendency to sound unintelligible in their speeches as a result of unintentional misuse of intonation tones. He further stated that this could be traced to the fact that Nigerian languages are predominantly tone languages which use pitch to signal a difference in meaning between words. The findings further buttresses the fact that Nigerian speakers of English employ the falling tone as the only choice where the Standard British English would normally allow other options of tones in their expression (Jowitt, 1991). Perhaps, it could be concluded that the study is a credence to the fact that these tones are not found in the participants' indigenous languages as asserted by Crutteden (1986). Hence, their struggle in their realizations. This further affirms Udofot's (2004) findings that bidirectional tones of fall-rise and rise-fall were significantly produced less in Nigerian English. Little wonder there were low realization of appropriate bitonal tones among the participants. It was also observed that there was a 4% presence of low boundary tone, low tone accent (L-L%) in the speeches of the participants from Ebonyi North and a greater percentage of its users used it rather than realizing H*+L, that is, rise-fall tone in the first syllable of the word 'obviously'.

Table 6.2: EBONYI CENTRAL

S/N	INTONATION PATTERNS	FREQUENCY	PERCENTAGE
1	L*	37	39%
2	H*	19	20%
3	L*+ H	15	16%
4	H*+L	23	24%
5	L-L%	2	2%
6	H*!H	-	-
TOTAL		96	

Making reference to the Table on the number of participants according to the Senatorial Zones, only twelve (12) participants from Ebonyi Central Senatorial Zone participated in the study. Further reference to the Table on the participants' performance in intonation, only seven (7) and five (5) participants appropriately assigned the falling tone to the words 'wind', and live respectively while others realized them as a rising tone and only 1 participant realized 'live' as a bidirectional tone. Only five (5) and three (3) appropriately assigned the high pitch accent to 'area', and 'sea' respectively. Where they could not realize the words as a high pitch unidirectional word, they replaced the high pitch accents with its low counterpart 'L*' and bidirectional tones. For the bidirectional tones realized in the words 'coast', 'wind', 'obviously' and 'could', it was observed that the participants did not have difficulty in realizing them as bidirectional tones, but they had difficulty in assigning the appropriate bidirectional tones to the appropriate words that deserve them.

However, the Table 7 above shows a general distribution of the low pitch accent which has a total number of thirty seven (37) occurrences. This further implies that there is a good record of inclination towards the use of the low pitch accent among the bilingual educated speakers of English in the Senatorial Zone, whether appropriately assigned or not. There is further no gainsaying the fact that the use of the rise tone, fall-rise tone and rise-fall tone are almost of the same level of usage among the participants. This shows that assigning the bitonal pitch accents to the words were not a difficult task to the majority of the participants but the difficulty lies in their appropriate assignment.

Table 6.3: EBONYI SOUTH

S/N	INTONATION PATTERNS	FREQUENCY	PERCENTAGE
1	L*	57	34%
2	H*	27	16%
3	L*+ H	33	20%
4	H*+L	44	26%
5	L-L%	7	4%
6	H*!H	-	-
TOTAL		168	

The Ebonyi South Senatorial Zone had the highest number of participants, twenty one (21), with a total number of one hundred and sixty eight (168) patterns of intonation observed from the utterances of the participants. In a bid to have a fair distribution and to give a more accurate account, the calculation above was done based on the number of participants as obtainable in other zones. In this Senatorial zone however, there is a record of 34% distribution of the falling tone, that is, the low pitch accent. It is worthy to note that about sixteen (16) and ten (10) participants appropriately assigned the low pitch accent to ‘wind’ and ‘live’ respectively which entails that more than half of the bilingual educated speakers of English in Ebonyi South Senatorial Zone have a level of mastery of the assignment of the falling tone in a connected speech. There is further no gainsaying the fact that the realization of the bitonal pitch accent with low tone prominence followed by a high tone ‘L*+H’ was a difficult task for the participants which is seen in the cases of ‘coast’ ‘wind’ and ‘could’ with only five (5), eight (8) and nine (9) appropriate assignments, respectively. More than half of the participants rather assigned the low pitch accent ‘L*’ to these words which further confirms and strengthens the initial observation that the most commonly used and most obtainable intonation patterns among the bilingual educated speakers of English in the zone, as found in other zones, is that of the falling tone.

