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Phonological Variation in Akokoid

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Abstract

This paper examines the process of language change occasioned by different phonological processes in the nine speech forms which scholars have given different names, such as Northern Akoko Cluster (Hoffman 1974), Akokoid (Akinkugbe 1978), Amgbe (Capo 1989), Arigidi – Amgbe (Akinyemi 2002) and Arigidi-Ọwọn (Fadọrọ 2008b). These nine speech forms are Arigidi, Erushu, Afa, Oge, Aje (Ese), Udo, Oyin, Igashi and Uro all spoken in the present Akoko North-West Local Government with its headquarters in Oke-Agbe, Ondo State of Nigeria. Through the direct method of data elicitation, the Ibàdàn 400 wordlist was used to obtain data from 30 informants. Selection of informants was guided by the acronym (NORMs) (Non-mobile, Old, Rural, Males). The major finding of this research is the fact that the speech forms in question have undergone systematic changes over time. These changes have occasioned phonological variation within the group. Arigidi (which is made up of Arigidi and Erushu) has twenty phonemic consonants, whereas Ọwọn (which comprises Afa, Oge, Aje, Udo, Oyin, Igashi and Uro) has twenty-two. This difference in the number of consonant phonemes coupled with different phonological processes, such as nasalisation, palatalisation, spirantisation, simplification of complex segments, vowel raising, changes in tonal pattern, etc have resulted in phonological variation across the speech forms. This paper is not only a state of the art report on language change motivated by phonological variation, it examines how phonological variation is produced by mechanical systematic sound changes, affecting the original sounds of the language and how these sound changes affect the language of different sectors of the speech community in different ways, thus producing variation where once was homogeneity.

Key Words: akokoid, phonological variation, language change.

Akokoid and Its Speakers

As highlighted in the abstract above, the nine speech forms classified together as Akokoid have been given different names by scholars. The common denominator about these speech forms is that they have been classified on the basis of lexicostatistics and mutual intelligibility by these scholars. They are all spoken in Akoko North West Local Government in Ondo State, Nigeria by over 250,000 people. Arigidi is spoken in Arigidi town; Erushu is spoken in Erushu town; Uro is spoken in Uro Ajọwa; Igashi is spoken in Igashi community; Oyin is spoken in Oyin community; while Oge, Aje, Udo and Afa are all spoken in their respective quarters in Oke-Agbe, the local government headquarters. The tree diagram below links Akokoid with Proto-Benue Congo.

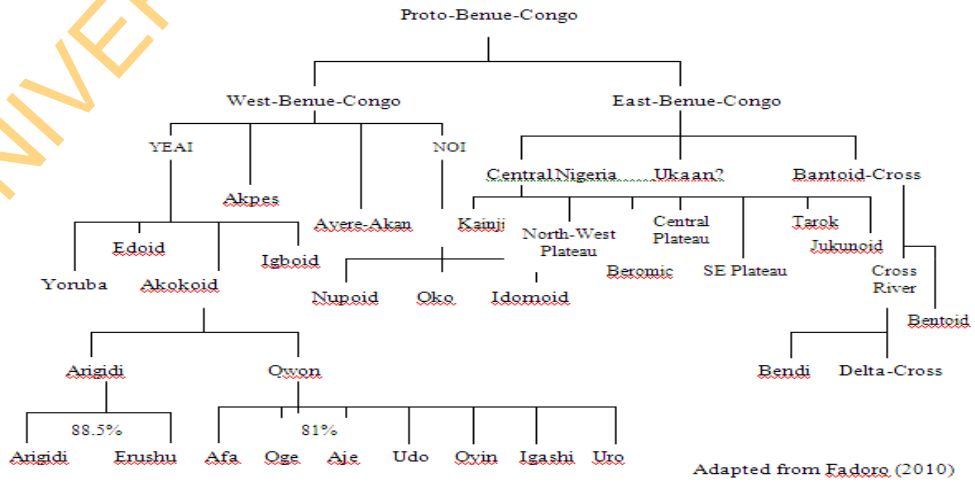

Figure 1: Akokoid as a Descendant of Proto-Benue Congo

For maps, see the Appendix.

Why Do We Have Phonological Variation in Language?

Preamble

> I have noticed in traveling about the country a good many differences in the pronunciation of common words… Now what I want to know is whether there is any right or wrong about this matter… If one way is right, why don't we all pronounce that way and compel the other fellow to do the same? If there isn't any right or wrong, why do some persons make so much fuss about it?
> (Letter quoted in "The Standard American", J.V. Williamson and U.M. Burke, eds; A various Language) sic.

According to Francis (1983:28) phonological variation in language can take any of the following forms or a combination of two or more:

i) Differences in the number of phonemes or a subsystem within it.
ii) Differences in the feature constituency (i.e configuration) of the phonemes
iii) Differences in the allophonic realization of the phonemes
iv) Differences in the incidence of the phonemes i.e. in their distribution through the lexicon.

