Submission for Approved Status of Orthography

ALTERATION AND ADDITION TO

TENTATIVE PHONOLOGY OF KWANGA (1979)

by

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These section heading numbers refer back to the Tentative Phonology of Kwanga.

0. INTRODUCTION

This paper is the alteration and addition to Tentative Phonology of Kwanga (Manabe, 1979). Stress, interpretation, description of vowels and distribution of vowels are discussed more in detail in section 4, 6.2, 6.3, 6.4 respectively in this paper. And two more morphophonemic changes are added in section 8.5.

We conducted the trial literacy classes for 23 weeks from October, 1980 through March, 1981. Three students who were illiterate before, became literate both in Kwanga and in Tok Pisin. This substantial result seems to indicate the appropriateness of our proposed orthography.

We wish to express our appreciation to our colleague, Les Bruce (presently serving as DATS) for his consulting help, especially in the analyses of labialized contoids and vowels.

4. PHONOLOGICAL WORD

A phonological word (hereafter, P-word) is marked by a primary stress (ˈ). Primary stress occurs on the first syllable of P-words. If the first syllable of P-words is V, then the second syllable can be nearly as prominent as the first one. In addition to this, if the P-word which begins with a V syllable consists of two or three syllables, then the primary stress can occur on the second syllable. (These examples are W_1 & W_3)

In reduplicated and compound P-words a secondary stress (ˌ) occurs on the first syllable of the second root. In simple P-words a secondary stress tends to occur on the third syllable.

The following are some examples of P-words ;

W_1	aˈni	'I'
W_2	'ahiraha꜀	'food'
W_3	iˈkisa꜀	'sunfly'
W_4	'kindaʊ	'to plant'
W_5	'miyaˌ꜀ɔ	'many'
W_6	'kaha꜀ˌtšɛ	'sister'
W_7	'himiˌyama	'woman'
W_8	'a꜀tšɛˌ꜀ʊnda꜀	'quick'
W_9	'huwɔriˌhawɔri	'be unsteady in one's steps'

* The heavy stress (ˈˈ) which occurs only with a rising pitch is a distinctive feature seen in the higher levels than the P-word level.

5.2 Contrastive Syllable Type 1 - V(V)

V(V) syllables occur as the first syllable of P-words, either singly or in combination with CV(V) syllables. VV syllables which are immediately followed by one to three CV syllables have been observed. On the other hand, V syllables can be followed by as many as six CV or CVV syllables. (V syllable which occurs in the final syllable of P-word ~~would~~ will be discussed in ~~the~~ Section 6.2.2b.)

5.3 Contrastive Syllable Type 2 - CV(V)

CVV syllables occur in the final syllable or the penultimate syllable of P-word. Up to four (C)V syllables preceding the CVV syllable have been observed, There is an optional CV or V syllable following it.

CV syllables are the most predominant type and occur in any position within P-words. P-words containing from one to seven CV syllables have been observed.

* The examples of type 1 and type 2 are same.

(C)VV syllables are postulated rather than (C)V.V syllables which have vowel sequences across syllable boundaries,

because of

1. their one mora timing which is same as (C)V syllables.
2. the result from the psycholinguistic test

(see Section 6.2.2.a 3&4)

6.2 Interpretation

6.2.1 Interpretation of non-syllabic vocoid

Non-syllabic vocoids (y) and (w) are interpreted as consonants because they occur in consonant positions in CV(V) syllables. But vocoids (i) and (u) which immediately follow vowels are interpreted as vowels because no VC or CVC pattern in Kwanga has been observed.