On the high tone accent, that is the rising tone, sixteen (16) participants which is more than half of the participants appropriately assigned the tone to the appropriate syllable in the word ‘area’ but in its assignment to the word ‘sea’, there is a total negligence as only three (3) participants appropriately assigned the expected intonation pattern ‘H*’. It is further not in doubt that the proper actualization of this pattern in the word ‘area’ was because the word is a bi-syllabic word. It is deduced on the note that the same results were obtained from other Senatorial zones. Contending that the bitonal pitch accent of any kind was easily realized among the majority of the participants is no gainsay, especially in the words which they were uncertain of the appropriate tone. This is further seen in the word ‘obviously’ as all the participants realized the first syllable of interest with a bitonal pitch accent irrespective of their appropriateness. Meanwhile, ten (10) participants realized it as a bitonal pitch accent with high tone prominence followed by a low tone, that is, a rise-fall tone. While six (6) participants realized it as low phrase accent, low boundary tone L-L%, four (4) participants further realized it as a bitonal pitch accent with low tone prominence followed by high tone, that is, fall-rise.

From the three senatorial zones, therefore, it is worthy to note that in spite of some observed differences, no significant differences were observed as majority of the participants showed inclination towards using the low pitch accent. There was also a record of a prevalent mix of the bitonal pitch accent which indicates that they are not in lack among the educated speakers of English in Ebonyi State but what is in lack is their appropriate use. Little wonder the participants tend to make up for their failure to use appropriate intonation patterns by using longer utterances, in most cases, in place of the tonic placement. Also, bi-syllabic words which ought to have their first syllables assigned the high pitch accent were not a difficult task for the participants from all the Senatorial Zones. It is further worthy to note that some of the bilingual

speakers of English did not realize the intonation patterns correctly despite their academic attainment. It is on this note that Jowitt's (1991) assertion that intonation patterns cannot be acquired as they are in the second language situation except when consciously learned due to their complexities, could be affirmed. The study further negates Okon's (2001) findings that age and gender were determinants in the choice of intonation patterns among Nigerian speakers of English as explicated in the study. The study recorded different categories of age and with diverse educational qualification. Yet, there was a significant fall in the appropriate patterns of intonation which further confirms Akinjobi's (2011) findings that performance of participants as reflecting academic competence has little or no effect on the appropriate assignment of the intonation patterns. Therefore, it can be concluded that the bilingual educated speakers of English in Ebonyi State could be described as the users of the unidirectional, especially the falling tone, and bidirectional patterns of intonation.

CHAPTER FIVE

SUMMARY AND CONCLUSION

This chapter deals with the summary of salient findings which emanate from the study as presented in the previous chapter. Here also, the conclusion of the study was drawn.

5.1 Summary of Findings

This study investigated the intonation patterns of the bilingual educated speakers of English in Ebonyi State. The three Senatorial Zones were fully represented in the study as participants from each local Government Area of the zones were randomly selected. With the use of ToBI, the Autosegmental –Metrical phonology was adopted for the analysis of the data. The findings reveal a low level of proficiency in the use and assignment of accurate patterns of intonation in the speeches of the bilingual educated speakers of English in Ebonyi State in spite of the recorded levels of educational attainment. It was observed that aside the widely known and commonly used intonation patterns of fall (L^*), rise (H^*), rise-fall (H^*+L) and fall-rise (L^*+H); the low pitch accent, low boundary tone ($L-L\%$) was also obtainable among the participants. However, the prevalent intonation patterns which were observed were L^* , H^* , L^*+H , H^*+L and $L-L\%$ with a record of preponderant use of unidirectional tones with a great inclination towards the use of the falling tones. It was further observed that the bilingual educated speakers of English in Ebonyi State have come to terms with the appropriate use and assignment of tones to weak syllables, bi-syllabic words and strong vowels in the initial position of a word.

