

Organised Phonology Data

Bukawa Language [BUK] Morobe Province

Oceanic; *North New Guinea Cluster*; North Huon Gulf Chain

Population census: 10,000

Major villages: Bukawa, Buakap, Mundala, Ugilim, Yambo, Busong, Buengim, Ulugidu, Tigedu, Buhalu, Busu, Aluki, Apo, Tikeleng, Butibam, Busamang

Linguistic work done by: SIL, LBT (began work 1989)

Data checked by: Eckermann, December 2000

Phonemic and Orthographic Inventory

/ɑ b ^mb b^w ^mb^w d ⁿd d^w e ɪ g ŋg g^w ŋg^w h i k ^ŋk k^w ^ŋk^w
 <a b mb bw mbw d nd dw e ê g ŋg gw ŋgw h I k ŋk kw ŋkw
 <A B Mb Bw Mbw D Nd Dw E Ê G ŋg Gw - H I K ŋk Kw -
 l ɭ m ^m n ŋ o u ø p ^mp p^w ^mp^w s t ⁿt u w w̥ j j ʔ/
 l lh m mw n ŋ o ô ö p mp pw mpw s t nt u w wh y yh c>
 L Lh M Mw N ŋ O Ô Ö P - Pw Mpw S T - U W Wh Y Yh (C)>

Consonants

| | Bilab | LabDen | Dental | Alveo | Postalv | Retro | Palatal | Velar | Uvular | Pharyn | Glottal |
|-------------------|-------|--------|--------|-------|---------|-------|---------|-------|--------|--------|---------|
| Plosive | p b | | t d | | | | | k g | | | ʔ |
| Nasal | m | | n | | | | | ŋ | | | |
| Trill | | | | | | | | | | | |
| Tap/Flap | | | | | | | | | | | |
| Fricative | | | | s | | | | | | | h |
| Lateral Fricative | | | | | | | | | | | |
| Approx | | | | | | | j j | | | | |
| Lateral Approx | | | l ɭ | | | | | | | | |
| Ejective Stop | | | | | | | | | | | |
| Implos | | | | | | | | | | | |

/^mp/ voiceless prenasalised bilabial plosive

/p^w/ voiceless labialised bilabial plosive

/^mp^w/ voiceless prenasalised labialised bilabial plosive

/^mb/ voiced prenasalised bilabial plosive

/b^w/ voiced labialised bilabialised plosive

/^mb^w/ voiced prenasalised labialised bilabial plosive

/m^w/ voiced labialised bilabial nasal

/ʰt/ voiceless prenasalised alveolar plosive

/ʰd/ voiced prenasalised alveolar plosive

/d^w/ voiced labialised alveolar plosive

/ʰk/ voiceless prenasalised velar plosive

/ʰg/ voiced prenasalised velar plosive

/k^w/ voiceless labialised velar plosive

/g^w/ voiced labialised velar plosive

/ʰk^w/ voiceless prenasalised labialised velar plosive

/ʰg^w/ voiced prenasalised labialised velar plosive

/w/ voiced labio-velar approximate

/w̥/ voiceless labio-velar approximate

| | | | | | |
|----------------|--------|-------------------|-----------------------------|--------|------------------|
| p | pupu | ‘termite’ | - | | |
| | apa | ‘adzed plank’ | | | |
| | pap | ‘goanna’ | | | |
| | | | ^m p ^w | mpwêŋ | ‘tree sp.’ |
| b | buc | ‘betel nut’ | | êmpwêŋ | ‘to cuddle (IR)’ |
| | abaŋ | ‘my/our ancestor’ | | -- | |
| | yob | ‘to care for’ | ^m b ^w | mbwêc | ‘call out’ |
| ^m p | - | | | dômbwê | ‘(his) back’ |
| | êmpiŋ | ‘to praise (IR)’ | | -- | |
| | - | | m | ma | ‘and’ |
| | | | | damaŋ | ‘my/our father’ |
| ^m b | mbu | ‘wind’ | | nom | ‘ground’ |
| | amba | ‘hand/arm’ | | | |
| | - | | m ^w | mweŋ | ‘you-sg come’ |
| | | | | dômwêŋ | ‘your back’ |
| p ^w | pwac | ‘agreement’ | | -- | |
| | ŋapwê | ‘its top part’ | | | |
| | - | | t | taŋ | ‘cry’ |
| | | | | tata | ‘star’ |
| b ^w | bwalec | ‘wrongly’ | | -- | |
| | ôbwêc | ‘night’ | | | |