/kuya/	('kʊ.ʲa)	'mushroom'
/yeda/	('ʲɛ.nda)	'to hit'
/yapai/	('ʲa.paɪ)	'father'
/wate/	('ʷa.tɛ)	'bread fruit'
/kowe/	('kɔ.ʷɛ)	'net bag'
/waiche/	('ʷaɪ.tšɛ)	'small flying fox'

6.2.2 Interpretation of vocoid clusters

The following vocoid clusters occur:

Group A: ai, ei, oi, ui, au, ou, / eu, iu, uu

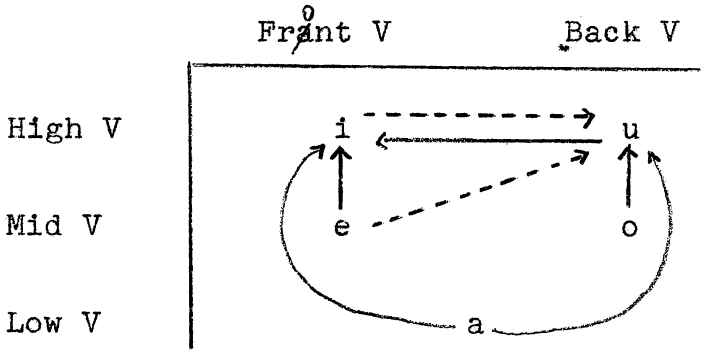
Group B: ai.u, ei.u, au.u, ou.u

Occurrence of the period in Group B indicates a sequence of vocoids with a timing of two moras. Absence of the period indicates a sequence with a timing of one mora. Non-syllabic vocoids which occur as pre-nuclear syllable margins are interpreted as consonants in Section 6.2.1. Thus none of the vocoid clusters in this section contain non-syllabic vocoids in onset

slots of CV(V) syllables.

6.2.2.a Group A

These vocoid clusters form the nucleus of a syllable of one mora timing, and one stress value occurs over the whole cluster. The first member of a complex nucleus is seldom /i/, its second member is either /i/ or /u/. These combinations may be seen in the following diagram:



NOTE: The sequence /eu/, /iu/ and /uu/ occur less frequently than the others, so the combination /eu/ and /iu/ are shown by broken lines.

The sequence /eu/, /iu/ and /uu/ could be found only with the verbal emphatic suffix /-u/. When the final syllable of the verb stem is CV, then CVu syllable occurs by adding this verbal suffix /-u/. By this suffix not only the sequence /eu/, /iu/ and /uu/ can occur but also /au/ and /ou/ which are common in

P-words can occur in the final syllables. Examples of these vocoid clusters containing verbal suffix /-u/ follow:

/eu/	/eripeu/	(ˈɛɾipɛʊ)	'to rejoice'
	/biseu/	(ˈbisɛʊ)	'to boil strongly'
/iu/	/litiu/	(ˈlitɪʊ)	'to sit down'
	/iu/	(ˈiʊ)	'to go'
/uu/	/raruu/	(ˈraɾʊʊ)	'to enter'
	/mekuu/	(ˈmɛkʊʊ)	'to show'
/au/	/dau/	(ˈdaʊ)	'to stay'
	/ichakau/	(ˈitʃakaʊ)	'to cry'
/ou/	/torou/	(ˈtɔɾɔʊ)	'to take'
	/yokou/	(ˈjɔkɔʊ)	'to wash'

Examples of the vocoid clusters in Group A without containing verbal suffix /-u/ follow:

/ai/	/aika/	(ˈaɪka)	'shadow'
	/gaina/	(ˈgaɪna)	'to disappear'
	/bakitai/	(ˈbakitaɪ)	'near'
/ei/	/ei/	(ˈɛɪ)	'yes'
	/atei/	(ˈatɛɪ)	'grandparent'
	/juwei/	(ˈdʒʊᵚɛɪ)	'to surround'
/oi/	/namoi/	(ˈnamɔɪ)	'whoes'
	/wohoi/	(ˈᵚɔhɔɪ)	'to bloom off'
	/bologoi/	(ˈbalɔngɔɪ)	'crooked'
/ui/	/nui/	(ˈnʊɪ)	'our'
	/kui/	(ˈkʊɪ)	'your'

	/wuichi/	(ʷʊɪ̯tʂ̌i)	'to blow up'
/au/	/au/	(ˈaʊ)	'hot'
	/ausuwa/	(ˈaʊ̯sʊ̯.ʷa)	'wind'
	/asau/	(aˈ̯saʊ)	'ball'
/ou/	/apou/	(aˈ̯pɔʊ)	'a kind of bird'
	/humou/	(ˈhʊ̯mɔʊ)	'a kind of tree'
	/yogou/	(ʲˈɔ̯ŋgɔʊ)	'to suspend'

