

# BALANGAO PHONEMES

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1. Word.
2. Syllable.
3. Phoneme:
  - 3.1 Interpretation of questionable items and sequences
  - 3.2 Contrasts and variations of consonants
  - 3.3 Contrasts and variations of vowels
  - 3.4 Accent.

## 1. PHONOLOGICAL WORD

A Balango word is one or more syllables occurring between pauses.

Within words, allophonic variations occur which do not occur across word boundaries. The phoneme *l* has two allophones, [r] and [l]. Word initially only the [l] allophone occurs. Word medially between non-front vowels, only the [r] allophone occurs. In the following examples both [l] and [r] occur between non-front vowels: in the first example a word boundary separates [l] from the preceding vowel, and in the second example there is no word boundary.

[qa'tšina lay'tšin]<sup>1</sup> 'neg-he like', 'He doesn't like it.'  
[qa'ram hen 'farat] 'get-you the banana', 'You get the banana.'

All words are distributed in the larger units of phrases, clauses, and/or sentences.

## 2. SYLLABLE

A syllable consists of an obligatory onset and peak with an optional coda.<sup>2</sup> The onset and coda are filled by consonants and the peak is filled by a vowel. The consonants (C) and the vowels (V) occur in two basic syllable patterns, CV and CVC. 'qaho 'dog', lu'wang 'carabao'. Consonants *w*, *y* occurring as a syllable onset are lenis following a vowel of the same quality occurring as a syllable peak *u*, *i*.

bu'wɔ 'betel nut', qabuni'yɔn 'creator'.

Consonant clusters are formed word medially by a closed syllable preceding another syllable. When the final consonant of the first syllable is velar and the initial consonant of the second syllable is non-velar, open transition occurs between the two syllables.

qimig'yat 'to be afraid'; 'bokbok'kal 'round'.

Certain restrictions govern syllable formation: neither *i* and *y* nor *u* and *w* co-occur in the same syllable. Two types of morphophonemic change take place to avoid these formations:

(1) Normal vowel loss does not occur upon affixation.  
bi'yal + -in > \*biy'lin > biyΔ'lin 'goiter'.

(2) *i* becomes *e* upon prefixation of *qi-*. (*q* becoming *y* is a morphophonemic change) qi'yab + qi- > \*qiyi'yab > qiye'yab 'to fan'. Another restriction is that sequences *ey* and *ow* do not occur in the same syllable.

Syllables are distributed in the larger units of words.

### 3. PHONEME

There are 22 phonemes in Balangao. Consonants are *p*, *t*, *k*, *q* (glottal stop), *b*, *d*, *g*, *h*, *m*, *n*, *ng*, *s*, *l*, *w*, *y*. Vowels are *i*, *e*, *ɨ*, *ɪ*, *a*, *u*, *o*. Word accent is also a phonemic feature of the dialect.

#### 3.1 Interpretation of questionable items and sequences.

The high vocoids [i] and [u] are interpreted as: (1) vowels *i* and *u* when they occur as syllable peaks; and (2) consonants *y* and *w* when they occur as syllable onset or coda, thus fitting the two basic non-suspect CV patterns.

dit'qal 'floor', du'mang 'other side', 'yato 'this', la'weng 'bad', hay'duq 'fish net', 'tongaw 'to stay home'.

High vocoids [i] and [u] occurring as syllable onsets are lenis and, in fast speech, phonetically not detectable when following a peak vocoid of the same quality. [si'<sup>1</sup>Δm] 'nine', [tsu'<sup>u</sup>Δ] 'two'. The sequences [-i.i-] and [-u.u-] are interpreted as *i.y* and *u.w* (period indicates syllable boundaries) to fit the non-suspect CV patterns. Further evidence in support of this interpretation is seen when morphophonemic changes cause the peak vocoid in question to drop. The onset vocoid is then clearly distinguished. In the following example the morphophonemic change is reduplication of the first syllable and the dropping of the vowel of the resulting second syllable. [si-] plus [si'<sup>1</sup>Δm] becomes [sis'yΔm] 'nine each'.

The high vocoid [ü] is interpreted as consonant *y* since it occurs only in the coda position of a syllable following the high vowel *u*. Vocoid [i] never occurs in this position. 'babuy 'pig'.

The sequences [k<sup>h</sup>] and [tš] occur in single C slots and are interpreted as single phonemes to fit the non-suspect CV patterns. ['k<sup>h</sup>ipan] 'small knife', [tšu'mang] 'other side'.

All consonants may carry length. They are interpreted as two phonemes to fit the non-suspect CV patterns, and occur only word medially between two peaks, forming the coda for one syllable and the onset for the next syllable. Long consonants contrast with non-lengthened consonants. (See section 3.2.)

