

## MIANMIN PHONEMES AND TONEMES.

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0. INTRODUCTION

Mianmin is a language of the West Sepik District, located about two days' walk north of Telefomin. It is a member of the Ok family of languages, and is spoken by approximately 1500 people.

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## 6.

## MIANMIN PHONEMES AND TONEMES.

## 1. CHART OF PHONEMES

<b>Stops</b>	<b>voiceless</b>	<b>t</b>	<b>k</b>
	<b>voiced</b>	<b>b</b>	<b>g</b>
<b>Nasals</b>		<b>m</b>	<b>n</b>
<b>Fricatives</b>		<b>f</b>	<b>s</b>
<b>Semi-vowels</b>		<b>w</b>	<b>y</b>
<b>Vowels</b>	<b>high</b>	i e	a i
	<b>low</b>	e --	a u o
<b>Pitch</b>		<b>↗ (high)</b>	
		<b>↘ (low - unmarked)</b>	
		<b>^\hspace{-0.1cm}(high falling)</b>	
		<b>▼(low rising)</b>	

## 2. CONTRASTS

## 2.1 The Consonant Contrasts

The stops contrast at bilabial, alveolar and velar positions. The alveolar and velar stops contrast with voiced and voicelessness. The fricatives contrast at bilabial and alveolar positions. The nasals and semi-vowels contrast at bilabial, alveolar and velar positions.

## 2.2 Examples of Consonant Contrasts

Bilabial:	[wàn]	/wan/	'bird'
	[mát]	/mát/	'gallbladder'
	[fàl]	/fal/	'steam cooking'
	[tèběl]	/teběl/	'ant'
	[i wěl]	/iwěl/	'arrow type'
	[ìmèn]	/imen/	'taro'
	[mìfǐm]	/mifǐm/	'sago'
	[àbō]	/abō/	'testicles'
	[àwǒk <sup>h</sup> ]	/awǒk/	'mother'
	[àmǒl]	/amǒl/	'vegetable greens'
	[àfǒk <sup>h</sup> ]	/afǒk/	'sun'
	[bànǒn]	/banǒn/	'lower arm'
	[fànìn]	/fanin/	'ancestor'
	[wànjǒn]	/waŋjǒn/	'calf of leg'
	[màměl]	/maměl/	'vein'
Alveolar:	[dàm]	/lam/	'flesh'
	[yàn]	/yan/	'sharp'
	[nàm]	/nam/	'chest'
	[sàn]	/san/	'cutting from plant'
	[tām]	/tam/	'temple'
	[mòtòl]	/motol/	'tree sp.'
	[wùlòóm]	/wuloóm/	'tree sp.'
	[múnúŋ]	/múnúŋ/	'nose'
	[tìyòp]	/tiyob/	'tree sp.'

	[bòsòóm]	/bosooám/	'tree sp.'
	[àí]	/ai/	'stomach'
	[án]	/án/	'arrow'
	[ás]	/as/	'tree'
	[gáth̥]	/gát/	'mole'
Velar:	[kémìn]	/kemin/	'to do'
	[gèŋámìn]	/genámin/	'to scratch'
	[hènìn]	/jenin/	'to beg'
	[hènìn]	/henin/	'to look for'
	[nákáh̥]	/naka/	'man'
	[sàŋá]	/sanja/	'fowl'
	[kíŋkan]	/kiŋkan/	'shaman'
	[màŋgék̥]	/maŋgěk/	'bee'
	[ákgit̥]	/akgit/	'female pig'
	[gáth̥]	/gát/	'mole'
	[káí]	/kai/	'landslide'
	[háíèp]	/haleb/	'wild'
	[gwáán]	/gwaán/	'spider'
	[kwáám]	/kwaám/	'club'
Stops:	[kín]	/kin/	'eye'
	[gíl̥]	/gil/	'wind'
	[dím]	/lim/	'lie'
	[tím̥]	/tim/	'lizard'
	[bíŋ]	/biŋ/	'tree sp.'