These vocoid clusters in Group A could be interpreted in three ways:

1. as vowel-consonant sequences, VC.
2. as one syllable nucleus (glides), V^{V}
3. as complex syllable nuclei, VV
4. as vowel sequences across syllable boundaries, V.V

1. These voclid clusters could be interpreted as vowel plus /y/ or vowel plus /w/. However there are no other closed syllables like VC or CVC in Kwanga, and no word medial consonant clusters. Therfore we prefer not to interpret these as vowel-consonant sequences.

2. These vocoid clusters could be interpreted as one syllable nucleus (glides). However the one stress value occurs over the whole cluster and neither vocoid of the cluster is generally more dominant than the other. /i/ and /u/ as second members of these vocoid clusters are regarded as strong as /i/ and /u/ in CV or V syllables. By this interpretation only CV and V syllables would be set up, but nine more vowel phonemes have to be added to the five single vowels. Therefore we prefer not to interpret

these as one syllable nucleus.

3&4. These vocoid clusters could be interpreted as complex syllable nuclei. By the psycholinguistic testing (see Gudschinsky.19 :126-35), these vocoid clusters could not be interpreted as nuclei of separate syllables. When the words containing these vocoid clusters or pronounced slowly syllable by syllable, only the second members of these vocoid clusters are pronounced with longer timing, and not the first members. This supports that these vocoid clusters do not occur across syllable boundaries, but occur within one syllable. Also the one mora timing and the occurrence of stress over the whole cluster support that these vocoid cluster should be interpreted as complex syllable nuclei within a syllable. By this interpretation the following syllable types would be set up; V, VV, CV, CVV. And the five simple vowels could fill in these vowel slots to explain all these vocoid clusters and no need to set up more vowel phonemes.

6.2.2.b Group B

These vocoid clusters can only occur by adding verbal emphatic suffix /-u/ to verb stems which end with vocoid clusters. The five vocoid clusters /ai/ /ei/ /oi/ /au/ and /ou/ have been observed as the final syllable complex nuclei of the verb stems. Examples of the vocoid clusters in Group B follow:

/ai/	/kaiu/	(ˈkaɪ̯ʊ)	'to write'
	/rasaiu/	(ˈraʂaɪ̯ʊ)	'to bring up'
/ei/	/eiu/	(ˈɛɪ̯ʊ)	'to harvest'
	/heiu/	(ˈhɛɪ̯ʊ)	'to look'

/oi/	/so'oiu/	(ˈsɔ̥ʔɔɪ̯ʊ̯)	'to wear'
	/wohoiu/	(ˈʷɔ̥hɔɪ̯ʊ̯)	'to bloom off'
/au/	/rauu/	(ˈraʊ̯ʊ̯)	'to climb up'
	/rakauu/	(ˈrak̚aʊ̯ʊ̯)	'to bring up'
/ou/	/yogouu/	(ˈʲɔ̥ŋgɔʊ̯ʊ̯)	'to suspend'

These vocoid clusters in Group B could be interpreted in three ways:

1. as vowel-consonant-vowel sequences across syllable boundaries, V.CV
2. as three vowel sequences within a syllable, VVV
3. as three vowel sequences across syllable boundaries, VV.V

1. It is not possible in Kwanga to have a non-suspect sequence of three vowels within a single syllable. When the vocoid cluster /auu/ and /ouu/ occur in environments other than the verbal ending, the central element of these sequences has been interpreted as consonant /w/ as follows:

(aʷu) --→ /awu/ gloss

(naʔambaʷuru) /na'abawuru/ 'a kind of bird'

(oʷu) --→ /owu/ gloss

However no /Vyu/ combination has been observed for /aiu/ /eiu/ and /oiu/. Only vowels /a, i, e, o/ have been observed after consonant /y/, and not the vowel /u/.