Based on the number of consonant phonemes, Akokoid exhibits phonological variation. For the purpose of clarity; let us present the sound inventory of the speech forms in a tabular form as shown below.

Table 1. **Consonants of Arigidi, Erushu and Ọ̀wọ̀n**

		Arigidi	Erushu	Ọ̀wọ̀n
Plosive	Bilabial	p b	p b	p b
	Alveolar	t d	t d	t d
	Velar	k g	k g	k g
	Labia-Velar	kp gb	kp gb	kp gb
Nasal	Bilabial	m	m	m
Alveolar		[n]	[n]	[n]
		Arigidi	Erushu	Ọ̀wọ̀n
Affricate	Palato-alveolar	tʃ dʒ	tʃ dʒ	tʃ dʒ
Fricative	Bilabial	- -	- -	ɸ
	Labiodental	f -	f v	f v
	Alveolar	s	s	s
	Palato alveolar	ʃ	ʃ	ʃ
	Glottal	h	h	h
	Velar			ɤ
Lateral	Alveolar	l	l	l
Trill	Alveolar	r	r	r
Approximant	Palatal	j	j	j
	Labia-velar	w	w	w

Note: [n] is an allophone of /l/ because [n] and [l] occur in complementary distribution, while [n] occurs only before nasal vowels, [l] occurs elsewhere.

A close look at the above table reveals that Arigidi has nineteen (19) phonemic consonants; Erushu has twenty (20) while Ọ̀wọ̀n, (comprising Oge, Aje, Udo, Uro, Igashi, Afa and Oyin) has twenty-two (22) phonemic consonants. This can be summarised in a harmonised phonemic chart shown below:

Table 2. Harmonised Phonemic Consonant Chart of Akokoid

	Bilabial	Labio dental	Alveolar	Palato Alveolar	Palatal	Velar	Glottal	Labio velar
Nasal	m							
Plosive	p b		t d			k g		kp gb
Fricative	(ɸ)	f (v)	s	ʃ		(ɤ)	h	
Trill			r					
Affricate				tʃ dʒ				
Central Approximant					j			w
Lateral			l					

Note: the phonemes in brackets are the ones not attested in all the speech forms. For example /ɸ/ is not attested in Arigidi and Erushu, whereas, it is attested in the Ọ̀wọ̀n varieties,the same thing applies to /ɤ/. /v/ is attested in Erushu and Ọ̀wọ̀n, whereas, it is not attested in Arigidi.

The differences in the number of phonemes demonstrated above have given rise to phonological variation in Akokoid. In addition to this, are different phonological processes as a result of different conditioning factors; these arise as a result of tonal variation and nasalisation. We shall demonstrate this shortly. Below, we present the phonological variants and possible phonological processes that occasion them in a table. A detailed explanation of these processes is given below the table.

Table 3: Phonological Variants

Gloss	**Variants**	**Places where they are used**	**Possible processes involved**
'steal'	dèdí	Oge, Aje, Oyin, Igashi	
	dèdʒī	Afa	Palatalization
Swallow	tírɔ̃mi	Udo, Afa, Oyin	
	Tʃírɔ̃mī	Arigidi and Erushu	Palatalization (t > tʃ)
Kolanut	ètò	Erushu	
	ītʃè	Oge, Uro, Aje, Oyin, Igashi	Palatalization (t > tʃ)
seed'	àsō	Erushu	
Gloss	**Variants**	**Places where they are used**	**Possible processes involved**
	àʃē	Arigidi	Palatalization (s > ʃ)
'money'	egó	Arigidi	
	ēvó	Oge, Uro, Igashi	g → v spirantization
	ēwó	Aje, Udo, Oyin	Weakening v → w
'axe'	ɛ̃ŋgɛ̀	Erushu	
	ɛ́ŋɤɛ̀	Oge, Aje, Igashi, Uro	Homorganic Assimilation/Spirantization
	tʃírɔ̃mī	Arigidi and Erushu	
	sírɔ̃mī	Oge, Aje	Spirantization (tʃ > s)
	íkú	Erushu	
	ìfò	Uro	Spirantization k → f
Night	ōdúdɔ̄	Arigidi, Erushu	
	ɔ̄rɔ́dɔ̄	Oge, Aje, Oyin, Igashi, Afa	
	ìrédè	Uro	
	érérì	Udo	
Darkness	ōfīfī	Igashi	
	ōsī́ sī́	Others	Spirantization t > s
Dog	ópó	Others	
	ōfō	Arigidi, Erushu	(i) Spirantization p > f, (ii) Change in tonal pattern HH → MM
Walk	dʒì	Arigidi	
	dʒɛ̄	Erushu	
	ʃɛ̀	Uro	dʒ > ʃ > s spirantization
	sɛ̀	Others	
Sell	tʃā	Oge, Uro, Aje	tʃ > ʃ or s
	ʃā	Afa, Oyin, Udo, Igashi	Weakening/spirantization
	sā	Arigidi, Erushu	
	tʃírɔ̃mī	Arigidi and Erushu	Palatalization (t > tʃ)
Calabash	sírɔ̃mī	Oge, Aje	Spirantization (tʃ > s)
	ékū́	Udo, Arigidi, Igashi	
Abuse	pū́	Udo, Oyin, Afa, Uro	
	pú	Aje, Igashi	Denasalization ũ → u
Saliva	útɛ̄́	Oge, Aje, Udo, Afa, Oyin	Fronting (u → i)
	ítɛ́	Uro	occasioned by alveolar

