Tonal substitution in Aguluezechukwu dialect of Igbo

Martha Chidimma Egenti & Sunday Ifeanyi Okoli

Abstract

Tone in African languages is a phonological feature which distinguishes meaning. This paper aims to ascertain tonal substitution in Aguluezechukwu dialect of Igbo in relation to the standard Igbo, in addition to identifying the function of contour tone in the dialect. Data were obtained through structured oral interview, which was facilitated by the use of a digital recorder to ensure perceptual clarity. The data were phonetically transcribed, glossed and descriptively analyzed. The study reveals that the tonal marking of some nouns in Aguluezechukwu dialect of Igbo sometimes vary, and contour tone in the Aguluezechukwu dialect of Igbo occurs as a result of the presence of long vowels. This study concludes that contour tone in Aguluezechukwu dialect of Igbo is accorded phonetic status rather than phonemic status because new meaning is not derived regardless of the change in tone.

Keywords: Tone, Phonological, Contour, Distinctive, Substitution.

1. Introduction

Igbo belongs to the West Benue-Congo, a major subdivision of the Niger-Congo language family in West Africa. It is spoken predominantly in the southeastern part of Nigeria precisely; Abia, Anambra, Ebonyi, Enugu, Imo and some parts of Delta, Bayelsa and River states. The Aguluezechukwu dialect of Igbo, the variety under investigation, is one out of the many dialects of Igbo. It is spoken in Aguluezechukwu community in

Aguata local government area of Anambra state and Ikekeonwu (1987) classifies it as one of the main dialects of the Inland West Igbo Dialect Cluster. The Aguluezechukwu dialect of Igbo has some phonological features that differ from the standard Igbo (The 'Standard variety' is used in education, government and media). The phonological differences are not limited to segmental phonemes but also the prosodic feature of tone. Various studies in Igbo tonology like Uwaezuoke (2017) discusses contour tone in Umuolum Igbo refuting the claims of some scholars that Igbo is strictly a register tone language with just three level tones; high, low and step tones.

In this paper, the tonal substitution of nouns in Aguluezechukwu dialect of Igbo and the standard Igbo are juxtaposed in a bid to bring out their differences, and also to ascertain whether the substitution of tone in the two varieties brings about differences in the meanings of lexical items. In addition to finding out, if the presence of contour tone in Aguluezechukwu dialect of Igbo brings about a change in meaning. The rest of the work is structured as follows; section two discusses tone and tone languages. It also reviews relevant empirical studies. In section three is data presentation and analysis; while section four presents the findings, summary and conclusion.

2.1 Overview of Tone and Tone languages

Many Asian languages are tone languages, such as Chinese, Vietnamese, Thai and Punjabi. Similarly, majority of the languages in Benue-Congo (Kwa group) of which Igbo is part of, are tone languages such as Yoruba, Kru, Akan, Ijo, etc (Blench & Dendo, 2004). Welmers (1959:2) cited in Eme and Uba (2010) state that "tone is that in which both pitch phonemes and segmental phonemes enter into the composition of at least some morphemes".

Some Igbo scholars such as Emenanjo (1978) and Mbah & Mbah (2010) uphold the view that Igbo language has two basic tones; high and low tones plus a downstepped high, which is regarded as a grammatical tone. However, in some recent works such as Uwaezuoke (2017), the downstep tone has been shown to perform lexical functions in Igbo indicating that it is an independent tone. Other definitions of tone such as Ladefoged, (2006), see tone as a pitch variation that affects the meaning of a word. He identifies only two possible tones in simple tone languages, which are high and low tones. In Bantu languages, such as Shona (spoken in Zimbabwe), Zulu, etc every vowel may be classified as being on a high or a low tone.