Well observed and noted from the findings also, is what Okon (2001) described as restriction. Instances were seen as the participants replaced certain patterns of intonation with other tones which were more convenient for them and which could be assumed to be prevalent in

their indigenous languages. It was in this vein that the bitonal pitch accents, which the study indicated were not scarce in the speeches of the participants, had a level of inappropriateness in their usages. Hence, their less production in Nigerian English (Udofot, 2004). It is therefore interesting to mention that the analysis of the findings described the bilingual educated speakers of English in Ebonyi State as users of unidirectional intonation patterns especially that of the falling tone.

5.2 Conclusion

The data for the study reveals a prevalent mix of the use of unidirectional and bidirectional patterns of intonation. It further affirms Jowitt's (1991) assertion that intonation patterns cannot be acquired as they are, in the second language situation due to their complexities, except when consciously learned. It can, therefore, be concluded that performance in the appropriate use and assignment of intonation patterns has little or nothing to do with an individual's bilingual make up or educational qualification.

REFERENCES

- Adejuwon, A. (2003). *The English intonation patterns of some radio broadcasters in south western Nigeria*. M.A project. Department of English. Obafemi Awolowo University, Ile Ife.
- Akindele, J. (2015). Infrastructural and pedagogical challenges of spoken English learning in second language context: Need for information communication technology (ICT) driven approach. *International Journal of Advanced Academic Research of Arts and Humanities*. 1(3),1-14. Retrieved May 8, 2018 from <http://www.ijaar.org>
- Akinjobi, A. (2011). Academic competence and linguistic performance: A study of English tune assignment by some Nigerian English language postgraduate students. *African Nebula*. 4. 66-76
- Akinjobi, A. & Oladipupo, R. (2005). Patterns of intonation of some Nigerian television reporters. *Ibadan Journal of European Studies*. 5. 1-16.
- Akinjobi, A. & Oladipupo, R. (2010). Intonation and attitude in Nigerian English. *A Journal of Contemporary Research*. 7(1), 159-167.
- Atoye, R. (2003). Native speaker perception of intonation in Yoruba zero-particle interrogative clauses. *A Bilingual Journal of Language, Letters and Culture*. BUEA University. Cameroon. 1(1), 1-14.
- Atoye, R. (2005). Non-native and interpretation of English intonation. *Nordic Journal of African Studies*. 14 (1), 26-42.
- Babalola, J. (2014). Effects of intonation variants on the language of wider communication in a multi-lingual environment. *International Journal of Humanities, Social Sciences and Education*. 1(3), 9-14.
- Banjo, A. (1971). *Towards a definition of standard Nigerian spoken English*. Actes du 8 congress de society linguistique de Africa Occidentals Abidjan.
- Banjo, A. (1979). *Towards a standard Nigerian spoken English*. Actes du 8 congress de society linguistique de Africa Occidentals Abidjan.
- Beckman, M. E. & Hirschberg (1993). *The ToBI anotation convention*. Ohio State University and T & T bell laboratories.