All vowels may carry length and are interpreted as a geminate cluster. Therefore, a new syllable pattern is interpreted at this point in which the syllable onset becomes optional; V and VC patterns may occur. Geminate clusters contrast with single vowels (see section 3.3).

**3.2 Contrasts and variations of consonants.** Bilabial consonants *b*, *p*, *w* contrast as follows in syllable initial and syllable final positions: 'baqaw 'corn', 'paqaw 'handle', 'waqah 'tomorrow'; 'halab 'to burn', 'qalaw 'a tree', 'qolap 'night blindness'.

The alveolar consonants *t*, *d*, *l*, *s*, *y*, and velar *h* contrast as follows in syllable initial and syllable final positions: 'talo 'to hide', 'dala 'blood', 'lana 'oil', sa'bun 'soap', 'yasa 'nevermind', 'halep 'dance'; ha'ngat 'lunch', ba'ngad 'to return', ba'ngal 'beads', pa'ngas 'naughtiness', teg'qangay 'nearly', 'langah 'camote vine'.

The velar consonants *k*, *g*, *h*, *q* contrast as follows in syllable initial position: 'kahoy 'a root', 'gahal 'sand', 'halep 'dance', 'qalin 'be affected'. They contrast with each other and with the absence of a consonant as follows in syllable final position: 'tokak 'frog', to'kag 'monkey', qas'sekaq 'filth', 'qagah 'medicine', 'baka 'cow'.

The nasal consonants *m*, *n*, *ng* contrast as follows in syllable initial and syllable final positions: loma'yaw 'to leave', tena'lem 'your bracelet', tonga'lan 'to put the bone'; qa'mam 'your father', la'man 'flesh', du'mang 'other side'.

Long consonants contrast with short consonants as follows: *p* and *pp* qa'poq 'my grandfather', qap'poq 'rice bran'; *t* and *tt* qu'ten 'body organ', qut'teng 'baby'; *k* and *kk* qe'kan 'fish', qok'kon 'puppy'; *q* and *qq* ha'qin 'I',

qihAQ'qAN 'one'; b and bb qi'big 'a name', qib big 'bed'; d and dd qo'daw 'to beg', had'dAN 'wait for'; g and gg qibΛ'gAN 'to tell', qag'gAM 'sleeping house'; w and ww qadi'wiy 'far', qadΛ'wiy 'a name'; y and yy ka'bayu 'horse', ka'bayyu 'type of betel nut'; l and ll 'bulig 'to carry', 'billig 'a barrio'; s and ss ko'sa 'cat', qis'sA 'to eat'; h and hh bΛ'hug 'full', luh'hub 'shoe'; m and mm loma'yAW 'he goes', lomma'yAW 'he went'; n and nn qi'naq 'my mother', qin'naq 'no'; ng and ngng bo'ngat 'to bite', beng ngat 'has bitten'.

Consonants consist of two series of stops, a series of nasals, a set of semivowels, a set of fricatives, and a lateral.

The stops in one series are unaspirated, voiceless, and when occurring syllable final, are normally unreleased. They occur at the bilabial, front alveolar, back velar, and glottal points of articulation. p pa'dug 'seedbed', 'qolap 'night blindness'; t to'kag 'monkey', 'balat 'banana'; k ka'sole 'bird', 'qutak 'brain'; q 'qalo 'pestle', ma taq 'my eye'.

The second series of stops has two sets of allophones, voiced and voiceless. The voiced allophones occur at the bilabial, alveolar, and velar points of articulation. These stops occur only as syllable coda. The voiceless allophones occur as a labiodental fricative, an alveopalatal grooved affricate, and an aspirated front velar stop. They occur only as syllable onset. b [b] bub'qula 'ball', [f] 'banga 'clay pot'; d [d] mad'qAN 'old woman', [tʃ] 'daqig 'door hook'; g [g] qag'gAM 'sleeping house', [kʰ] gΛ'dang 'straight'.

Nasals occur at bilabial, alveolar, and back velar points of articulation. m ma'noq 'chicken', mal'qum 'to be ripe'; n no 'if', 'gipan 'small knife'; ng nga'yug 'coconut', gi'ngang 'to stop'.

Semivowels are voiced and occur at bilabial and alveolar points of articulation. The bilabial semivowel has only one allophone: w high close back rounded vocoid, wang'wang 'river', maq'wAW 'to be thirsty'. The alveolar semivowel has two allophones: y [ü] a high close front rounded vocoid occurring only as syllable coda following u, 'babuy 'pig', [y] a high close front unrounded vocoid occurring in other environments, 'yasa 'nevermind', 'langtay 'bridge'.

Fricative consonants are voiceless. The grooved fricative occurs at the alveolar point of articulation, s sa'bun 'soap', 'qapAS 'envy'. The non-grooved fricative has two allophones: h [ħ] a pharyngeal fricative occurring only word

final, 'qagah 'medicine'; [h] a glottal fricative occurring non-final in words, 'halang 'pine', bɪ'hal 'appearance'.