Omachonu (2000) considers tone to be an intermediate level of phonological organization, that is, intermediate between individual segmental units (consonants and vowels) and their combination into words. He asserts that a tone language is a language which employs pitch to bring about a change in meaning between seemingly identical words/lexical items. Tone is significant in the sense that pitch plays critical role in signaling a semantic differentiation of words and phrases. That is why Eme et al (2010) define tone as a pitch variation applied to syllables in tone languages for distinction of meaning. This is also highlighted by Fromkin and Rodman (1993) where tone is described as the contrastive pitch in syllables in language where two words may be identical except for such differences in pitch.

Explaining a Tone language, Pike (1948)states that it is a language where contrastive pitch levels do not merely form the intonation tune of a sentence, but rather determine distinctiveness of the lexical items. That is to say that in tone languages, tone distinguishes between the meanings of words with the same phonemic composition. Welmers (1959:2), however, considers

Pike's (1948) definition of tone language too strong. He proposes that "a tone language is a language in which both pitch phonemes and segmental phonemes enter into the composition of at least some morphemes". Emenanjo (2015) avers that a tone language makes use of the pitch of the voice to make a difference in the meaning of the words or utterances. This explanation shows that tone languages have tone features that are perceived in words and sentences, and Igbo is a typical example of such language. These tonal features operate as a distinctive element of the words and sentences in the language.

In discussing the tonal patterns of tone languages, Eme, et al (2001), mention two kinds of tonal pattern: register tonal pattern and contour tonal pattern. They point out that in register tone languages, tones are essentially level, meaning that the pitch of a syllable does not glide from one level to the other during speech production. This is the case of all Nigerian languages. The Igbo and Yoruba languages, for example, have register tone pattern. Igbo has high, low and downstep tones, while Yoruba has high, low and mid tones. In Igbo, while the high and low tone can occupy any position in a word, downstep tone can only follow a high tone and does not begin a word. The tone combinations (H – High, L-low and S- downstep tones) are illustrated in (1a) below:

1. HH - eke 'python'
HL - ulò 'house'
HS - irē 'to sell'
LL - àlà 'land'
LH - òke 'rat'

The other tonal pattern is Contour tonal pattern, where there is a glide in pitch during speech production. Mbah and Mbah (2010), has it that contour tone languages are languages which involve the

changing state of the transition from one pitch to the other in their description of tone. The tonemes for contour tonal patterns are represented as rising [*], falling [^], falling-rising [*] and rising falling [*].Some instances of contour tone in Chinese language language as shown in Nkamigbo and Obiamalu (2016) are as follows:

2. qìshuĭr 'soft drink' shàngwŭ 'morning' zěnme 'how' xiě 'write' lìshĭ 'history'

2.2 Empirical Review

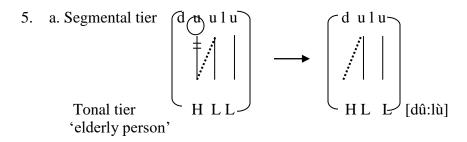
This section discusses studies of tone in some African languages. For instance, Eme & Uba (2010) in discussing Igbo phonology state that Igbo language is a register tone language with three level tones; high tone, low tone and downstep tone. Examples of Igbo words bearing the tones are shown below:

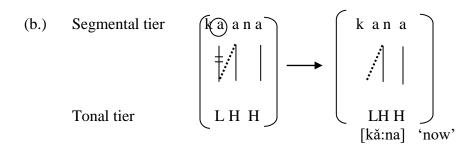
3.	HH	isi	'head'
	HL	isì	'smell'
	LL	ìsì	'blindness'
	HS	isī	'to cook'

Uwaezuoke (2017) discusses gliding tone in Igbo. He observes that despite Igbo being a register tone language, its tones sometimes glide when two identical vowels occupy a contiguous position. The gliding tone, to this scholar, is phonetically motivated and in line with the autosegmental phonology (subsequently AP) model of Goldsmith (1979), one of the two identical adjacent vowels becomes deleted, while its tone moves to the next vowel, which is

a tone-bearing unit. He illustrates with data from Umuolum Igbo variety below:

Examples (4a-c) show that the tones of the two identical vowels are not of the same pitch. Therefore, in speech, the two adjacent identical v-elements are realised as one sound, but maintaining the different pitches. Below is an AP analysis of the data by Uwaezuoke (2017):





The first column of (5a) shows that the first high back vowel, which has a high tone is delinked and deleted without affecting its tone at the tonal tier. Its high tone is rather associated by new association line to the next tone bearing unit, which is the second high back vowel with a low tone because the Obligatory Contour Principle (OCP) of AP forbids two identical V-elements from co-occurring. Uwaezuoke (2017) concludes that the deletion of the first vowel with its tone associated to the adjacent vowel is what resulted into gliding tone witnessed in the second column. He gives the same explanation for (5b).

Atadoga(2015) also discusses tone in Igala with regard to their lexical functionality. She states that the language has high, low and mid tones; while high and low tones are marked, mid tone is unmarked. She exemplifies as presented in (6).

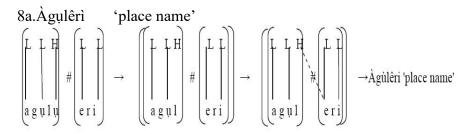
6. i. ábá 'one who boasts'
ii. àbá 'name of person'
iii. àbà 'iron peg'
iv. ébì 'hunger'
v. ébi 'begging'
vi. èbì 'open teeth'

Rolle (2013) distinguishes between three main tonemes in Urhobo: High, Low, and Downstepped High Tone using minimal (and near minimal) pairs, as illustrated in 7(a-d) below:

7. a. LL òdè 'name'
hL ódè 'yesterday'
b. LH èné 'yams'
hL énè 'four'
c. HL éwù 'clothes'
LL èwù 'Ewu village'

Using acoustic paramaters, Obianika (2014), discusses the acoustic analysis of tone in Abankaleke with the thrust of checking for upstep in Izii and Ezaa dialects as claimed by some scholars. It was observed that the tone levels operational in the Izii and Ezaa dialects of the Igbo language are the high, low, downstep and the glides (rising and falling glides) and that though the high raising tone occurs in these dialects that it is not phonemic as evidenced from both the perceptual and acoustic analyses. Furthermore, she concludes that the upstep is not obtainable in the investigated dialects at the lexical level.

Similarly, Ezenwafor (2014) discusses contour tone in Ekwulobia dialect of Igbo language where she used examples in (8) to argue that all occurrences of dissimilar vowels across word boundaries motivate the phonological process of assimilation:



b. ńnē 'mother' òkwà 'a type of bird' → Ńnôkwà 'place name'

c. ámá 'open place' àkù 'wealth' — Ámâkù 'place name'

She further gave instances of rising tone in Igbo language, where she states that deletion rule is applied to get the result.

9.

The foregoing discussed tone from different perspectives especially with regard to its behavior between segments and across word boundary. However, this study differs from previous studies in the sense that tonal substitution especially in Aguluezechukwu dialect of Igbo has not been investigated. In the next section is data presentation and analysis.

3.0 Data Presentation and Analysis

Data were obtained through oral interview of one adult male and two adult females of between sixty years and above, and one youth of thirty years' old who are all native speakers of Aguluezechukwu dialect of Igbo and were born and bred there; and have lived most times of their lives there too. Data were collected using a digital recorder. The wordlist used is a random compilation from Ibadan 400 wordlist of Sterk, *Amumamu Utoasusu na Agumagu Igbo* by Ogbuagu, Anedo, Udemmadu & Udechukwu (2012) and

researchers' intuitive knowledge. This study adopts Emenanjo (1978) and Williamson's (1984) tone-marking convention which marks the low tone (`) and downstep tones (-) and leaves the high tone (`) unmarked. The uprising tone (`) which features in some of the lexical items is also indicated. The data are arranged based on their tonal differences (SI represents Standard Igbo). They are presented in groups and sets for easy analyzes and better understanding. They are also grouped based on the words of the standard Igbo that share similar tones in their first two syllables as follows:

Group 1 (HH)

In this group are lexical items that the first two syllables are HH tone sequence (i.e. Those words that are marked HH, and others that have more than two syllables but with HH tone sequence beginning them).