Gloss	Variants	Places where they are used	Possible processes involved
	ítɛ́	Igashi, Arigidi, Erushu	ɛ̃ → ɛ (Denasalization)
Bone	íkpī̃	Oge, Udo, Afa, Igashi, Erushu	Variation based on vowel change
	ékpī̃	Aje	”
	íkpɛ̄̃	Oyin	”
	íkpī	Igashi, Uro	”
	ékpē	Arigidi	”
Show	gbàgā	Eruṣhu, Oge, Aje, Udo, Afa, Igashi, Uro and Oyin	
	gbàgā̃	Arigidi	Nasality a → ã
Send	n̄dɔ́	Oyin	
	dɔ́	Arigidi, Erushu, Igashi, Uro	Deletion of /d/ or /n/
	nɔ́	Afa, Udo, Oge, Aje	
Two	kējí	Igashi, Uro	
	ìjí	Udo, Oyin, Arigidi, Afa, Erushu, Aje, Oge	Deletion of first consonant
Three	kédā	Igashi	”
	kídā	Uro	Deletion of first consonant e.g. k → ø
	ídā	Udo, Oyin, Arigidi, Erushu, Aje, Oge	
Four	kēnɛ́	Igashi	
	kīnɛ́	Uro	
	ī̄nɛ́	Udo, Oyin, Arigidi, Erushu, Aje, Oge, Afa	Deletion of first consonant k → ø
Five	kétɔ̄	Igashi	
	kíta	Uro	
	ítā̃	Udo, Oyin, Arigidi, Erushu, Aje, Oge, Afa	Deletion of first consonant k → ø
Six	kèfà	Igashi	
	kìfà	Uro	
	ìfà	Udo, Oyin, Arigidi, Erushu, Aje, Oge, Afa	Deletion of first consonant k → ø
Cold	ítù̃tū̃	Oyin	
	tù̃tū̃	Afa, Erushu	Elision/Deletion
	útū̃	Igashi	
	tù̃	Arigidi, Oge, Aje, Udo, uro	
Knee	ígɔ̄	Oge	Partial Reduplication
	ígɔ̄gɔ́	Aje, Udo, Oyin	ígɔ́ → ígɔ̄gɔ́
	gírígɔ́	Igashi	
	ī̄gírígɔ̄	Uro	
Short	kèn̄mgbè	Erushu	Hormoganic Nasal/ Deletion
	èn̄mgbè	Arigidi	
	ègbègbè	Afa	
	gbègbè	Ido, Oyin	
	kègbè	Oge, Aje	
Dry	gō	Arigidi, Oge, Aje	Reduplication
	ī̄gògō	Afa	gō → gògō
	ògōgō	Uro	Insertion of i or o
	úgō	Igashi, Oyin, Udo	
Bone	íkpī̃	Erushu, Oge, Udo, Afa	Variation based on vowel change
	ékpī̃	Aje	”
	ékpē	Arigidi	”
	íkpɛ̄̃	Oyin	”
	íkpī	Igashi, Uro	”

Gloss	Variants	Places where they are used	Possible processes involved
Kill	kpú	Oge, Udo, Afa, Igashi, Uro, Oyin	Variation based on vowel change
	kpó	Erushu, Aje	
	kó	Arigidi	weakening - kp → k
Head	ɪ̄gírī	Oge, Aje, Udo, Afa, Oyin, Igashi	Variation based on vowel change
	ēgírī	Erushu, Arigidi, Uro	”
Mountain	ídì	Afa, Oge, Aje, Udo, Oyin	”
	ídè	Erushu	”
	èdè	Arigidi	”
Think	règō	Uro, Igashi	”
	régɔ̄	Afa, Aje, Udo, Oyin, Oge	”
Tongue	írɛ́̄	Igashi, Oge, Uro, Aje, Erushu	”
	ɛ́rɛ́̄	Arigidi, Afa, Udo, Oyin	”
Navel	íkpɔ̀̄	Oge	”
	ɛ̄kpɔ̀	Erushu	HL → ML
	ɛ̄kpɔ̄̀	Oge	H L → MM
	Ípɔ̄	Uro, Aje, Udo, Oyin	weakening kp → p
	ɪ̄pɔ̄	Igashi	H L → MM
Bee	úwɔ̀	Oyin	
	ūwɔ̀	All others	H L → ML

Discussion on Phonological Processes

As noted above, phonological variations in Akokoid are occasioned by two major factors:

i) differences in the number of phonemes
ii) different phonological processes as a result of different conditioning factors.