The lateral consonant is voiced and has two allophones; l [l] a lateral continuant which occurs word initially and in alveolar environments. An alveolar environment is defined as: (1) contiguous to a front vowel; (2) a preceding alveolar consonant in a consonant cluster; (3) a front vowel preceding a non-alveolar consonant in a consonant cluster.

'lima 'hand'; 'bali 'storm'; pos'laqet 'flashl. 'flooded', manla'yad 'to be happy', layla'yadna 'his happiness', kallon'tay 'rubber band'; dip'lat 'wall board', meqla'yaw 'to go with'. [r] a mid-central retroflexed vocoid which occurs word medially and finally and in non-alveolar environments: qa'bal 'to weave', 'haplat 'to spank'.

**3.3 Contrasts and variations of vowels.** High vowels i, ɪ, u contrast as follows: qig'gɔy 'did not', qɪg'nɔn 'hold', qug'hɔ 'deer'; bi'dong 'bladder', bɪ'hal 'appearance', bu'yuy 'boil'.

Mid vowels e, ɛ, o contrast as follows: le'ngat 'sweat', lɛ'nga 'a bean', lo'ngidɪn 'to bend back'; te'balo 'bamboo pot', tɛ'laq 'kind of bark', to'bayag 'lime bottle'.

Front vowels i, e contrast as follows: 'qimeng 'whiskers', 'qemot 'bottom'; 'bali 'storm', ta'le 'rope'.

Central vowels ɪ, ɛ, a contrast as follows: qɛ'nɔn 'to increase', qɪ'nɪm 'six', qa'naq 'child of'; qɛ'nɔd 'earlier', qɪ'nɪb 'door', qa'mɔh 'to bathe'.

Back vowels u, o contrast as follows: 'qoto 'louse', 'quto 'to cook'; qut'teng 'baby', qot'tem 'immature rice'.

Lengthened vowels generally occur in one syllable words, which are relatively few.<sup>3</sup> Upon the morphophonemic change of the addition of a suffix, beginning with a central vowel, to a word ending with a central vowel, vowel length of the quality of the suffix occurs. lan'sa + -ɪn > lan'siɪn 'to nail it'. Contrast of lengthened vowels with non-lengthened vowels is as follows: i and ii bin'hal 'to blacksmith', 'biin 'shame'. e and ee pahet'nɪn 'to fatten', 'heet 'to sharpen', ɪ and ɪɪ qim'big 'to lie down', 'qiim 'a weed'. ɛ and ɛɛ wɔh'di 'each one', 'wɔɔh 'trodden grass'. a and aa qa'gahan 'to medicate', qa'gaahɪn 'to get grass'. u and uu buq'tan 'to close', 'buuq 'hair'. o and oo qu'pop 'to shut', qu'poop 'bellows'.

All vowels are voiced. The high and central vowels have no additional allophones. i high close front unrounded vocoid, ma'qid 'none'; u high close back rounded vocoid,

qu'du 'sky';  $\ddot{i}$  high close central unrounded vocoid, qi'dig 'back';  $\Lambda$  mid close central unrounded vocoid, ba'yah 'wine'; a low open central unrounded vocoid, ma'ta 'eye'.

Mid close front unrounded e has two allophones. Mid open [e<sup>ə</sup>] occurs only preceding ng and k, 'quheng 'charcoal', 'wewek 'dimple'. Mid close [e] occurs in all other environments, teq'gad 'flint stone'.

Mid close back rounded vocoid o has two allophones. Mid close back-central [o<sup>ɨ</sup>] occurs only in unaccented open syllables following b, d, g: bo'loqoq 'a fruit', do'pol 'ashes', go'lot 'dirt'. Mid close back [o] occurs in all other environments, 'podot 'warm'.

Phonemes are distributed in the larger units of syllables.

**3.4 Accent is contrastive** on the word level in the Balangao phonemic system. It is described in detail in the paper, "The Obscuring of Word Accent in Balangao".<sup>4</sup>

## NOTES

1. All examples are written in phonemic script unless bracketted, indicating phonetic script.
2. The terms "onset", "peak", and "coda" are taken from Hockett, Charles F., *A Manual of Phonology*, IJAL 21, No.4, IUPAL (1955), pp.126-7.
3. These words resist normal morphophonemic change and, in neighbouring dialects, a glottal stop separates two like vowels which occur in words where vowel length occurs in Balangao. 'heet would be 'heqet 'to sharpen'. However, in the dialect described in this paper, the glottal stop seldom occurs.
4. Shetler, Jo and Hopkins, Anne Fetzer, "The Obscuring of Word Accent in Balangao", *Oceanic Linguistics* 3:101-9 (1964).

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