- Beckman, M. E. & Pierrehumbert J.B (1986). Intonational structure in Japanese and English. *A phonology yearbook* 3, 255-309. Retrieved April 2, 2018 from <http://www.jstor.org/stable/4615401>
- Beltran, E. (2015). English intonation patterns of non- English major students' teachers. *International Journal of Interdisciplinary Research and Innovations*. 3(2).16-33.
- Cruttenden, A. (1986). *Intonation*. Cambridge: Cambridge University Press.
- Crystal, D. (1969). *Prosodic systems and intonation in English*. Cambridge: University Press.
- Eka, D. (1985). *A phonological study of standard Nigerian English*. PhD Thesis. Department of English, ABU, Zaria.
- Emeka-Nwobia, N. & Onu, M. (2016). Spoken English errors of undergraduate students in selected tertiary institutions in Southeastern Nigeria. *IOSR Journal of Humanities and Social Sciences*. 21(7), 13-17. Retrieved April 5, 2018 from <http://www.iosrjournals.org>
- Fajobi, E. (2011). *The nature of Yoruba intonation: A new experimental study*. Retrieved March 28, 2018 from http://www.sussex.ac.uk/linguistics/documents/ef_yoruba_intonation
- Gimson, A. (1977). *A practical course of English pronunciation: A perfectual approach*. London: William Lowes and Sons.
- Grice, M. & Baumann, S. (2005). *An introduction to intonational function and model*. n.p
- Gut, U. (2001). *Prosodic aspects of standard Nigerian English*. Retrieved March 28, 2018, <http://www.spectrum.uni-bielefeld.de/TAPS/Gut.pdf>
- Gut, U. & Milde, J. (2002). The Prosody of Nigerian English. *ISCA Archive: Speech Prosody*. Retrieved March 28, 2018 from <http://www.isca-speech.org/archive>
- Gussenhoven, C. (1984). Phonology of intonation. *Glott international*. 6 (9). 271-284
- Ibrahim, S. & Faleke, V. (2013). Pattern of intonation tunes in the marking of attitudes in Nigerian English. *Journal of the Nigerian English Studies Association*. 16 (2).171-187.
- Jowitt, D. (1991). *Nigerian English usage: An introduction*, Nigeria: Longman.
- Jowitt, D. (2000). Patterns of Nigerian English intonation. *English World-wide*. 21(1), 63-80.
- Ladd, R. (1996). *Intonational phonology*. Cambridge University Press. Cambridge: Massachusetts.

- Levis, J. (2003). The Intonation and meaning of normal yes/no questions. *Wiley Library: World Englishes* 3(18), 373-380. Retrieved from <http://doi.org/10.1111/147.971x.00150>
- Melefa, M. (2011). *Rhythmic and intonational pattern of NN24's Newscasting*. M.A. Thesis. Department of English. University of Ibadan, Ibadan.
- Melefa, M. (2016). *Phonological analysis of selected Nigerian Television Newscasters*. PhD thesis. Department of English, University of Nigeria, Nsukka.
- Nwaenyi, C. F. (2010). *A study of the problem encountered in the use of English prosodic features by Igbo native speakers in Orlu educational zone*. M.A Thesis. Department of English, University of Nigeria, Nsukka.
- Nolan, F. (2014). Intonation. Retrieved September 13, 2017 from <http://www.dl.ueb.vnu.edu.vn/handle/1247/10045>
- Obianika, E. C. (2014) Tone in Abankaleke Igbo: An acoustic analysis. *Global Journal of Arts, Humanities & Social Sciences*. 2(6), 11-28
- O'Connor, J. D. & Arnold, G. F. (1973). *Intonation of colloquial English: A Practical Handbook*. Longman.
- Okon, B. (2001). *The Intonational structure of Nigerian English*. PhD Thesis. Department of English. University of Ibadan.
- Oladipupo, R. (2010). The intonation of noun phrases subjects and clause-modifying adverbials in Nigerian English. *African Review: An International Multi-Disciplinary Journal, Ethiopia*. 4(3b), 167-178.
- Olajide, S. B. & Olaniyi, O. (2013). Educated Nigerian English phonology as core of a regional 'RP'. *International Journal of Humanities and Social Science*. 3(14), 277-286.
- Ononiwu, C. M. & Njemanze, Q. (2018). Poor English pronunciation among Nigerian ESL students: The ICT solution. *International Journal of Language and Literature*. 3(1), 169-179. Doi: 10.15640/ijll.v3n/a22.
- Pierrehumbert, J. B. (1980). *The Phonology and phonetics of English intonation*. PhD Thesis, MIT. Indiana University.
- Pike, K. (1945). *The intonation of American English*. University of Michigan Press.
- Pitrelli, J., Beckman, M. E. Hirschberg, J. (1994). Evaluation of prosodic transcription labeling reliability in the ToBI framework. *Third International Conference on Spoken Language*