The first factor has been demonstrated above. For example, Arigidi has nineteen (19) consonant phonemes, Erushu has twenty (20), while O□wọn has twenty-two (22). The sound /v/ is present in Erushu and in Ọ□wọn, whereas, it is absent in Arigidi. /ɸ/ and /ɤ/ are present in Ọ□wọn, whereas, they are absent in Arigidi and Erushu. This has resulted in phonological variation across the speech forms. The second major factor has to do with how the phonemes are distributed in the lexicon and how they instigate different phonological processes which result in different pronunciations in the speech forms. Assimilation is the most frequent or common of all the processes. It is a phonological process whereby sounds become more similar to each other. In assimilation, there is a sound which causes an adjacent sound to change. The sound which effects the change is called assimilating or conditioning sound while the one that is affected by the change is referred to as the assimilated sound (Yul-Ifode 1999). The assimilated sound becomes more similar to the conditioning sound in the process of assimilation. The word ‘assimilation’ is derived from the root ‘similar’ which could be understood in terms of features. That is, the feature values (phonetic) of the assimilated sound change to that of the conditioning sound.

The phonetic values may affect one, several or all of the features of the sound concerned. A consonant may cause changes in another consonant, a consonant may take on features of a vowel, one vowel may occasion changes on another vowel, etc. Assimilation itself is a natural phonological process. In discussing assimilation, three major factors are considered.

These are:

i) the direction of assimilation
ii) contiguity or proximity of sounds
iii) the extent or degree of assimilation.

Assimilation may follow one direction or another. It may be progressive, regressive, bi-directional or reciprocal. In other words, the assimilated segment may occur before or after the conditioning segment or between two conditioning segments, or the two segments may even effect changes on each other simultaneously. Moreover, assimilation could be partial or total. Some of the assimilatory processes are discussed with examples.

Nasal Assimilation

Yul-Ifode (1999) described nasal assimilation as the commonest type of assimilation. There are two major types of nasal assimilation. One is that in which a nasal consonant becomes homorganic with a following consonant, while the other mainly affects the nasalization of vowels or other oral sonorants.

Homorganic Nasal Assimilation

This kind of assimilation is regressive in nature. In other words it involves the assimilation of a nasal consonant to the feature of place of articulation of a following consonant. That is, in a sequence of a nasal plus another consonant, the nasal consonant takes on the values of all the features of the place of articulation of the following consonant. This assimilatory process is technically referred to as Nasal Homorganicity. It is attested in a large number of African languages, such as Akan, Yorùbá, Kiswahili, Igbo, Edo, Odual, Hausa, etc. (Yul Ifode 1999). Let us look at the following examples from our data in Arigidi-Ọ̀wọ̀n .

'axe'	ɛ́ŋgɛ̀	Erushu
	ɛŋɤɛ	Oge, Aje, Igashi, Uro
'full'	ŋ̄ɤɔ́	Oge, Aje, Udo, Afa, Igashi, Oyin and Uro
'one'	kìŋkā	Uro
'send'	n̄dɔ́	Oyin
'nine'	síndà	Igashi
	índà	Udo, Oyin, Arigidi, Erushu, Aje, Oge and Afa
'short'	kèn͡ŋmgbè	Erushu
	èn͡ŋmgbè	Arigidi

In the above data, the assimilation is regressive in that the nasal segment takes the place of articulation of the following consonant, thus:

$$N \rightarrow \begin{Bmatrix} n \\ ŋ \\ ŋm \end{Bmatrix} / - \begin{Bmatrix} d \\ g \\ gb \end{Bmatrix}$$

The above rule states that the syllabic nasal (N) takes the feature place of articulation of the consonant that follows it. Only three syllabic nasals are attested in all the speech forms. These are the alveolar nasal [n], which comes before alveolar plosive; the velar nasal [ŋ] which comes before velar plosive; and labio-velar nasal [ŋ͡m] which comes before labiovelar plosive.

The assimilation here is regressive because the sound that causes assimilation follows the sound that is assimilated, put the other way round the assimilated sound comes before the assimilating sound. Apart from being regressive or anticipatory, it is partial because it involves only the place of articulation of the following consonant. Finally, it is contiguous because the conditioning and the assimilated sounds are not separated by any other segment.