When these verb stems are pronounced by ~~inself~~ themselves without the

verbal suffix /-u/, the final vocoid clusters of the verb stems have not been interpreted as vowel-consonant sequences but as complex syllable nuclei VV in (Section 6.2.2.a.) Kwanga literates spell these vocoid clusters as three vowels, which makes the spelling of the verb stems constant, even when the verbal suffix /-u/ follows after them. Therefore we prefer not to interpret these vocoid clusters as vowel-consonant-vowel sequences across syllable boundaries.

2. Although these vocoid clusters could have two mora timing, the last two vocoids of /auu/ and /ouu/ could act as one lengthend vowel /u:/ which rhythmically make one unit. Also in section 6.2.2.a, verbal suffix /-u/ has been interpreted as the final vowel of the complex syllable nuclei and not as the separate syllable nucleus by itself. However it is not possible in Kwanga to have a non-suspect sequence of three vowels within a P-word. If we set up the new syllable type VVV or CVVV, some non-syllabic vocoid which have been interpreted as consonants in section 6.2.1 could be interpreted as vowels also. Following are some examples of these.

/kuya/	~	/kuia/	'mashroom'
/halaya/	~	/halaia/	'clean'
/anaye/	~	/anaie/	'to fight each other'
/akowe/	~	/akoue/	'stomach'
/sawe/	~	/saue/	'to say'

Because of the strong preference of Kwanga literates in spelling these non-syllabic vocoid as consonant /y/ or /w/ rather than

as vowel /i/ or /u/, the sequences above are interpreted phonemically as vowel-consonant-vowel. So we should not admit (C)VVV syllable type which leads some ambiguity with the interpretation of non-syllabic vocoid. Therefore we prefer not to interpret these vocoid clusters as three vowel sequences within a syllable.

3. Since these vocoid clusters have two mora timing, these could be interpreted as three vowel sequences across syllable boundaries. By this interpretation the four syllable types (C)V, (C)VV which have been set up in Section 6.2.2.a could be kept and there is no need to set up another syllable type. In Section 5.2 both V and VV syllables are described to occur as the first syllable of P-words. But by this interpretation V syllable can occur also in the final syllable of the P-words following CVV syllable. This does not lead any ambiguity with the interpretation of other segments.

6.2.3 Interpretation of prenasalized stops

The sequences of stop preceded by homorganic nasal, (mb), (nd), (ndž), and (ŋg) occur word medially, and have the voiceless allophones (mp), (nt), (ntš) and (ŋk) respectively. Phonetically the homorganic nasal corresponds in time to a full phoneme, but the phonetic sequences of nasal and stop are interpreted as units.

Because,

a) There are no non-suspect consonant clusters within the syllable, and the nasal is always homorganic with the stop and is never syllabic.

b) Prenasalized stops lose the homorganic nasal when they occur P-word initially. This means that the prenasalization is a predictable phonetic feature, and not phonological.

c) Some Kwanga people who are already literate in Tok Pisin sometimes spell these prenasalized stops without homorganic nasal, although in Tok Pisin nasals are always spelled. This is a confirmation that for them the prenasalized stop is just one psychological unit.

6.2.4 Interpretation of labialized contoids

Labialized contoids (p^w) (k^w) (mb^w) ($ŋg^w$) ($ɸ^w$) and (m^w) can occur before the vowel /a/, /e/ or the vowel cluster /ai/, /au/, /ei/, /eu/. These examples are as follow:

/mwa/	('m^wa)	'rain'
/mwai/	('m^waɪ)	'shore'
/apwe/	('ap^{w}e)	'bird'
/ɔkwai/	('ɔk^{w}aɪ)	'next'
/fwele/	('ɸ^{w}eleɛ)	'some'
/habwa/	('hamb^{w}a)	'knowledge'

These labialized contoids C^{w}V(V) could be interpreted in three ways,

a. as consonant-consonant /w/ sequences, CCV(V)

b. as consonant-vowel /u/ sequences, CuVV

c. as labialized consonants, C^{w}V(V)

a. Interpretation as CCV(V) sequences would introduce

CC clusters and there are no nonsuspicious ones in Kwanga.

