The Status of the Vowel [A] In Dholuo: A Phonological Look at the Vowel In Terms Of [ATR] Value.

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Abstract: Scholars who have studied Dholuo phonology seem not to agree on the number of vowels the language has. This disagreement arises from the contested status of the vowel [a] with respect to its [ATR] value. Some of the scholars argue that this vowel has a [+ATR] (Advanced Tongue Root) and a [-ATR] (Retracted Tongue Root) realizations while others argue that it is a neutral vowel. As such the former maintain that the language is a ten vowel-language with the latter asserting that it is a nine-vowel language. It is against this backdrop that this paper seeks to make some contribution to the debate with a view to reducing or eliminating altogether, the doubt on the position of this vowel.

Keywords: ATR value, Dholuo vowel, KSN and BU dialects, Neutral Vowel, Vowel Harmony, Vowel Raising.

I. Introduction

According to Dupre, C.E (1968) [1] and also Greenberg, J (1963) [2] Dholuo is a Nilotic language spoken by the Luo people of east Africa, mainly in Kenya and Tanzania. The language, according to Oduol, J.H.A. (1990) [3] among other scholars, has two mutually intelligible dialects namely the Boro-Ukwala (BU) and the Kisumu-South Nyanza (KSN) dialects. The former is spoken in the current Siaya County and the latter in the current Kisumu, Homabay and Migori counties of Kenya and it spreads to the Luo regions of Tanzania. Given its spread and the great population of speakers, the KSN dialect is considered the standard dialect. Genealogically, it is grouped together with languages like Acoli, Lango, Alur, Padhola, Dinka, Shilluk, among others under the Western Nilotic branch of the Nilotic group.

Dholuo is a vowel harmony language. Harmony, according to Katamba, F. (1989) [4] and corroborated by Goldsmith, J (1990) [5], is a phonological assimilation in which vowels in a word agree in one or more features like height, being back or front, round or spread. In Dholuo this harmony is realized in terms of the tongue root feature, [±ATR].

A lot of controversy surrounds the status of the vowel [a]. Some scholars argue that this vowel has a [+ATR] harmony counterpart while others believe that it is neutral. It is on this account that this paper seeks to establish whether this vowel is a neutral vowel or has a harmony counterpart. In this endeavour, we will look at views of both groups of scholars and also consider corpuses of words containing this vowel so that we can arrive at a convincing conclusion if possible.

We provide an adapted IPA chart of Dholuo consonants to help readers pronounce words used in this paper.

Manner	Sto	ps	Fricatives	Lateral	Trill	Glides	Nasals	Pre - nasal
Place								stops
Bilabial	р	b				w	m	mb
Labiodental			f					
Dental			θð					nð
Alveolar	t	d	S	1	r		n	nd
Palatal	с	ł				j	ր	րյ
Velar	k	g					ŋ	Ŋg
Glottal			h					

Adapted from Ladforged, P. (1982) [6]

NB: Voiceles stops and fricatives are plaed to the right while their voiced counterparts appear to the left of the grid. The rest of the sounds are naturally voiced.

The Vowel [a] as a Non-neutral Vowel

The view that Dholuo vowel [a] has a harmony counterpart is held by those people who classify the language as a ten- vowel language. As a result, they divide the vowels in terms of their [ATR] values into two sets thus:

	[+ATR]		[-ATR]	
Ι		u	Ι	σ
e		0	3	э
	а			a

Adapted from Clark, J. and C. Yallop (1995) [7]

Proponents of this view include Tucker (1994) [8], Casali (2003) [8] and Omondi (1982) [10]. Tucker worked extensively on Dholuo grammar and seems convinced that the language has ten vowels: Luo (like Alur, Acoli, Ateso and Maasai) has ten vowel sounds, which can be divided into two Categories – Open and Close (Tucker 1994:15).