Fricatives:	[fâp]	/fâb/	'where'
	[wân]	/wan/	'bird'
	[sân]	/san/	'cutting from plant'
Nasals:	[né]	/né/	'I'
	[ŋènɪn]	/ŋenin/	'to beg'
	[mén]	/mén/	'child'
	[bànõn]	/banõn/	'lower arm'
	[wànõn]	/wanõn/	'calf of leg'
	[bímán]	/bimán/	'snake'
	[tán]	/tan/	'sunlight'
	[taán]	/taán/	'flint'
	[tam̚]	/tam/	'temple'
Semi-vowels:	[yàn]	/yan/	'sharp'
	[wàn]	/wan/	'bird'
	[hàlèp]	/haleb/	'wild pig'

### 2.3 Examples of Vowel Contrasts

The five vowels contrast in:

[íñ]	/íñ/	'liver'
[èñ]	/en/	'elder sister'
[áñ]	/áñ/	'arrow'
[óñ]	/óñ/	'bone'
[úñ]	/úñ/	'egg'
[míp]	/mib/	'lid'
[mén]	/mén/	'child'
[wán]	/wan/	'bird'

[mò̄n]	/mò̄n/	'old' garden'
[àmù̄n]	/amù̄n/	'stomach'
[yábīl]	/yábil/	'down place'
[tèbě̄l]	/tebě̄l/	'ant'
[sàbă̄l]	/sabă̄l/	'strong'
[kòbō̄l]	/kobō̄l/	'cassowary'
[búbú̄l]	/búbú̄l/	'flower'
[bàsî̄]	/basî̄/	'nose tusk'
[kwèsè̄]	/kwese/	'rainbow'
[bèsà̄]	/besa/	'nothing'
[itô̄]	/itô̄/	'tongs'
[àsû̄]	/asû̄/	'two'

Vowel glides /e<sup>i</sup>/ and /a<sup>i</sup>/ contrast in:

[sè̄ī]	/sēī/	'tortoise'
[sà̄ī]	/sāī/	'vine'
[tè̄ī]	/tè̄ī/	'bamboo sp.'
[tâ̄ī]	/tâ̄ī/	'axe'

Vowel glide /e<sup>i</sup>/ and the vowel /e/ contrast in:

[è̄īn]	/ēīn/	'cooked'
[è̄n]	/en/	'elder sister'
[gè̄īm]	/gēīm/	'arrow type'
[gémbsbè̄]	/gémbsbè̄/	'I am sick'
[mè̄īmè̄ī]	/mè̄īmè̄ī/	'earth tremor'
[mè̄mě̄]	/memě̄/	'children'

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[màápsé<sup>i</sup>] /maábsé<sup>i</sup>/ 'tortoise sp.'

[kwèsè] /kwese/ 'rainbow'

[wòfúmè<sup>i</sup>] /wofúme<sup>i</sup>/ 'bat sp.'

[wèsémè] /wesemê/ 'canoe'

Vowels /a/ and /e/ and the vowel glide /a<sup>i</sup>/

contrast in:

[wàs] /was/ 'drum'

[wèsémè] /wesemê/ 'canoe'

[wá'sá] /wá'sá/ 'cut'

[náká] /naka/ 'man'

[máké] /make/ 'other'

[nòká<sup>i</sup>] /noká<sup>i</sup>/ 'grandfather'

Vowel glide /a<sup>u</sup>/ and vowels /o/, /u/ and /a/

contrast in:

[dàulám] /laulam/ 'fly'

[dó̄l] /ló̄l/ 'forked stick'

[dùlám] /lulam/ 'bird sp.'

[dá̄l] /lá̄l/ 'shallow'

[k̄ísáusé̄l]/kisausel/ 'spirit'

[sòsòn] /soson/ 'widow'

[asúsúnâ̄]/asusunâ̄/ 'two'

[asá̄l] /asá̄l/ 'bark'

Vowel glide /o<sup>u</sup>/ and vowels /o/, /u/ and /a/

contrast in:

[t <sup>h</sup> u'min]	/t <sup>h</sup> u'min/	'put'
[t <sup>h</sup> o̚l̚im]	/tol̚im/	'bird sp.'
[t <sup>h</sup> u'nùmin]	/tunumin/	'wasp's nest'
[tam̚]	/tam/	'temple'
[kió <sup>u</sup> ]	/kió <sup>u</sup> /	'fish sp.'
[kió̚]	/kió̚/	'tinea'
[biúbiú̚]	/blúblu/	'run'
[kiâ̚]	/kiâ̚/	'properly'

#### 2.4 Examples of Tone Contrasts

The four tonemes ///, /\\/, /^/ and /v/ contrast in:

[k <sup>h</sup> ín]	/kin/	'eye'
[k <sup>h</sup> ín̚]	/kín/	'insect sp.'
[ám̚]	/am/	'day'
[áám̚]	/aám/	'wild pandanus'
[áâm̚]	/aâm/	'big sister'
[afá̚l̚]	/afá̚l̚/	'mucus'
[ibâ̚l̚]	/ibâ̚l̚/	'hornet'
[k <sup>h</sup> etap̚]	/ketab/	'flying fox'
[bimán̚]	/bimán/	'snake sp.'
[áyáp̚]	/áyab/	'uncle'
[áyá̚l̚]	/ayal/	'flaming torch'
[kwé <sup>i</sup> gòŋ̚]	/kwé <sup>i</sup> goŋ/	'joint'
[kwé <sup>i</sup> l̚on̚]	/kwé <sup>i</sup> l̚on/	'hand'
[kwé <sup>i</sup> gúŋ̚]	/kwé <sup>i</sup> gúŋ/	'wrist'

[ùnàlín]	/unalin/	'food'
[àwítñîn]	/awitnîn/	'star'
[àntibín]	/antibîn/	'headwaters'
[àfúnán]	/afunán/	'leg hair'
[yòíòwók]	/yolowók/	'beetle sp.'
[àtòt̪b̪p̪]	/atot̪b̪p̪/	'spark'
[gètât̪ón]	/getat̪ón/	'hollow at base of skull'
[kâtâbám]	/katabam/	'cave'
[t̪l̪úsám]	/tilúsam/	'roofing grass'
[kâtâbám]	/katabam/	'cave'
[íkámwáí]	/íkámwal/	'married couple'
[àmísáí]	/amísal/	'door'

### 2.5 Examples of Length Contrasts

[bâánôñ]	/baánôñ/	'jaw'
[bànõñ]	/banõñ/	'forearm'
[mén]	/mén/	'baby'
[meén]	/meén/	'string bag'

## 3. INTERPRETATION

### 3.1 Consonants

The labialized velar stops [g<sup>w</sup>] and [k<sup>w</sup>] are interpreted as consonant clusters because non-suspect consonant clusters [sm] and [sk] do occur:

[smík̪]	/smik/	'reflection'
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[skɪlən] /skɪləb/ 'leg'

For the same reason [bl], [fl], [kl], [gl], [tl], [dl] and [ŋl] are also interpreted as clusters.

The /w/ has been interpreted as a consonant because it does occur in consonant slots. Also, while we have non-suspect consonant clusters, we do not have any non-suspect vowel clusters.

For the same reason /y/ has been interpreted as a consonant.

### 3.2 Vowels

#### 3.2.1 Lengthened Vowels

Since lengthened vocoids carry two tones and are from  $1\frac{1}{2}$  to 2 times the length of a single vowel, these have been interpreted as a sequence of two vowels and are two syllable nuclei.

Examples:

[báánôñ] /baánôñ/ 'jaw'

[wàán] /waán/ 'sweet potato'

[mèén] /meén/ 'string bag'

#### 3.2.2 Vowel glides

3.2.2.1 Vocoid glides that take two separate tones are interpreted as a sequence of two vowels and are two syllable nuclei.

Examples:

[àbàú]	/abaú/	'black cockatoo'
[kwèít]	/kweít/	'sugar cane'
[èím]	/eím/	'pandanus'

3.2.2.2 Vocoid glides that take one tone are interpreted as a single phonetically complex vowel and is one syllable nucleus.

Examples:

[dè <sup>i</sup> p]	/de <sup>i</sup> b/	'road'
[ké <sup>i</sup> m]	/ké <sup>i</sup> m/	'clear place'
[yò <sup>u</sup> m]	/yo <sup>u</sup> m/	'clothing'

### 3.3 The Syllable.

#### 3.3.1 Definition.

A syllable consists of an obligatory nucleus containing one vowel and one emic pitch. It has an optional onset containing one or two consonants and an optional coda containing one consonant.

- 3.3.2 The general pattern for syllable breaks is that they occur 1) between a vowel and a following intervocalic consonant or consonant clusters /kw/, /gw/, /bl/, /fɪ/, /kl/, /gl/ and /bw/ which starts the next syllable
- 2) between two contiguous consonants
  - 3) between two contiguous vowels.