In Kwoma which is a member of the same Nukuma language family as Kwanga, the labialized contoids were interpreted as two phonemes i.e. CC clusters in the beginning analysis (Kooyers, Orneal and Martha Kooyers, 1961. 1963). However this interpretation was changed later as single complex consonantal phonemes (Kooyers, Orneal, Martha Kooyers and Darlene Bee, 1971). And they mentioned the reason for their change as follows.

> The adoption of a unit interpretation of complex consonantal sequences results in much greater over-all simplicity. Syllable structure, phoneme distribution and word formation can be described with less complexity and greater symmetry than would be possible with an interpretation postulationg consonant clusters. The greater economy of statement minimizes the expanse of increasing the phoneme inventory.

A Similar statement can be made to Kwanga, too. If we interpret these labialized contoids as CC clusters, we can reduce six phonemes from the consonant chart. However, additional CCV and CCVV syllable types would need to be set up. If this is the case, the second consonant slot of these syllables is filled only by /w/, which would lead to less symmetry and more complexity in phoneme distribution.

Not only in Kwoma but also in Abulas, Boikin, and Manambu which are the members of Ndu language family, the labialized contoids are interpreted as single complex consonantal phonemes. Ndu language family and Nukuma language family (i.e. Kwanga and Kwoma) are related, being classified as the same member

of Middle Sepik Stock according to Laycock (1973). The above discussion seems to support that labialized contoids should not be interpreted as CC clusters in Kwanga.

b) Interpretation as CuV(V) sequences would introduce CVVV syllable and there are none in Kwanga. (see the discussion about VVV in Section 6.2.2.b).

c) Interpretation as labialized consonants (single unit) is chosen. Because,

1. It is only legitimate to consider that labialized contoids in the following examples fill only one phoneme slot rather than two phoneme slots.

/kwini/ ~ /kuni/	('kʷɨ.ni) ~ ('ku.ni) 'to grow thick'
/tukwiya/ ~ /tukuya/	('tʊ.kʷɨ.ˈa) ~ ('tʊ.kʊ.ˈa) 'to sleep'
/apwetoko/ ~ /apotoko/	('a.pʷe.tɔkɔ) ~ ('a.pɔ.tɔ.kɔ) 'hen'
/kwohopwe/ ~ /kuhopwe/	('kʷɔ.hɔ.pʷe) ~ ('kʊ.hɔ.pʷe) 'you get married'
/kwo'owe/ ~ /ku'owe/	('kʷɔ.ʔo.ᵘe) ~ ('ku.ʔo.ᵘe) 'you put'

nothing missing ?

only (kw) has been observed before vowel /i/ or /o/. And because Kwanga literates spell (kʷɨ) and (kʷɔ) as ku, the labialized consonants have been written only before vowel /a/ or /e/ in Kwanga orthography. /kʷo/ occurs only as a phonemic realization of the subjective personal pronoun prefix /ku-/ in a morphophonemic change preceding /o/ or /ho/. (see Chart 8-3.b in Manabe 1979)

The above five examples look very much like a back, high,

rounded, semivowel (i.e. w) is interacting with

1) front vowels to produce a back rounded vowel, (ʊ) or (ɔ) in first three examples

and 2) non-high back vowel to produce a high vowel, (ʊ) in last two examples.

Eunice V. Pike describes the vowel systems of the Sepik River basin as follows. (1964)

> The predominant conditioning factors are palatalized or labialized consonants. Although there are differences between languages, as a general rule, front close vocoids occur preceding /y/, front open vocoids occur following /y/, back close rounded vocoids occur preceding /w/ and labialized consonants, back open vocoids occur following /w/ and labialized consonants.

As Eunice V. Pike described, in Yessan-Mayo, high closed central unrounded vowel /ɨ/ has allophone (ʊ) when it occurs following /w/ and labialized consonants. As labialized consonants, only /k^w/ and /ng^w/ exist.