10. SI		Aguluezechukwu	Gloss
a.	(SET 1)		
i.	ụra	ùra	sleep
ii.	agbụsị	agbusi	ant
b.	(SET 2)		
i.	mmadù	mmadụ	human
ii.	anwụrù	anwùrù	snuff
iii.	ọgbakò	ògbàkọ	gathering
iv.	ụdarà	ụdara	apple
v.	akwukwo	akwukwō	book
vi.	ekwensū	ekwēnsū	Satan

In (10a(i)), the word differs in tone in SI and Aguluezechukwu Igbo such that, while SI bears a HH tone sequence, Aguluezechukwu Igbo has a LH sequence whereas in (10a(ii)), the HHL tone sequence changes to a HHH sequence in Aguluezechukwu Igbo.

(10b(i&iv)) changes from a HHL sequence of SI to a HHH sequence in Aguluezechukwu Igbo; the HHL sequence of SI in (10b(ii)) changes to a HLL sequence in Aguluezechukwu Igbo; and there is a change from SI's HHL sequence to LLH sequence in Aguluezechukwu Igbo in (10b(iii)). Finally, in (10b(v)) is a change from the SI's HHH sequence to a HHS sequence in Aguluezechukwu Igbo; while there is a change from a HHSS sequence in SI to a HSSS sequence in Aguluezechukwu Igbo in (10b(vi)).

Group 2 (HL-)

11

ST.

In this group, we present lexical items that the first two syllables start with HL tone (i.e. Those words that are marked HL, and others that have other tone on them but started with HL tone)

Gloss

11.	OI.	nguiuezeenukwu	Gloss
<i>a</i> .	(SET 1)		
i.	azù	azụ	fish
ii.	ọkà	ọka	maize
iii.	edè	ede	cocoyam
iv.	mbè	mbe	tortoise
v.	akpį̀	akpi	scorpion
vi.	nchà	ncha	soap
vii.	ukwà	ùkwa	bread fruit
viii.	ụzò	ùzọ	door

A guluezechukwu

b .	(SET 2)		
i.	ntị	nti	ear
ii.	ezì	ezi	pig
iii.	ilì	ili	grave
iv.	uzè	uze	squirrel
v.	ijè	ije	journey
vi.	abù	abu	poem
vii.	ụkà	ùka	discussion
viii.	ụlòọgwù	ulòogw <u>u</u>	hospital
ix.	ehìhìè	èhihie	afternoon
<i>c</i> .	(SET 3)		
i.	nnùnù	nnụnụ	bird
ii.	nwaànyị	nwàanyị	female
iii.	anàrà	anara	garden egg
iv.	anyàsį̇̀	ànyasi	night
v.	dimkpà	dìmkpā	strong man

In (11a(i-vi)), the words differ in tone in SI and Aguluezechukwu Igbo such that while SI bears a HL tone sequence, Aguluezechukwu Igbo has a HH sequence. Also, the tones of (11a(vii&viii))which is the HL tone sequence changes to a LH sequence in Aguluezechukwu Igbo.

In (11b(i-vi)), the words differ in tone in SI and Aguluezechukwu Igbo such that while SI bears a HL tone sequence, Aguluezechukwu Igbo has a HH sequence. In (11b(vii)), the tone changes from a HL sequence of SI to a LH sequence in Aguluezechukwu Igbo; the HLHL sequence of SI (11b(viii)) changes to a HLHH sequence in Aguluezechukwu Igbo; and there is a change from SI's HLLL sequence to LHHH sequence in Aguluezechukwu Igbo in (11b(ix)).