It should be understood that by Open, Tucker means what we refer to herein as [-ATR] while by Close he means [+ATR]. Casali (2003) and Omondi (1982) support Tucker's position. Casali also quotes Tucker and Bryan (1957) and Hall, et. al. (1974) as also being of the opinion that the language is a ten-vowel system language. Although they do not at all discuss or try to defend this position, Tucker (1994) goes ahead to give examples from the language to support this claim. In her view, which is also held by people who agree with her, the fact that this vowel appears in environments where it is neighboured by [+ATR] vowels suggests possibilities of it being [+ATR]. Such instances are listed by Tucker (1994:25) as:

Example 1	
gari / gare	'vehicle'
kitabu	'book'
ciajo	'domestic animal'
ngato	'sandal'
miriambo	'falsehood'
milambo	'south'
bawo	'earthen bowl'

However, Tucker (1994) seems to run into some problems as concerns the nature of this vowel when we look at its behaviour when [-ATR] suffixes are attached to it. Tucker herself has the following examples:

gari /gare	'vehicle'	gaca	'my vehicle'
kitabu	'book'	kItαpε	'his book'
bawo	'timber'	bapwa	'our timber'
ciajo	'domestic animal'	cIac-gI	'their animal'

From this data Tucker (1994:25) observes:

The only regular change of this kind is to be found when a centralized stem vowel -a- in a Free Form commutes to peripheral $-\alpha$ - in its Bound Form...

By 'regular change,' Tucker (1994) is referring to what can be termed 'reverse- vowel harmony' in which a [-ATR] vowel influences a [+ATR] neighbouring vowel to become a [-ATR] vowel. It should be noted that harmony spreads from [+ATR] to [-ATR] and not the reverse.

She goes ahead trying to resolve this dilemma but still encounters problems when she says:

...the fact that stems in - a - cannot exist without a close vowel suffix causes one to wonder whether -a - itself is not under suffix umlaut influence, and that -a - is restored when the suffix is removed.... The only drawback to such a solution lies in the fact that close /e/ and /o/ have not yet been found as recognizable suffixes in other contexts.

As a result of the foregoing observations, we cannot conclude that there exists a [+ATR] vowel [a]. There are still other cases where the vowel still appears suspicious. One such instance is evident in the BU dialect. In this dialect, roots containing the vowel tend to harmonize with [+ATR] plural suffixes:

Example 2

ра

ma

ka

The examples next page show occurrence of /a/ with the plural suffix /-e/

Noun	plural (BU)	(KSN)	gloss
maro	mar-e	mer-e	'mother-in-law'
lando	land-e	lend-e	'light-skinned(feminine)'
kwaro	kwar-e	kwer-e	'grandfathers'
sIlwal	silwand-e	silwend-e	'light-skinned(masculine)'
dajo	daj-e	dej-e	'grandmother'
wat	wad-e	wed-e	'relative'
bam	bamb-e	bemb-e	'thigh'
pap	paw-e	pew-e	'field'
ogwaŋ	ogwaŋg-e	ogweŋg-e	'mongoose'
əgwal	ogwand-e	ogwend-e	'toad/ frog'

B. Below are examples of the same phoneme and the plural suffix /-ni/:

pac-o

mac-o

kac-o

NOUN	(BU)	(KSN)		gloss
pala	pal-ni / pand-e	pelni/pe	end-e	'knife'
lwanda	lwand-ni	lwend-ni	'rock'	
Jwala	Jwal-ni	Jwel-ni		'plastic/polythene'
paka	pak-ni	pek-ni		'cat'
mbala	mbal-ni	mbel-n	i	'scar'
əhala	ohal-ni	ohel-ni		'trade'
ramakI	ramak-ni	ramek-	ni	'tongs'
ətanda	otand-ni	otend-ni	'bed'	
naŋga	naŋg-ni	neŋg-ni	l	'clothes'
C. These show /a/ occurri	ng with the verbal-noun su	ffix /-o/		
Verb root	verbal noun (BU)	(KSN)	gloss	
twaŋ	twaŋ-o	twen-o	'sewing'	
kwal	kwal-o	kwel-o	'stealing'	
cand	cand-o	cend-o	'troublesomeness	s'
mað	maθ-o	meθ-o	'drinking'	
waŋ	waŋ-o	weŋ-o	'burning'	
bar	bar-o	ber-o	'splitting/ dissect	ting'