- Processing* (ICSLP94). 18(22), 123-126. Retrieved May 8, 2018 from <http://www.isca-speech.org/archive>
- Rampton, M. B. H. (1990). Displacing the native speaker: Expertise, affiliation and inheritance. *ELT Journal*. 44(2), 97-101. Doi 10.1093/elt/44.2.
- Roach, P. (2010). *English Phonetics and Phonology: A practical course*. 4th ed. Cambridge University Press.
- Silverman, K., Beckman, M. E., Pitrelli, J., Ostendorf, M., Wightman, C., Price, P., et al (1992). ToBI: A standard for labeling English prosody. *Proceedings of the Second International Conference on spoken Language Processing*. Banff, Canada. 867-870.
- Suciu, G. (2016). Intonation- The music of everyday speech-and its impact on successful communication. *Convergent Discourse: Exploring the Context of Communication*. 17(4), 180-184.
- Sunday, A. (2010). The Supra-segmentals of bilingual Nigerian adult aphasias. *SKASE Journal of Theoretical Linguistics*. 7 (2), 39 - 66. Retrieved April 4, 2018 from http://www.skase.sk/Volumes/JTL16/pdf_doc/03.pdf
- Sunday, A. & Fadeyi, K. (2016). Intonation patterns of the English of Nigerian primary school teachers. *Ife Studies in English Language*. 12(1), 16-31
- Ufot, B. (2009). *Modern English structure*. Uyo, Nigeria: Robert minder International Limited.
- Udofot, I. (1997). *The Rhythm of spoken Nigerian English*. PhD Thesis. Department of English, University of Uyo.
- Udofot, I. (2002). The intonation of Nigerian English. *Journal of West African Languages*. 2. 35-47.
- Udofot, I. (2004). Varieties of spoken Nigerian English. In Awonusi, V. & Babalola, E. (Eds.), *the domestication of English in Nigeria* (pp 93-113). Lagos: University of Lagos Press.
- Verdugo-Ramirez, D. (2006). A study of intonation awareness and learning in non-native speakers of English. *Language Awareness*. 15 (3), 141-159. Doi: 10.2167/la404.0
- Weinreich, U. (1968). *Languages in contact: Findings and problems*. New York: Mouton Publishers.

APPENDICES

Department of English and Literary Studies,
Faculty of Arts,
University of Nigeria,
Nsukka,
Enugu State.

June, 2018

Dear Respondent,

I am a student of the above named institution, undertaking a study on the “Intonation patterns of selected educated bilingual speakers of English in Ebonyi State.” The aims are to describe the patterns of intonation in the speech of educated bilingual speakers of English in Ebonyi State and to describe how their intonations define them. Information obtained will be treated with utmost confidentiality and strictly for academic purpose.

Thanks

Yours faithfully,

Okoro, Faith A.

**BIO-DATA FORM FOR BILINGUAL EDUCATED SPEAKERS OF ENGLISH IN
EBONYI STATE
SECTION ONE**

1. Educational Qualification (please kindly tick which applies to you and If in view, please specify)

PhD

Master's degree

Bachelor's degree

OND/HND

NCE

Others, please specify _____

2. Institutional Category (please kindly tick which applies to you)

University

Polytechnic

College of Education

Others, please specify _____

3. Course Studied / Studying (Please underline and specify which applies to you) _____

4. Age bracket (please kindly tick which applies to you)

▪ 21-30

▪ 31-40

▪ 41-50

▪ 51 and above

5. Occupation _____

6. As an educated bilingual, which other language do you speak in addition to English?

7. Sex (Please kindly tick the sex that applies to you)

• Male

- Female

8. Please kindly tick the Senatorial Zone and Local Government Area applicable to you.

❖ **Ebonyi North**

• Abakaliki LGA

• Ebonyi LGA

• Ishielu LGA

• Ohaukwu LGA

• Izzi LGA

❖ **Ebonyi Central**

• Ikwo LGA

• Ezza North LGA

• Ezza South LGA

❖ **Ebonyi South**

• Afikpo North LGA

• Afikpo South LGA

• Ivo LGA

• Ohaozara LGA

• Onicha LGA

SECTION TWO

Please kindly read the following continuous speech, as naturally as you can, with specific intonation patterns where applicable.

They're building wind farms, all over the area, where we live. We can see long lines of them along the tops of the hills, and down by the coast, there are wind turbines out at sea and along the shore. They only build them where there's plenty of wind, obviously. We certainly get a lot of that near us. You could say the landscape's been completely transformed, but most people don't seem to mind.