In (11c(i&iii)), the tone is changed from SI's HLL sequence to a HHH sequence in Aguluezechukwu Igbo; while there is also a change from a HLL sequence in SI to a LHH sequence in Aguluezechukwu Igbo in (11c(ii&iv)). In (11c(v)), the tone changes from HLL in SI to LHS in Aguluezechukwu Igbo.

Group 3 (LH-)

The first two syllables of the lexical items presented in this group start with LH tone (i.e. Those words that are marked LH, and others that have other tone on them but started with LH tone)

13.	SI	Aguluezechukwu	Gloss
<i>a</i> .	(SET 1)		
i.	ùtụtù	ùtụtụ	morning
ii.	ònugbù	ònugbu	bitter leaf
iii.	èberè	èbere	mercy
iv.	mbuzò	m̀buzo	cricket

The tones in (13a(i-iv))change from LHL in SI to LHH in Aguluezechukwu Igbo.

Group 4 (LL-)

In this group, we present lexical items that the first two syllables start with LL tone (i.e. Those words that are marked LL, and others that have other tone on them but started with LL tone)

14.	SI	Aguluezechukwu	Gloss
<i>a</i> .	(SET 1)		
i.	ùdò	ùdŏ	rope
ii.	nchì	nchĭ	grass-cutter
iii.	ìtè	ìtĕ	pot
iv.	m̀уò̀	myŏ	sieve
v.	ùwà	ùwă	world

vi.	àkàrà	akara	fried beans
b .	(SET 2)		
i.	ìkùkù	ikuku	wind
ii.	àchịchà	àchịchă	bread
iii.	ìchàkà	ìchàkă	maracas
iv.	òbòdò	òbòdŏ	town

In (14a(i-v)), the words differ in tone in SI and Aguluezechukwu Igbo such that while SI bears a LL tone sequence, Aguluezechukwu Igbo has a LR sequence. The tones in (14a(vi)), that is LLL tone sequence of SI changes to a HHH sequence in Aguluezechukwu Igbo. The tone in (14b(i)) changes from a LLL sequence of SI to a HHH sequence in Aguluezechukwu Igbo; and there is a change from SI's LLL sequence to LLR sequence in Aguluezechukwu Igbo in (14b(ii-iv)).

With regard to the presence of contour tone, it is observed that it occurs as a result of long vowel which is not allowed in Igbo language. From the data, it is also observed that the rising tone occurs at the final positions.

Group 5 (HS-)

In this group, we present items that the first two syllables start with HS tone (i.e. Those words that are marked HS, and others that have other tones on them but started with HS tone)

15.	SI	Aguluezechukwu	Gloss
	nwokē	nwòke	male

In (15), the HS tone in SI sequence changes to a LH sequence in Aguluezechukwu dialect.

4.0 Summary and Conclusion

In Igbo language, it is mostly observed that the change of tone of any lexical item is always distinct and grammatical. Thus, we discuss the tone of some nouns of Aguluezechukwu dialect of Igbo with reference to the standard Igbo. It was observed that there is presence of contour and tone substitutions. There are also instances of tonal differences and/or tonal substitution in some nouns of Aguluezechukwu dialect of Igbo when juxtaposed with the standard Igbo as seen in the instances provided in the study. In addition to realization of contour tone, it was observed that contour tone in Aguluezechukwu dialect of Igbo occurs as a result of the presence of long vowels. Also, contour tone in Aguluezechukwu Igbo is accorded phonetic status rather than phonemic status because new meaning is not derived regardless the change in tone.