Nasalisation

This is another type of assimilation which is very common in African languages. It could either be progressive or regressive, depending on the language. In our data, all the speech forms have the following nasal vowels:

	ĩ	ũ
	ɛ̃	ɔ̃
	ã	

Each of these vowels when adjacent to a consonant can cause the consonant which is non-nasal to be nasalised, such consonants are usually approximants, rhotics or spirants. Let us look at the following examples:

'cook'	r̃á	Oge, Udo, Oyin
	r̃ā	Aje, Afa, Igashi and uro
'know'	˜j̃à	in all the speech forms
'defeacate'	j̃ī	(in all the speech forms)
'teeth'	éj̃ì	(in all the speech forms)
'laugh'	w̃ɔ̄	(in all the speech forms)
'nose'	úw̃ɔ̄	(in all the speech forms)
'crocodile'	ɔ́ɲ̃ì	(in all the speech forms)

From the above data, /r/, /j/, /w/ and /l/ become [r̃] [j̃] [w̃] and [n] respectively before nasal vowels. In other words, the nasal vowels (ã, ĩ and ɔ̃) cause the consonants (r, j, w and l) to be nasalized thus becoming (r̃, ɲ, w̃ and n). Let us capture this in a single rule:

$$\begin{bmatrix} -\text{cons} \\ -\text{syll} \end{bmatrix} \rightarrow [+\text{nasal}] \; / \; - \; \begin{bmatrix} +\text{Syll} \\ +\text{nas.} \end{bmatrix}$$

That is all approximants have nasal counterparts which occur before nasal vowels. For example:

(i) /l̰/ → [n]
[l̰]
(ii) /r/ → [r̃]
[r]
(iii) /j/ → [j̃]
[j]
(iv) /w/ → [w̃]
[w]

Variation Based on Vowel Change

There are instances of phonological variation that are based on vowel change. We present some examples below:

	Arigidi	**Erushu**	**Ọwọn**	(a)
‘Body’		edʒe	idʒl̰	
‘Seed’		aʃe	ati/asi	
‘Mountain’		ede/ide	idi	
‘Steal’		de	di	
‘Run’		ʃe (Erushu)	ʃi	

The words above exemplify /l̰/ and /e/ corresponding in stems.

Below we present words involving /u/ and /o/.

	Arigidi/Erushu	**Ọwọn**	(b)
‘Kill’	kó	kpú	
‘Ear’	oto	oto	
‘Eat’	dʒo	dʒu	
‘Fly’	hò	hù	

Initially, we analysed these instances as cases of vowel raising e.g. e > ɪ and o > u. The problem with this analysis is that there are instances where /ɪ/ occurs consistently across the nine speech forms. A look at table (c) below confirms this:

	Arigidi	**Erushu**	**Ọwọn**	(c)
‘Hair	iʃírí	iʃírí	itírí	
‘Teeth’	e̋j̀ì	e̋j̀ì	e̋j̀ì	
‘Grass’	èʃíʃI	isi̋si̋	iʃíʃí	
‘Head’	egi̋rí	egi̋ríigi̋rí		

The same thing applies to /u/ which occurs consistently in the stems of the following words:

	Arigidi	**Erushu**	**Ọwọn**	(d)
‘Eye	ódʒù	ódʒù	ídʒù	
‘Mouth’	őr̃ũ	ò̋r̃ũ	odòru	
‘Smoke’	újù	úwù	ówú	
‘Thread’	orúru	orúru	orúru/òwú	

The implication of this is that historically we see the following correspondences:

Arigidi	**Erushu**	**Ọwọn**	(e)
ɪ	ɪ	ɪ	
e	e	ɪ	
u	u	u	
o	o	u	

That is, there is an /ɪ/ which corresponds to /ɪ/ consistently in all the speech forms and there is other /ɪ/ which corresponds to /ɪ/ in Ọwọn, but to /e/ in Arigidi and Erushu as shown above.

The same thing happens with /u/. There is an /u/ which corresponds to /u/ consistently across the speech forms. there is also the other one which corresponds to /u/ in Ọwọn and to /o/ in Arigidi/Erushu. The summary of what we are saying here is that the parent language could have had two type of /ɪ/ and /u/, and this is what has caused the variation we are dealing with.

Note: We observed a similar situation in the prefixes of some words.

Palatalization

This is a general term which refers to any articulation involving a movement of the front of the tongue towards the hard palate as a secondary articulation; hence, the primary place of articulation is elsewhere in the vocal tract. Thus, movements like t > tʃ, s > ʃ are instances of palatalisation. Below are some of the examples found in our data.