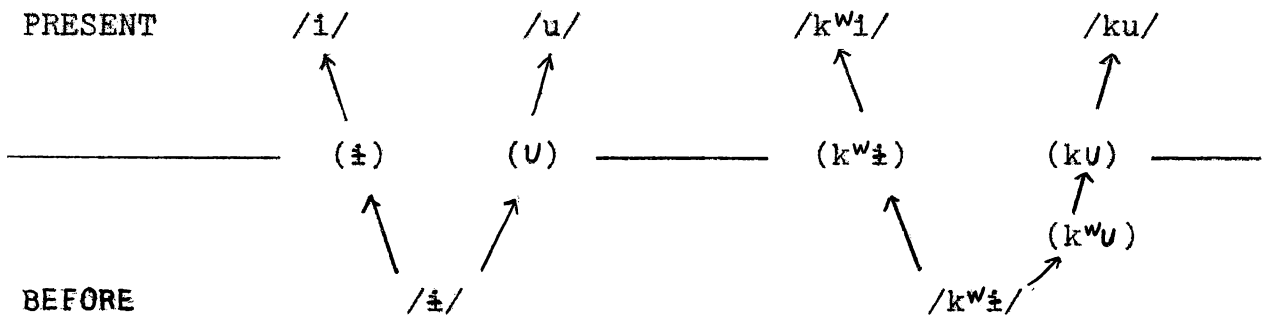
(examples)

/k^wɨntɨ/	('k^wʊnti)	'boil soup'
/^{m}bʌwtk^{w}ɨ/	('^{m}bʊwtk^{w}ʊ)	'to kill'

(Foreman, Vilma and Helen Marten, 1973)

We can notice some similality in our first two examples to these Yessan-Mayo's examples. The labialized consonant /k^w/ occurs with the high central vocoid (ɨ). From this insight, we may be able to postulate that traditionaly in Kwanga, too, there was a high closed central vowel /ɨ/, and this phoneme had allophones of (ɨ) and (ʊ). However historically these

two allophones were begun to be understood as two phonemes /i/ and /u/ in Kwanga. This can be a plausible explanation of the free variation of /kwi/ and /ku/.



2. The formal writing test by the school students indicates that the fairly good students prefer to write the labialized consonant for the sequence. The group tested was a class of 21 students standard 4 at Yupanakor Primary shool. They were

already been taught how to write vowels and consonant stops in Kwanga. And they did syllable exercises before they were given the writing test for labialized contoid which they were not taught. For the writing test, three pairs of words in which (p^w) contrasts in identical environment were given as follow.

1. /ape/ 'to stick'
   /apwe/ 'bird'
2. /kapa/ 'copper'
   /kapwa/ 'bad'
3. /tapa/ 'hand'
   /tapwa/ 'daytime'

The results

10 out of 21 students could write those three words /ape/ /kapa/ and /tapa/ without any mis-spelling. The 10 students who could write consonant stops and vowels correctly, wrote (p^w) as follow:

4 students: wrote labialized consonant-vowel sequence, /pwV/
1 student: wrote /upV/
1 student: wrote /poV/
1 student: wrote /pi/
1 student: wrote /pu/
1student: wrote /bV/
1 student: wrote at random

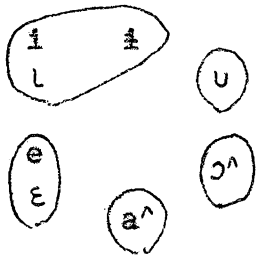
These four students who wrote labialized consonant-vowel sequences /pwV/, are fairly able to write with the Tok Pisin orthography. Other six students who added vowel /u/ or /o/, or changed consonant stop voiceness, or vowel quality, could recognize the contrast

in these pairs. But we can not get the certain idea for orthography from these six students' paper as they are all different. However four students'papers indicates that they recognized these sequences not as consonant-vowel /u/ but as the labialized consonants, or consonants plus /w/.

3. Our seven language assistants who finished the standard 6 or high school, always write these sequences as the labialized consonants from the begining. Also three students who went through the trial literacy class could handle the labialized consonants without any difficulties.

6.3.2 Description of Vowels

6.3.2.1 Workchart



6.3.2.2 Description

/i/

(i) high close front unrounded vocoid, occurring word initially, medially and finally.