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APPENDIX 1
ADOPTED FROM IBADAN 400 WORDLIST BY J.P. STERK

S/N	STD. IGBO	TRANSC.	AGC. D.	TRANSC.	GLOSS
1.	ùtụtù	/ʊtʊtʊ/	ùtụtụ	/ʊtʊtʊ/	Morning
3.	nnùnù	/ŋոʊոʊ/	nnụnụ	/ŋnʊnʊ/	Bird
4	ụzò	/vz/	ùzọ	/vz/	Door
5	azù	/azu/	azụ	/azu/	Fish
6	ọkà	/Okà/	ọka	/Oka/	Maize
7	ura	/ura/	ùra	/ura/	Sleep
8	Nwokē	/ŋwo k é/	nwòke	/ŋwòke/	Male
9	Mbè	/mbè/	mbe	/mbe/	Tortoise
10	nwaànyi̇̀	/ŋwaànI/	nwàanyị	/ŋwànI/	female
11	mmadù	/mmadu/	mmadụ	/mmadu/	human
12	abù	/abu/	abu	/abu/	song
13	ukà	/ʊkà/	uka	/ʊka/	discussion

14	Ehìhìè	/ehìhìè/	èhihie	/èhihie/	afternoon
15	anyàsi̇̀	/aŋàsÌ/	ànyasị	/àpasI/	night
16	ùdò	/UdO/	ùdŏ	/UdO/	rope

APPENDIX 2
THE RESEARCHER'S INTUITION

	•	BLANCILI	•	•	1
S/N	STD.	TRANSC.	AGC.D.	TRANSC.	GLOSS
	IGBO				
1.	ulò ogwù	/ʊləəgwʊ/	ulò ogwu	/ʊləəgwʊ/	hospital
2	Èberè	/èberè/	èbere	/èbere/	mercy
3	ọgbakò	/ОБакО/	ògbàkọ	/ӘБакӘ/	gathering
4	Àkàrà	/àkàrà/	akara	/akara/	fried bean
5	Oche	/otfe/	oche	/otfe/	chair
6	Ònugbù	/ònubù/	ònugbu	/ònubu/	bitter leaf
7	anwụrù	/aŋwuru/	anwùrù	/aŋwʊrʊ/	snuff
8	ekwensū	/ekwe ń sú/	ekwēnsū	/e kwé ń sú/	Satan
9	Dimkpà	/dimpa/	dìmkpā	/dìmbá/	strong man
10	ukwà	/ʊkwà/	ùkwa	/ukwa/	bread fruit
11	aṅàrà	/aŋàrà/	aṅara	/aŋara/	garden egg
12	nchì	/r\tjì/	nchĭ	/ r}t ʃĭ/	grasscutter

APPENDIX 3 ADOPTED FROM AMŲMAMŲ ŲTOASŲSŲ NA AGŲMAGŲ IGBO BY OGBUAGŲ, J.O ET AL (2012)

S/N	STD. IGBO	TRANSC.	AGC. D.	TRANSC.	GLOSS
1	agbusi	/abusÌ/	agbusi	/abusI/	ant
2	Ijè	/iʤè/	ije	/idze/	journey
3	Ilì	/ilì/	ili	/ili/	grave
4	Uzè	/uzè/	uze	/uze/	squirrel

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5	Nchà	/ŋʧa/	ncha	/ŋʧa/	soap
6	m̀bụzọ̀	/Czudm/	mbuzo	/mbuzO/	cricket
7	Ìkùkù	/ìkùkù/	ikuku	/ikuku/	wind
8	Ezì	/ezì/	ezi	/ezi/	pig
9	Edè	/edè/	ede	/ede/	cocoyam
10	akwụkwọ	/akwukw3/	akwụkwō	/akwukw3/	book
11	ichàkà	/Ìʧàkà/	ichàkă	/ Ìtʃ àkă/	maracas
12	àchịchà	/àʧÌʧâ/	àchịchă	/àʧÌʧǎ/	bread
13	Ìtè	/ìtè/	ìtĕ	/ìtĕ/	pot
14	myò	/myO/	myŏ	/Cyḿ\	sieve
15	ùwà	/ʊwà/	ùwă	/ʊwǎ/	world
16	Òbòdò	/òbòdò/	obodo	/òbòdò/	town

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