'swallow'	tírɔmĩ	(Ọwọn)
	'tʃirɔmĩ	Arigidi - (Arigidi and Erushu) t > tʃ.
'housefly'	íf̃ĩf̃ĩ	(Ọwọn)
	tʃĩ̀itʃĩ	(Arigidi/Erushu)
	íʃĩ̀ʃĩ	(Arigidi) t > tʃ > ʃ.
'kolanut'	etò	(Erushu)
	ítʃì	(Ọwọn)
	ítʃè	(Ọwọn) t> tʃ.
'salt'	utɛ̃́	(Erushu)
	utʃɛ̃́	(Ọwọn)
	utʃĩ́	(Ọwọn) t > tʃ

In the above examples, we observe the correspondences to t ~tʃ, and s ~ ʃ before front vowels. We assume therefore that in the varieties showing the palatal forms, the environment is the non low front vowels. We can capture the rules as follows:

$$\begin{bmatrix} -\text{cont} \\ +\text{cor} \end{bmatrix} > \begin{bmatrix} -\text{ant} \\ -\text{back} \\ +\text{del.rel} \end{bmatrix} / \_ \begin{bmatrix} +\text{Syll} \\ -\text{bk} \end{bmatrix} \quad \text{(i)}$$

$$\begin{bmatrix} t \\ +\text{cont} \\ +\text{cor} \end{bmatrix} > \begin{bmatrix} tʃ. \\ -\text{ant} \\ -\text{bk} \end{bmatrix} / \_ \begin{bmatrix} +\text{Syll} \\ -\text{bk} \end{bmatrix} \quad \text{(ii)}$$

s > ʃ.

Although, it may be argued that the above are cases of /tʃ/ and /ʃ/ changing to /t/, which are cases of hardening. However, it is more plausible for an alveolar to become palatalized before front vowels than the reverse.

Spirantisation /Frication

Fricatives are otherwise called spirants because of the friction noise generated in the process of producing them. Whenever a stop or an affricate changes to a fricative, the process is described as spirantisation or frication. The process is another case of weakening. Instances of frication are demonstrated as follows in which we have:

g ~ ɣ
t ~ s
tʃ ~ ʃ

As shown in the data below:

'axe'	ɛ́ŋ́gɛ́	(Arigidi-Erushu)
	ɛ́ŋ́ɣɛ̀	(Ọwọn -Oge Aje, Igashi, Uro)
'give birth'	tʃuw̄ɔ̄	(Oge, Igbashi, Uro, Arigidi, Erushu)
	ʃuw̄ɔ̄	(Others)
'swallow'	tírɔmĩ	(Ọwọn-Udo, Afa, Oyin)
	sírɔmĩ	(Ọwọn-Oge and Aje)
'seed'	àti	(Oyin)
àsi	(Ọwọn-Oge, Uro, Aje)	
'hair'	itírí	(Oyin, Afa)
iʃírí	(Arigidi and Erushu)	
'women'	étʃI	(Oyin)
` `	éʃI	(Afa, Udo)

In the above examples /g/, tʃ/ and /t/ in Arigidi/Erushu correspond to [ɣ], [ʃ] and [s] respectively on Ọwọn. We believe that the development is from the stops to fricatives. That is, we see it as a weakening process. Although, here again, it may be argued that the opposite is the case, namely, that we are dealing with hardening i.e. ɣ, ʃ, s > g, tʃ and t respectively. The position we are taking here is that the process is a weakening one which is a more common process in sound change.

Another weakening process exemplified in our data is the change from a fricative to an approximant. Let us look at the data below:

'smoke'	úvú	(Igashi)
	úwú	(Uro, Erushu)
	ówú	(Oge, Aje, Udo, Oyin, Afa)
	újù	(Arigidi)
'money'	ēgó	(Oge, Uro, Igashi)
	ēvó	(Afa)
	ēwó	(Aje, Udo, Oyin)
'come'	vā	(others)
	wā	(Arigidi)
'go'	vè	(others)
	wè	(Arigidi)

As shown above, /v/ changes to either of [w] or [j]. This is a perfect example of weakening. One of our informants in Erushu, Prince Oluwaseun Durogbitan, aged 28 and a graduate of Polytechnic Ibadan, said that /v/ is gradually being lost in Erushu. According to him, the youths and children substitute /w/ for /v/.

Simplification/Weakening

This process takes place when a complex segment is simplified or weakened. We have some examples of this in our data. Let us examine the following:

'navel'	íkpɔ̄	(Oge)
	ípɔ̄	(Uro, Aje, Udo, Oyin)
	ῑpɔ̄	(Igashi)
	kp → p	
'kill'	kpú	(Oge, Udo, Afa, Igashi, Uro, Oyin)
	kpó	(Erushu, Aje)
	kó	(Arigidi)
	kp → k	
'cassava'	ɔ́gbɔ́rɔ́dɔ́	(Uro)
	ògòròlò	(others)
	gb → g, d → l	
	ɔ → o (raising)	

In the above examples, /kp/ and /gb/ which are doubly articulated segments are simplified or weakened to /p/, /k/ and /g/ respectively. These are instances of simplification or weakening.