The BU dialect case presents us with a situation worth investigating. We need to find out whether this vowel is transparent or it presents a [+ATR] feature. Transparency refers to a situation where a neutral vowel allows the spread of a given ATR value as though it was non-existent in a word.

pec-o

mec-o

kec-o

'carving'

'biting'

'robbing/ grabbing'

We prefer to argue in favour of the former position. This stand is motivated by the fact that the suffixes given in the three sets above /-e/, /-ni/ and/-o/ are inherently [+ATR] and their influence can be seen in the KSN dialect examples where the following change in the vowel is realized in the three sets of examples:

/a/ becomes /e/ when [+ATR] suffixes /-ni/, /-e/ and /-o/ are attached to a root containing it.

As argued in Were, G (2007) [11], this is a clear case of vowel raising or shift where [a], a low vowel has been raised to [e], a mid-high vowel. One can't help concluding that this raising or shift is occasioned by the fact that there is need for harmony since the suffixes are inherently [+ATR] while the root vowel [a] lacks a [+ATR] harmony counterpart. Consequently, there is raising or shift to [e] which is the closest [+ATR] vowel to fill this gap. (Look at the vowel chart given on page 10) Adhiambo (1981:51) [12] argues that the change of /a/ in the roots when the plural affixes are added could be accounted for in two ways. It could be as a result of vowel harmony, in which case there could be a distinction in terms of vowel harmony categorization between a [+ATR] /a/ and a [-ATR]/a/. It could also be seen as a morphologically conditioned change which is independent of vowel harmony. To support this position, she quotes Stewart and Van Leynseele (1971) , who say that 'vowels of specified phonological categories can survive as underlying phonemes and continue to support an underlying Cross Height Vowel Harmony process even when they have been completely lost on the surface.'

Adhiambo (1981:121) suggests the likelihood of /a/ being underlyingly [-ATR]. Her argument lends more credence to our claim that [a] undergoes a raising process from a low vowel to a mid-high [+ATR] vowel /e/:

That this underlying [-ATR] /a/ should change to [e] and not to a [+ATR] [a] could be attributed to the lack of distinction between [+ATR] /a/ and [-ATR] /a/ on the surface.

Though Casali (2003:37-38), classifies Dholuo as a ten-vowel language, he gives us some characteristics of the vowel [a] in nine-vowel system languages that seem to shed light on this area:

.../a/ does not function as a genuinely [+ATR] vowel in the language; it is still clearly a [-ATR] vowel in a number of respects:

- It is phonetically [-ATR]; for example, it has the voice quality characteristics of other [-ATR] vowels.
- Roots containing only /a/ take [-ATR] rather than [+ATR] forms of harmonizing affixes.

What Casali(2003) asserts here can be attested to using the examples below. In these sets of examples we shall use affixes that harmonize according to the [ATR] value of the root-vowel to show how this vowel behaves. We therefore need to compare it with other roots that contain [+ATR] vowels:

Example 3

A. infinitive suffix /-o/ or /-ɔ/	
cam-o	'to eat'
kwal-o	'to steal'
paj-o	'to carve'
bɛt-ɔ	'to slash'
mer-o	'to make drunk'
ger-o	'to build'
ter-o	'to convey'
kel-o	'to bring'
neg-o	'to kill'
bII-ə	'to taste'
kIr-ə	'to spray'
dIj-o	'to press'
kij-o	'to waylay'
ðir-o	'to push'
winj-o	'to hear/ listen'
dəj-ə	'to weed'
bəj-ə	'to pacify'
goj-o	'to beat'
gol-o	'to remove'
bor-o	'to bleed(e.g. bleed a cow)'
gor-o	'to draw'
mor-o	'to warm'
tor-o	'to break'
cul-o	'to pay'
mul-o	'to touch'
θul-o	'to lift'
gur-o	'to nail/ drive, e.g. a peg into ground