## Examples:

/wen.té.bín.i.so	be/	'I heard'
/kwé <sup>i</sup> .blōŋ/		'fingernail'
/ba.án.ón/		'jaw'
/kwe.ít/		'sugar cane'

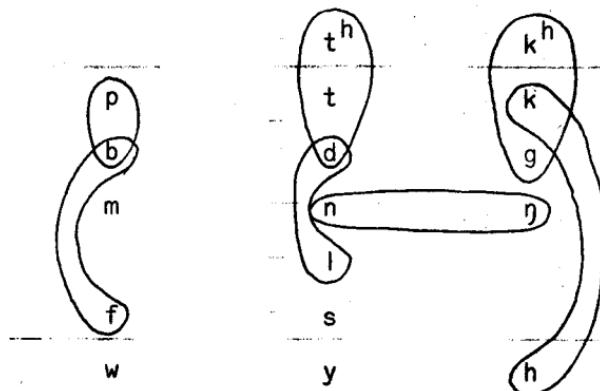
3.3.3 There are twelve basic syllable types and they are listed below with examples.

V	[é]	/é/	'he'
V <sup>v</sup>	[á i]	/á i/	'father'
CV	[né]	/né/	'I'
CV <sup>v</sup>	[sà i]	/sa i/	'vine'
CVC	[súm]	/súm/	'big'
CV <sup>v</sup> C	[dè i t]	/dè i t/	'nest'
VC	[ás]	/as/	'wood'
V <sup>v</sup> C	[è i t]	/e i t/	'decoration'
CCVC	[kwèŋ]	/kwèŋ/	'grasshopper'
CCV <sup>v</sup> C	[kwè i m]	/kwè i m/	'malaria'
CCV	[smé]	/smé/	'cave'
CCV <sup>v</sup> .CCVC	[kwé i .blōŋ]	/kwé i .blōŋ/	'fingernail'

## 4. DESCRIPTION OF PHONEMES

## 4.1 Consonants

## 4.1.1 Phonetic Work Chart



## 4.1.2 Description of Consonants

The voiced bilabial stop /b/ has two allophones:

- 1) The voiceless bilabial unaspirated stop /p/ occurs syllable final followed by a consonant, or word final.

[búkúpsân] /búkúbsân/ 'beads'

[kùl̩ip] /kul̩ib/ 'tree sp.'

- 2) The voiced bilabial stop /b/ occurs word initial, medially following a consonant and between vowels:

[bàáp] /baáb/ 'aunt'

[dèbàá!] /lebaái/ 'dirt'

[sib̥ə] /sib̥ə/ 'full'

The voiceless alveolar stop /t/ has two allophones:

- 1) A voiceless alveolar unaspirated stop followed by a consonant:

[fátnámín] /fátnamín/ 'what'

[awitn̩ín] /awitn̩ín/ 'star'

- 2) A voiceless alveolar aspirated stop occurs word initial, medial following a consonant and between vowels and word final.

[tek̥é] /tek̥é/ 'tall'

[üktem̩] /üktem̩/ 'ash'

[atúŋ] /atúŋ/ 'branch'

[ak̥et̥] /ak̥et̥/ 'flower'

The voiced alveolar stop /l/ has two allophones:

- 1) A voiced alveolar stop occurs word initial and medial following consonants:

[dáɿ] /láɿ/ 'shallow'

[atlâ] /atlâ/ 'cliff'

- 2) A voiced alveolar flapped lateral occurs word initially following consonants, word medially preceding consonants and between vowels and word final:

[blébó] /blébó/ 'lizard sp.'

[fálgàmín] /falgamin/ 'steam cooking'

[sùlùp] /sulub/ 'cockroach'

[àsà̄j] /asatʃ/ 'bark'

The voiceless velar stop /k/ has two allophones:

- 1) A voiceless velar unaspirated stop is followed by a consonant:

[üktem<sup>h</sup>] /uktem/ 'ash'

[kwäm̩] /kwam/ 'club'

- 2) A voiceless velar aspirated stop occurs word initial, following a consonant, medially between vowels and word finally:

[skt̪iõn] /skilõn/ 'foot'

[kak̪et̪] /kak̪et̪/ 'little finger'

[nèék<sup>h</sup>] /neék/ 'friend'

The voiced velar stop /g/ has one phonetic manifestation as a voiced velar stop /g/ occurring word initially, and medially following a consonant:

[gòk̪im̩] /gok̪im/ 'louse'

[gwàán] /gwaán/ 'spider'

[màngěk<sup>h</sup>] /mangěk/ 'bee'