Here again, it is possible to posit hardening since the opposite of weakening is hardening. This will imply that what we present as derivations will be selected as the base forms. Examples:

p → kp
k → kp
g → gb

However, we analysed them as cases of weakeing since it is more phonologically plausible for plosive to undergo weakening in an intervocalic environment then vice versa.

Change in Tonal Pattern

In our data, we observe some words in which there is a change in tonal patterns from one speech form to the other. Such changes result in phonological variation. Let us examine some examples below:

'fat'	úhɛ̄	(Oge, Aje, Udo, Oyin, Igashi and Afa)
	ùhɛ̄	(Uro)
	HM → LL	
'bee'	úwɔ́	(Oyin)
	ūwɔ́	(others)
	HL → ML	
'divide'	má	(Oge, Udo, Igashi and Oyin)
	mā	(others)
	H → M	
'earth'	ítʃā	(Erushu, Oge, Aje, Udo, Afa, Uro)
	ῑtʃá	(Igashi)
	ῑtʃā	(Oyin, Arigidi)
	HM → MH → MM	

'market' ádʒá		(Oge, Aje, Udo, Oyin, Uro)
	ādʒá	(Afa)
	ádʒā	(others)
	HH → MH → HM	
Catch	ɦū̄	(Others)
	ɦū́	(Oge, Aje, Uro)
	M → H	
Navel	ī̱pɔ̄	(Igashi)
	ɛkpɔ̀	(Erushu)
	íkpɔ̀	(Oge)
	MM → ML → HL	
Cow	àrɔ̄gɔ̀	(Arigidi and Erushu)
	āràgɔ̀	(Uro and Udo)
	àràgɔ	(Afa and Oge)
	LML → MLL → LLL	

In the data above, we can see that phonological variation is instigated by a change in the tonal patterns such as:

HM → LL
HL → ML
H → L
HM → MH → MM
HH → MH → HM

H - stands for High tone,
L stands for low tone and
M stands for Mid tone. All these are phonological variants.

Concluding Remarks

As observed above, Arigidi, Ọ̀wọ̀n and Erushu have nineteen (19), twenty-two (22) and twenty (20) phonemic consonants respectively. The differences in the number of consonant phonemes as demonstrated above have consequently resulted in phonological variation in the speech forms. In addition to this, these phonemes are distributed differently in the lexicon to further occasion different phonological processes which eventually led to different pronunciations in the speech forms. However, in terms of vowels and tones, the speech forms are identical, though, these vowels are selected in different ways and the tones are manipulated in various ways to further occasion phonological variation in the speech forms.

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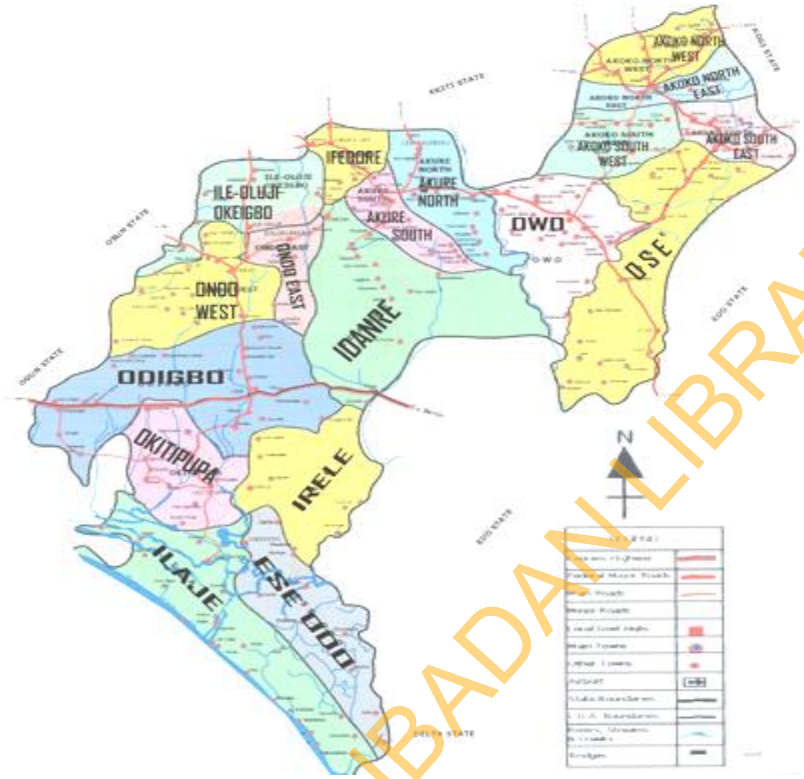
Appendix