(ɩ) high open front unrounded vocoid, tends to occur as an occasional non-contrastive variation of (i), when following vowels and alveolar and palatal consonants

(i) high close central unrounded vocoid, tends to occur as an occasional non-contrastive variation of (i) when following velar consonants.

/hi/	(ˈhi̱)	'fire'
/nipi/	(ˈni̱pi)	'ripe'
/apai/	(ˈa̱pai̱)	'elder brother'

/e/

(ɛ) mid open front unrounded vocoid, occurring word initially, medially and finally

(e) mid close front unrounded vocoid, occurring as an occasional non-contrastive variation of (ɛ) when following labialized consonants

/ei/	(ˈɛi̱)	'yes'
/me/	(ˈmɛ̱)	'tree'
/apwe/	(ˈa̱pʷe)	'bird'
/seke/	(ˈsɛ̱kɛ)	'leg'

/a/ (aˆ) low open central unrounded vocoid, occurring word initially, medially and finally

/ahai/	(a̱ˈhai̱)	'mine'
/aika/	(ˈai̱ka)	'shadow'
/asama/	(ˈa̱sa̱ma)	'year'
/fuda/	(ˈp̶u̱nda)	'one'

/o/ (ɔˆ) mid open back rounded vocoid, occurring word initially, medially and finally

/okwe/	(ˈɔ˧kʷe)	'sore'
/noko/	(ˈnɔ˧kɔ)	'female animal'
/lopo/	(ˈlɔ˧pɔ)	'banana'
/owogo/	(ˈɔ˧ʷɔ˧ŋgɔ)	'mosquite'

/u/

(ʊ) high open back rounded vocoid, occurring word initially, medially and finally

/nunu/	(ˈnʊ˧nʊ)	'we'
/uku/	(ʊˈkʊ)	'water'
/nubo/	(ˈnʊ˧mbɔ)	'road'

6.4.2 Distribution of vowels in the syllables

All the vowels can occur in the nucleus of V and CV syllables. The vowel clusters which occur in CVV syllables are: /ai/, /au/, /ei/, /ou/, /ui/, /oi/, /eu/, /iu/, /uu/. Among these the first three listed: /ai/, /au/ and /ei/ can occur also in vv syllables. The vowel cluster /ai/ occurs most frequently, then /au/ and /ei/ follow in frequency. The vowel clusters /ou/, /ui/, /oi/, /eu/, /iu/ and /uu/ occur much less. The order of frequency of the vowel cluster ~~occurances~~ is shown by the following formula:

/ai/	>	/au/	>	/ei/	>>	/ou/	>	/ui/	>	/oi/	>	/eu/,	/iu/,	/uu/
1		2		3		4		4		4		4	4	4

The low or the mid vowels preceding the high vowels are the most common combination of the vowel clusters. The following chart indicates this tendency clearly.

			H		M		L
		V_2	F	B	F	B	
V_1			i	u	e	o	a
H	F	i		4			
	B	u	4	4			
M	F	e	3	4			
	B	o	4	4			
L		a	1	2			

H: high vowel

M: mid vowel

L: low vowel

F: front vowel

B: back vowel

V_1: vowels preceding

V_2: vowels following

numbers: the frequency orders of the vowel clusters

8.5 Other Morphophonemic Changes

(adding two more examples)

2nd person imperative word ma, and sentence particle-emphasis ya have some morphophonemic changes. When ma is immediately followed by the vowel /e/ or the phoneme cluster /he/, then ma changes into me. When ya is immediately followed by the

vowel /e/ or the phoneme cluster /ho/, then ya changes into yo. The following are some examples of these two.

ma (2nd person imperative word)

me ete ha	'give them all!'
me hei	'look!'
ma i	'go!'
ma a	'eat!'
ma owe	'put it!'
ma ucha	'call!'

ya (sentence particle-emphasis)

yo oku	'to shine'
yo horukwe	'to play'
ya i	'to go'
ya a	'to eat'
ya ei	'to dig'
ya ucha	'to call'

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