The voiceless labio-dental fricative /f/ has one phonetic manifestation as a voiceless labio-dental fricative which occurs word initial, medially between vowels and following consonants. Finally it fluctuates with p :

[fàb̪i] /fab̪i/ 'adze'

[àf᷑k <sup>h</sup> ]	/af᷑k/	'grandmother'
[ikam᷑f᷑]	/ikamf᷑/	'footprint'
[dèif]	/leib/	'road'

The voiceless alveolar grooved fricative /s/ has one phonetic manifestation as a voiceless alveolar grooved fricative which occurs word initially, word medially between vowels and following a consonant and word finally:

[sòm]	/som/	'banana'
[asít <sup>h</sup> ]	/asít/	'raw'
[kánsébè]	/kansebe/	'he has died'
[wàs]	/was/	'drum'

The voiced bilabial nasal /m/ has one phonetic manifestation and occurs in all consonant positions:

[mén]	/mén/	'child'
[ámún]	/amún/	'stomach'
[kápmük <sup>h</sup> ]	/kabmük/	'heel'
[tém̥báɪ]	/témbái/	'young man'
[búk᷑m]	/buk᷑m/	'charcoal'

The voiced alveolar nasal /n/ has one phonetic manifestation and occurs in all consonant positions:

[níŋ]	/níŋ/	'younger bro.'
[tín᷑]	/tín᷑/	'club'

[kwínt̪e] /kwínt̪e/ 'afternoon'

[fátnamín] /fátnamín/ 'when'

The voiced velar nasal /ŋ/ has one phonetic manifestation and occurs word initially, word medially between vowels and followed by a consonant and word finally:

[ŋènìñ] /ŋenin/ 'to beg'

[wànjōñ] /wanjōñ/ 'calf of leg'

[màngék<sup>h</sup>] /mangék/ 'bee'

[at<sup>h</sup>úñ] /atúñ/ 'branch'

The voiced alveo-palatal semi-vowel /y/ has one phonetic manifestation and occurs word initial, word medial between vowels:

[yúñdím] /yúñlím/ 'river bank'

[àyàm] /ayam/ 'good'

The voiced rounded bilabial semi-vowel /w/ has one phonetic manifestation and occurs word initial, word medial between vowels and as the second member of a consonant cluster:

[wàn] /wan/ 'bird'

[kawá<sup>h</sup>] /kawá/ 'axe'

[gwàáp] /gwaáb/ 'small'

[atgwàí] /atgwai/ 'coals'

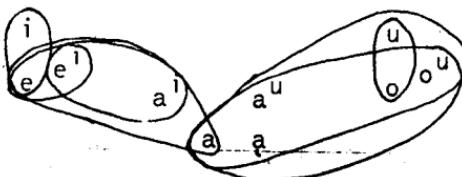
The voiceless velar semi-vowel /h/ has one phonetic manifestation and occurs word initial

and syllable initial:

[hèk <sup>h</sup> ]	/hek/	'older brother'
[hò <sup>u</sup> hò <sup>u</sup> ]	/ho <sup>u</sup> ho <sup>u</sup> /	'cough'

## 4.2 Vowels

### 4.2.1 Phonetic Work Chart



### 4.2.2 Description of Vowels

The voiced high close front unrounded vocoid /i/ has one phonetic manifestation and occurs in all vowel positions:

[kǐn <sup>h</sup> ]	/kín/	'insect'
[imèn]	/imen/	'taro'
[sèwi]	/sewí/	'flying fox'

The voiced mid open front unrounded vocoid /e/ has one phonetic manifestation and occurs in all vowel positions:

[hèk <sup>h</sup> ]	/hek/	'older brother'
[èn]	/en/	'older sister'
[mèmě]	/memě/	'children'

The vowel /a/ has two allophones:

1) A voiced low open central unrounded vocoid

[a] which occurs in all vowel positions:

[wà̄]	/wāl/	'termite'
[àfèt <sup>h</sup> ]	/afet/	'another'
[nàkà]	/naka/	'man'

2) A voiced low open central unrounded nasal  
vocoid [ã] which fluctuates between speakers  
in all vowel positions:

[wàán]	/waán/	'sweet potato'
[wàn]	/wan/	'bird'
[hàám]	/haám/	'under chin'

The voiced high closed rounded vocoid /u/ has  
one phonetic manifestation and it occurs in all  
vowel positions:

[dúm]	/lúm/	'point of taro'
[ùnǎŋ]	/unǎŋ/	'woman'
[àsú]	/àsú/	'two'

The voiced mid closed back rounded vocoid /o/  
has one phonetic manifestation and occurs in all  
vowel positions:

[sòm]	/som/	'banana'
[mòkò <sup>h</sup> ]	/mokō/	'fish'
[óñ]	/óñ/	'bone'

The voiced mid open front unrounded vocoid /e/ rising to a high close front unrounded vocoid /i/ has one phonetic manifestation and occurs in all vowel positions:

[mè'ime'i]	/me'i me'i/	'earthquake'
[kwé'iblón]	/kwé'iblón/	'fingernail'
[è'it]	/e'it/	'decoration'

The voiced low open central unrounded vocoid /a/ rising to a high close front unrounded vocoid /i/ has one phonetic manifestation and occurs in all vowel positions:

[á̚]	/á̚/	'father'
[tá̚i]	/tá̚i/	'knife'
[gá̚i sémìn]	/ga̚i sémìn/	'to win'
[sá̚i yǒn]	/sa̚i yǒn/	'bird sp.'

The voiced low open central unrounded vocoid /a/ rising to a voiced high closed rounded vocoid /u/ has one phonetic manifestation and occurs only word medial:

[dà<sup>u</sup>lám] /la<sup>u</sup>lam/ 'fly'  
 [kísà<sup>u</sup>sèl] /kisa<sup>u</sup>sel/ 'spirit'

The voiced mid closed back rounded vocoid /o/  
rising to a voiced high closed rounded vocoid /u/  
has one phonetic manifestation and occurs word  
medial and final:

[gò̚lò̚t̚ém]	/golo̚t̚ém/	'cemetery'
[úmásó̚]	/úmásó̚/	'eel'

#### 4.3 Supra Segmental Items

##### 4.3.1 Length

See Section 3.2.1.

##### 4.3.2 Stress

Stress is non-contrastive in the Mianmin language.

If there is only one high tone // or high falling /^/ in the word, it will take the stress.

Should there be more than one high // tone or high glide /^/ they will receive equal stress.

If all syllables in a word are low tone /\ or low rising /v/ each syllable receives equal stress.

##### 4.3.3 Tone

4.3.3.1 There are four emic tones: high //, high falling /^/, low /\ and low rising /v/.

[ákúláp]	/akuláp/	'aunt'
[wèsémê]	/wesemê/	'canoe'
[mùlùp]	/mulub/	'descendants'
[mífím]	/mifím/	'sago'
[múnúŋ]	/múnúŋ/	'nose'
[básâl̚]	/básâl̚/	'verandah'

4.3.3.2 The following tone patterns occur on two and three syllable words.

Two syllable words:

\ \

\ \ /

\ \ ^

\ / /

\ / ^

/ ^

Examples:

[k̥em̥it]	/kemit/	'gourd'
[k̥awá]	/kawá/	'axe'
[k̥om̥ók]	/komók/	'headman'
[sílím]	/silím/	'snake'
[múnúŋ]	/múnúŋ/	'nose'
[ánòk]	/ánok/	'bow'
[dàm̥íp]	/lam̥íb/	'garden'

Three syllable words:

\ \ \

\ \ ^

\ \ \ /

\ \ \ /

\ \ /

\ \ \ /

///

//\

## Examples:

[fànìnwàɪ]	/faninwal/	'ancestors'
[wèsèmê]	/wesemê/	'canoe'
[ákùláp]	/akuláp/	'aunt'
[kátabám]	/katabám/	'cave'
[ükálí]	/ukálí/	'pumpkin'
[bémámin]	/bémámin/	'caterpillar'
[sínábí]	/sínábí/	'crocodile'
[bánákíà]	/bánákíà/	'underneath'

## 4.3.4 Pitch Perturbation

Pitch perturbation occurs across word boundaries.

- 1) A high tone // on the initial syllable of a word following a low /\ on the preceding word perturbs to low.

Example:

/básâl/ 'verandah'

/né básâl/ 'my verandah'

/né sum basâl/ 'my big verandah'

- 2) A high tone // or low rising tone /\ on the last syllable of a word preceding a low on first syllable of following words perturbs the low to high.