Maps



Map of Ondo State

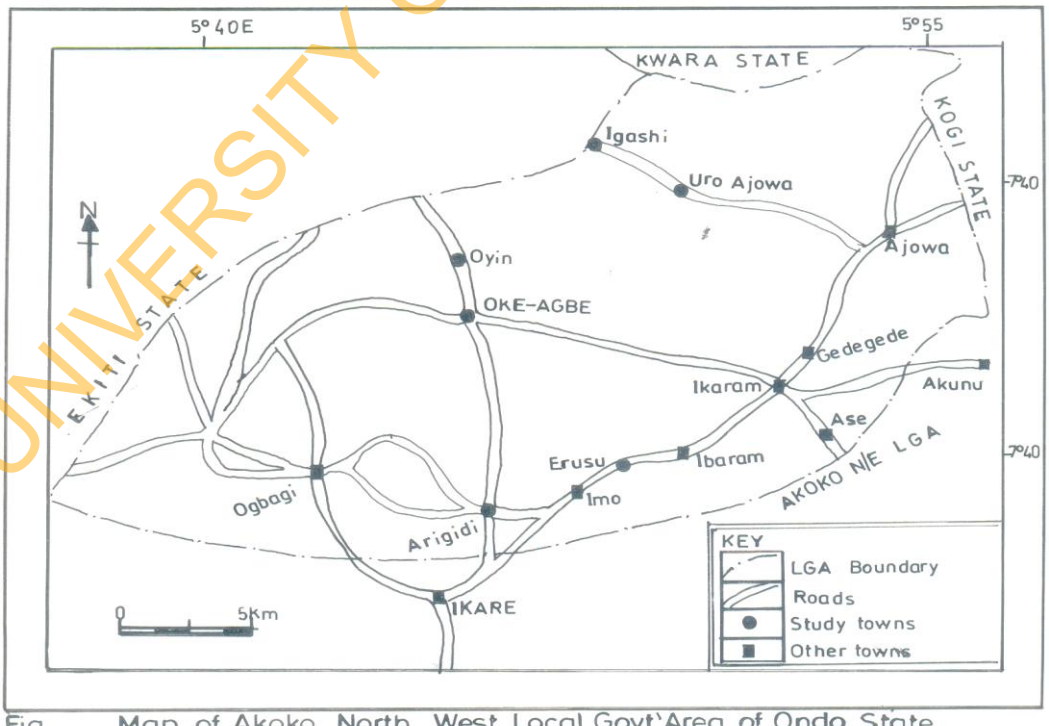


Fig Map of Akoko North West Local Govt Area of Ondo State Showing the Study towns.

Map of Akokoland

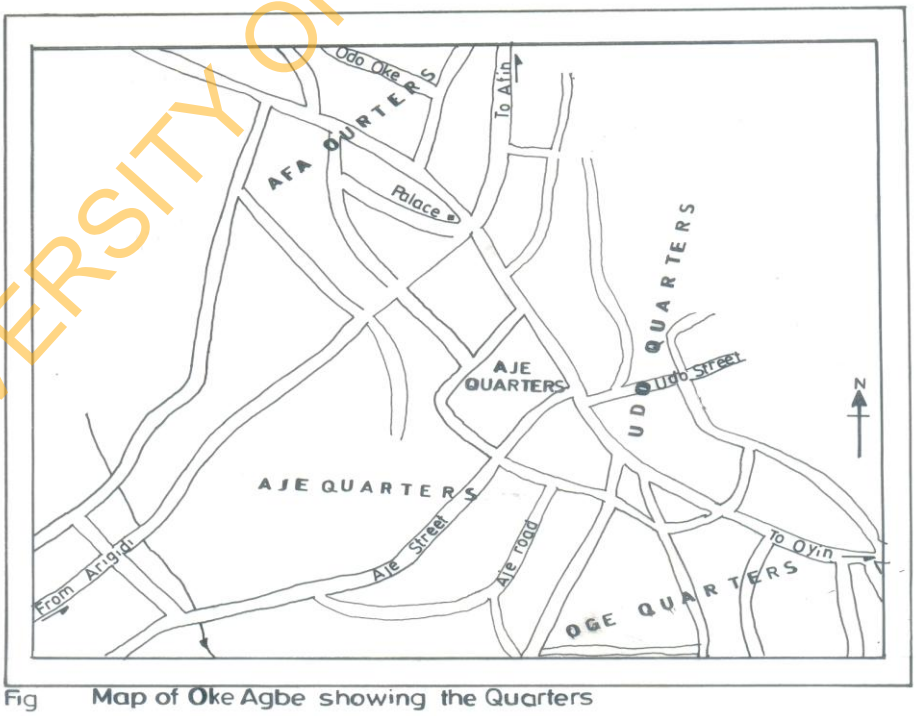


Fig Map of Oke Agbe showing the Quarters