| | | | | | |
|----------------|--------|-------------------|---|--------|---------------|
| d | dac | 'blood' | | akwa | 'old' |
| | dedec | 'baby/newborn' | | -- | |
| | -- | | | | |
| | | | g | gaŋgac | 'sand/gravel' |
| ⁿ t | -- | | | ŋagec | 'a little' |
| | tanti | 'we-inc run' | | -- | |
| | -- | | | | |
| ⁿ d | nduc | 'island' | | | |
| | dinda | 'mother' | | | |
| | -- | | | | |
| d ^w | dweŋ | 'river diversion' | | | |
| | -- | | | | |
| | -- | | | | |
| n | nawhê | '(his) wife' | | | |
| | dinam | 'your mother' | | | |
| | -- | | | | |
| s | sôm | 'say' | | | |
| | asa | 'who' | | | |
| | -- | | | | |
| l | lac | 'sail (boat)' | | | |
| | galuc | 'crab' | | | |
| | — | | | | |
| l̥ | lhac | 'stand' | | | |
| | galhac | 'I stood' | | | |
| | -- | | | | |
| j | yac | 'we' | | | |
| | yeyec | 'black' | | | |
| | -- | | | | |
| ʔ | -- | | | | |
| | kecu | 'vine sp.' | | | |
| | ac | 'sun' | | | |
| | | | | | |
| k | kuku | 'round' | | | |
| | aka | 'legspan' | | | |
| | -- | | | | |
| | | | | | |
| k ^w | kwê | 'build' | | | |

Suprasegmentals (tone, stress, length)**a) Tone**

Tonal contrast is evident between high and low tones, and this is (where necessary) marked by acute or grave accents over the vowels. In multisyllabic words the critical tone distinction is normally on the final syllable.

In the Yabêm language, tone follows the voicing or non-voicing of associated stops. However, the Bukawa system of tone does not follow such rules.

Examples of minimal pairs with contrastive tone:

| | | | |
|------|-----------------------|------|-----------|
| akwá | ‘canoe, side support’ | akwà | ‘old’ |
| atú | ‘son, baby’ | atù | ‘big’ |
| mbác | ‘bird, flying group’ | mbàc | ‘to rub’ |
| wê | ‘song’ | wê` | ‘to lead’ |

The Bukawa devoiced semivowels have no counterpart in Yabêm – there we find that contrast in tone distinguishes the meaning, whereas in Bukawa the devoiced counterpart usually still bears high tone. Examples:

| | | | | | | | |
|------|-----|------|------------|----|------|------|---------|
| Yab: | awê | (HT) | ‘open(ly)’ | // | awê` | (LT) | ‘woman’ |
| Buk: | awê | (HT) | ‘onen(ly)’ | // | awhê | (HT) | ‘woman’ |

Hence it does not appear that the tonal difference in Yabêm is catered for in Bukawa simply by devoicing the semivowels.

The glottal stop in Bukawa usually has a high tone preceding it. This may also be linked with stress. But again there are exceptions, as can be seen from the list of examples above.

In some cases an imperative mood of the verb is signalled by a high tone, eg:

| | |
|------------|----------------------|
| tanôm mbúc | ‘close your eye!’ |
| tanôm mbùc | ‘your eye is closed’ |

In terms of a working orthography, it seems only necessary to mark tone on minimal pairs of words of the same word class, or where confusion could possibly result. Context and different word classes in many cases reduce the need to mark tone. EG:

| | |
|-------|--|
| dínáŋ | (HT) is a noun meaning ‘my mother’ |
| dínàŋ | (LT) is a demonstrative meaning ‘that’ |
| atú | (HT) is noun meaning ‘son, baby’ |
| atù | (LT) is an adjective meaning ‘big’ |

Writing either of these without tone marking is unlikely to cause confusion. Even with minimal pairs or words of the same word class which are contrasted only by tone, contextual factors such as co-occurring adverbs may obviate the need to mark tone. For example with the following verbs:

| | | | |
|------------|--------------|-------------|----------------|
| kôm | (HT) ‘cover’ | kô`m | (LT) ‘make/do’ |
|------------|--------------|-------------|----------------|

The former verb commonly co-occurs with adverbs such as *ahuc* ‘enclosingly’ or *si* ‘downwardly’. These do not occur with the latter verb, so in context the meaning would be clear apart from the marking of the tone.

b) Stress

Stress is not phonemic – much of the language is monosyllabic anyway. In general, the final syllable is stressed, with these provisos:

- i) Dialect variation: Although only brief word lists have been taken in other dialects, there seems to be a tendency for stress on the first syllable in the Eastern dialects.
- ii) Suffixed or compound words: The stress is normally retained on the final syllable before suffixation, e.g. the postpositional clitic *ŋga* ‘of/for’ is very common. When added to a word, stress does not pass through it.