Example:

/flelen/ 'light'

/kawá flélen/ 'light axe'

/mifím flélen/ 'light sago'

- 3) A high falling tone /<sup>~</sup>/ on the last syllable of a word preceding a high // on the final syllable of the following word perturbs the high to low.

Example:

/súm/ 'big'

/lám<sup>~</sup>b sum/ 'big garden'

- 4) There is one exception to this rule. A two syllable word consisting of high // followed by low /<sup>~</sup>/ is never perturbed.

## 5. DISTRIBUTION

### 5.1 Consonants

All consonants occur syllable initial and syllable final except for /b/, /g/, /w/ and /y/ which occur only syllable initial, and /h/ which occurs only word initial. All consonants occur intervocallyically except for /h/ which occurs only word initial and /g/ which occurs only word initial and syllable initial following a conson-

~~ant~~ /w/ is not followed by /u/ and /y/ is not followed by /i/.

### 5.2 Vowels

All vowels occur in the nucleus of both open and closed syllables. All vowels occur word initial, medial and final except /a<sup>u</sup>/ which occurs only word medial and /o<sup>u</sup>/ which occurs word medial and final.

### 5.3 Tone

High and low tones occur on any syllable in a word while high falling and low rising only occur on the final syllable of a word. High falling also, does not occur on one syllable words.

### 5.4 Syllable

All syllables occur in every position in a word.

## 6. ORTHOGRAPHY

### 6.1 Proposed Orthography

Phonemic	Orthography
/b/	b
/t/	t
/d/	l
/k/	k

/g/	g
/m/	m
/n/	n
/ŋ/	ng
/f/	f
/s/	s
/w/	w
/y/	y
/h/	h
/i/	i
/e/	e
/a/	a
/o/	o
/u/	u
/e <sup>i</sup> /	ei
/a <sup>i</sup> /	ai
/a <sup>u</sup> /	au
/o <sup>u</sup> /	ou

Tone	/'/
	/^/
	/~/

Tone is to be unmarked.

## 6.2 Loan Words

English	Vernacular
pawpaw	fófó
tomato	kómátó
file	fáil
wire	wayă
machine	másín
school	skúl
pencil	bénsól
matches	másís
spoon	sbún
government	gábmán
policeman	blísmán
cement	smén
picture	bíksá
money	monî
company	kámbánî

## 6.3 Text

[wàánó	hèép	té	mìnâbiànìb	â	èká
/waánó	heléb	té	minâbianib	â	eká
waano	heleb	te	minabianib	a	eka
sweet potato	pull-they come	gather-they	and	and	

itámó dàbiànib â èká imen láñó áliámó  
 itámó labianib â eká imen lango aliamo  
 itamo labianib a eka imen lango aliamo  
 dance house dance-they and and taro garden weeds

hàlibíbiànib â mákí iménó wáánó  
 halibíbianib â makí imenó waánó  
 halibibianib a maki imeno waano  
 clear-they and some people taro sweet potato

méén gùlélép té bà gùlélép únèbiànib  
 meén guleléb té ba guleléb unebianib  
 meen guleleb te ba guleleb unebianib  
 string-bag bring come and bring go-they

â mákí itámó dàbiànib â mákí  
 â makí itámó labianib â makí  
 and some people dance house dance-they and some

bíp dáñó klábián á biànip tâ  
 bib lango klabian a bianib ta  
 bib lango klabian a bianib ta  
 people place garden work work-they and

ùnàmbiàbió bë bísnîs      tâblásébé wàánó  
 unambiabió be bisnîs      tablasebé waánó  
 unambiabio be bisnis      tablasebe waano  
 ate-they . business white man sweet potato

hà      òlèp      té      wèbiànìb â      mònîò bòkábiànìb  
 ha      oleb      té      webianib â      monio bokábianib  
 ha      oleb      te      webianib a      monio bokabianib  
 pull out bring come buy-they and money got-they

â nàbîp      tâ smîkô      témó ní yâtèmbúó bë/  
 â nabib      tâ smîkô      témó ní yatembuo be/  
 a nabib      ta smiko      temo ni yatembuo be  
 and stopped-they and picture in      we it-look-we .

They pulled sweet potato and gathered it and they  
 danced and they cleared weeds in the taro garden.  
 Some people got string bags and filled them with  
 taro and sweet potato and they went. Some people  
 danced and some people cleared the gardens of  
 bush and they ate. The white business men bought  
 the sweet potato that the people pulled and  
 brought. They got money. We saw it in the  
 picture.