In the examples above, we have given both [+ATR] and [-ATR] qualities for each vowel. It will be realized that the vowel /a/ is the only vowel in Dholuo that lacks the [+ATR] suffix /-o/. This confirms Casali's assertion that roots containing only /a/ take [-ATR] rather than [+ATR] forms of harmonizing affixes.

B. The adjective forming suffix /nI/ or /ni/ can	also be used to support this assertion:
mat-nI	'to make a confused noise, as of a crowd'
bag-nI	'being undecided'
daŋ-nI	'wandering aimlessly'
cap-nI	'unsettled
bab-nI	'to be impatient
Jaj-nI	'to shake with anger'

C. Finally, we can use the reflexive suffix /-r ϵ / or /-re/ to justify this claim further: cando-r ϵ 'suffering' kalo-r ϵ 'passable'

camo-re	'edible'
galɔ-rɛ	'idle'
pako-re	'praising himself'

In these last two sets of examples we have not included the other vowels. We assume that the examples given in set A above will suffice to exemplify what we are discussing here. However, the two sets we have above, just like set A, also show that /a/ takes only the suffixes with [-ATR]. Here we have /-nI/ and /-rɛ/ for set B and set C respectively. We can therefore safely conclude that Casali's observation on nine-vowel languages, cited above, is true of Dholuo. Otherwise, if this vowel had a [+ATR] counterpart as the BU case may lead us to conclude, we would have had segments containing this vowel that take the optional [+ATR] suffixes /-o, -ni and -e/, just like the other vowels given in our examples above do.

Although they don't subject the vowel [a] to the kind of examination as we have done here, several other scholars are convinced that this vowel is neutral in Dholuo making the language a nine-vowel language. They include Okombo (1982) [13], Oduol (1990) and Oduor (2002) [14], among others. With regards to this position, our vowels would be arranged as shown next page.

[+ATR]		[-ATR]		
Ι	u	Ι		σ
e	0	3		э
			а	

Adapted from Clark, J. and C. Yallop (1995)

In our arrangement above, the vowel [a] is placed in the group of [-ATR] vowels because, as discussed before in this paper, neutral vowels inherently display [-ATR] characteristics. For example, in Dholuo, it naturally picks [-ATR] affixes where choices between $[\pm ATR]$ affixes are involved.

II. Summary And Conclusion

The subject of this paper was the controversial status of the vowel [a]. It was dedicated to the attempt to establish the true status of this vowel. In this endeavour, we have briefly discussed the controversy surrounding this vowel and also looked at the arguments that have been advanced by each of the two groups that treat this vowel as a neutral vowel on the one hand and those who view it as a vowel with both [+ATR] and [-ATR] features on the other. In our discussion we have looked at the behaviour of this vowel vis-à-vis those of the others when both inherently [+ATR] affixes such as /-ni, -o and -e/ as well as the optional harmony affixes such as the infinitive suffix/-o/ and /-o/ or the reflexive /-rɛ/ and /-re/ are attached to them. Such an environment acts as an uninfluenced environment in which the true nature of the vowel can be investigated.

We have also looked at the exceptional case of the vowel in the BU dialect when the inherently [+ATR] suffixes given above are attached to it. In summary, we can report that our finding is that this vowel is a neutral one in Dholuo, and like other neutral vowels, it is underlyingly [-ATR]. In the case of the BU dialect, it behaves like a transparent vowel as explained by Casali (2003). However, we suggest that more studies on the BU dialect can shed the necessary light on this matter.

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