tu di'naŋ + ŋga ----> tu di'naŋ-ŋga 'because of that'
 for that PPclitic

a'maŋ + daŋ ----> a'maŋdaŋ 'five (Lit. little hand)'
 hand.1POS a/one

dô 'mbwê + ŋakwa ----> dô 'mbwêkwa 'spine, backbone'
 behind.part GenPF.bone

iii) Emphasis. Exclamations often are stressed on the first syllable

na'whê 'wife'
 'nawhê '(call or summons to) wife'

c) Intonation

Bukawa intonation patterns are not unlike English, generally falling at the end of statements of fact, rising at the end of questions or hesitant questions.

d) Vowel length

Vowel length is only a 'decorative' feature of the language.

abôm 'large' cf. áábôm for emphasis

The conjunction *e* which carries a continuative aspect is very often lengthened which in a sense heightens and helps to demonstrate its meaning:

sêsa gwêc si sêmbo eee ŋasec sa
 3P.go.out sea 3SR.go 3S.stay CONT++ darkness up/out
 'They went out to sea and stayed (there) until darkness came.'

Syllable Patterns

| | | | |
|------|------------------------|--------------------------------|---|
| V | a 'tree' | a.tu 'big' | di.nda.i 'mothers' |
| VV | aô 'I, me' | | |
| CV | pi 'go up' | ya.ŋga.leŋ 'tree sp.' | a.bô.ŋgac 'grandpa' sê.sa 'they go out' |
| VC | ac 'sun' | têc.am.piŋ 'hornbill' | |
| VVC | aôŋ 'agreement' | | |
| CVV | lau 'people' | | kê.sau 'he deceived' |
| CVC | bêc 'day' | soc.ŋgwe.leŋ 'frog sp.' | a.maŋ.daŋ 'five' ŋam.som 'meat' |
| CVVC | giam 'dog' | | |

Conventions: Phonological

As the velar plosive /k/ never occurs word or syllable finally, and the glottal stop /ʔ/ never occurs word or syllable initially, it would be possible to posit these as allophones of one phoneme. However, as syllable breaks are not marked orthographically, there would be some ambiguity.

| | | |
|---------|--------------|--------------------|
| [kɪ.ku] | <kêku> | ‘to follow (R)’ |
| [keʔ.u] | <(wac) kecu> | ‘a vine (wac) sp.’ |

Conventions: Orthographic

The 23 letter practical orthography as proposed for the Bukawa language has been intentionally modeled on the orthography used for the Yabêm language. The spelling system departs from Yabêm in that labialisation is represented in Bukawa by means of <w> whereas in Yabêm it is represented by a back vowel which corresponds in height to that of the following vowel (either <u, û, or o>) as well as <w> - four different symbols.

The proposed orthography uses the grapheme <c> for the /ʔ/ as a separate phoneme, especially as the older generations familiar with Yabêm are familiar with such representation.

The use of <h> with the <l, w and y> for the voiceless sounds.

Transcription of part of a recorded passage

/muŋŋga lau andu siʔ miŋ daŋ tɪŋ aø bu aʔi daŋ lu nakweŋ sɪndøʔ malaʔ daŋ. iŋlu tawasi, ma iŋ aʔi dau dai. ma bɪʔ daŋ iŋ bu mbo ʊm. kɪsɪlɪŋ mbo e balɪkoʔ tuŋ iŋ. ma iŋ bu mbu sa malaʔ meŋ, magoʔ akɪŋ malaʔ tibaliŋ su. boʔdinaŋ sip saleŋ gi kuʔ balɪkoʔ yɪʔ kɪʔsuwa ŋaseŋ./

<Muŋ-ŋga lau andô sic miŋ daŋ tɛŋ aø bu awhê daŋ lu nakweŋ sêndöc malac daŋ. Iŋlu tawasê, ma iŋ awhê dau daê. Ma bêc daŋ iŋ bu mbo ôm. Kêselêŋ mbo e balêkoc tuŋ iŋ. Ma iŋ bu mbu sa malac meŋ, magoc akêŋ malac tibaliŋ su. Bocdinaŋ sip saleŋ gi kôc balêkoc yêc kêcsôwa ŋaseŋ.>

“Before, the ancestors told me a story thus: A woman and (her) husband lived in a village. They were alone, and the woman was pregnant. And one day she wanted to go to the garden. (As) she was walking, she felt birth pains. And she wanted to return to the village, but it was a long way away. So she went into the bush and had the baby on a cassowary track. ...”

Bibliography

Dunstan, Peter and Val Dunstan, 1974. A tentative phonemic statement of the Bukawa language. Unpublished manuscript, SIL Ukarumpa.

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