

# Organised Phonology Data

## Bariai Language [[BCH]] Gloucester District– West New Britain Province

**Oceanic**; *North New Guinea*; Ngero Group, Bariai sub-family

Population census: 1,360 (1995)

Major villages: Gurisi, Kokopo, Akonga, Bambak, Namaramanga, Mareka, Alaido

Linguistic work done by: SIL (Steve Gallagher)

Data checked by: Steve Gallagher

Data based on: 7 years in the language.

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### Phonemic and Orthographic Inventory

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### Consonants

	Bilab	LabDen	Dental	Alveo	Postalv	Retro	Palatal	Velar	Uvular	Pharyn	Glottal
Plosive	p b		t d					k g			
Nasal	m		n					ŋ			
Trill			r								
Fricative				s							
Lateral Approx			l								

p	paeamao	'bad'		t	tutui	'straight'
	ipapa	'his cheek'			itangtang	'he is crying'
	itap	'he falls'			sat	'bad'
	luplup	'you meet'			nakotkot	'vine sp.'
	patpat	'stones'			tletle	'post'
	pla	'you spit'			tnan	'you leave'
b	bisinga	'basket'		d	danga	'something'
	eaba	'man'			bada	'you get'
	bib	'you press'			madid	'you stand'
	tubnga	'appearance'			madlo	'calm'
	mambe	'like, as'			idabdab	'he fishes'
	blala	'young woman'				
m	maitne	'not yet'		n	niu	'coconut'
	mama	'sago'			nanono	'I cook'
	maem	'your tongue'			ean	'you eat'
	komba	'obligation'			antu	'spirit'
	imadmadid	'he is standing'			nadnad	'you boil'
					tnag	'my other'

r	rua	'two'	g	gaisala	'morning'
	roronga	'meeting'		igagal	'his neck'
	tibur	'bush'		sulug	'you go down'
	sakirkir	'dirt/garbage'		ibagbage	'wing'
	irangrang	'he is able'		gergeu	'child'
	krau	'broken'		gla	'lighting'
s	sai	'who?'	ŋ	nging	'you laugh'
	sasa	'grandparent'		oanga	'flood'
	kus	'finished'		bong	'night'
	inasnasi	'he follows'		singsingago	'diarrhea'
	sulsul	'juicy'		annga	'food'
				memednga	'cold'
				kngor	'fish sp.'
l	lima	'five'			
	lalala	'you walk'			
	sil	'deep'			
	imalmal	'he is angry'			
	kadlo	'eyeball'			
	blos	'unfastened'			
k	kulupu	'heavy'			
	pokaka	'you open'			
	isek	'he gets'			
	kusuksuk	'black'			
	kabkabo	'platform'			
	kles	'slippery'			

## Vowels

i		u			
e		o			
		a			
i	igonga	'finger'	u	un	'you drink'
	budisinga	'wet'		busa	'many'
	kisi	'you hold'		ipu	'banana'
	paria	'lizard'		bua	'betel nut'
	tutui	'straight'		gergeu	'baby'
e	ele	'his'	o	ololo	'custom'
	ket	'you cut'		bokonga	'work'
	bagele	'crocodile'		ado	'day/sun'
	keo	'you say'		iluo	'his teeth'
	gergeu	'baby'		tisoa	'they lift'
a	abei	'tree'	je	ieda	'his name'
	imata	'his eye'		ieieinga	'pain'
	tamag	'my father'			
	gaea	'pig'			
	tuanga	'village'			

ja	iaba	'banana type'	au	apu	'ashes'
	aia	'mother'		imataud	'he is afraid'
	mararaiapala	'boa constrictor'		itautau	'bears fruit'
	kaoaiaoainga	'outrigger'		eau	'water'
				titiau	'you play'
jo	iboroio	'his lung'	oɟ	goibe	'alright'
		'continue'		moi	'taro'
				nonoi	'you fill'
ju	iud	'he carries'	oɛ	moe	'pandanus mat'
	iuui	'it's tail'			
ej	eine	'this'	oɑ	oaga	'canoe'
	kapeipei	'big men'		bakeoa	'shark'
	abei	'tree'		oanaoana	'hot'
ɛɑ	eaba	'man'	ɟi	iuui	'it's tail'
	taeanean	'we eat'		motouidanga	'shell sp.'
	gaea	'pig'			
	eaoa	'lime'	ɟɑ	ual	'pound sago'
ɑɟ	aita	'brother'		guas	'tobacco'
	paisi	'you light'		napauaua	'citrus sp.'
	bagemai	'our hands'		panua	'people'
	poai	'Maylay apple'		kaua	'dog'
	oaioa	'over there'	ɟo	adiuol	'vine sp.'
ɑɛ	aeg	'my leg'		tiuouai	'they weave'
	gadae	'above'		iuon	'full'
	aluae	'far'			
	paele	'walk along coast'			
ɑo	aol	'we buy'			
	gaot	'outside'			
	paeamao	'bad'			
	eao	'you'			

### Suprasegmentals (tone, stress, length)

A stressed syllable in Bariai is characterized by intensity and a slightly higher pitch than an unstressed syllable. Although stress is not entirely predictable, it is not contrastive in any example found in the data. Stress primarily occurs on the penultimate syllable of the stem. The stress is retained by this syllable regardless of any reduplication or inflectional suffixing. Consider the following examples.

oaga	[ <sup>1</sup> oɑ.ɟɑ]	'canoe'
oagaeai	[ <sup>1</sup> oɑ.ɟɑ.ɛɑɟ]	'on the canoe'
eaba	[ <sup>1</sup> ɛɑ.βɑ]	'man'
eababa	[ <sup>1</sup> ɛɑ.βɑ.βɑ]	'men'
matag	[ <sup>1</sup> ma.ta <sup>1</sup> ]	'my eye'
imata	[i. <sup>1</sup> ma.ta]	'his eye'
matada	[ <sup>1</sup> ma.ta.ɟɑ]	'our(incl) eyes'

When the derivational suffix /-ŋɑ/ appears on a stem, stress is placed on the penultimate syllable of the resulting surface form.

nakado	[na.'k <sup>h</sup> a.dɔ]	'I do'
kadonga	[k <sup>h</sup> a.'dɔ.ŋa]	'deed/doing'
igera	[i.'ɣɛ.ra]	'he sees'
geranga	[gɛ.'ra.ŋa]	'sight/seeing'

Stress may shift from the penultimate syllable to the antepenultimate syllable if the vowel of the latter is lower in height than the former, or is the same vowel.

itekia	[i.'t <sup>h</sup> ɛ.ki.a]	'sap'
ilabora	[i.'la.βo.ra]	'his head'
gigima	[ʔi.yi.ma]	'star'
boloma	[ <sup>h</sup> bo.lo.ma]	'near'
buobuo	[bu.'o.bu.o]	'be confused'
giniu	[ <sup>h</sup> gi.ni.u]	'nest'
iriau	[i.'ri.aɻ]	'young man'
palele	[p <sup>h</sup> a.le.le]	'turn over'
parere	[p <sup>h</sup> a.re.re]	'pour'
bagele	[ <sup>h</sup> ba.ɣe.le]	'crocodile'

The following counter examples show that the stress placement is not entirely predictable.

kadenge	[k <sup>h</sup> a.'de.ŋɛ]	'in-law'
pagege	[p <sup>h</sup> a.'ɣe.ɣɛ]	'shut'
babanga	[βa.'βa.ŋa]	'wide'
dibala	[ <sup>h</sup> di.βa.la]	'sickness'
ikilele	[i.'k <sup>h</sup> i.le.le]	'look carefully'
imadmadid	[i.,maɖ.ma.'dɪɻ]	'he is standing'
tibur	[t <sup>h</sup> i.'βuɻ]	'area/bush'
sulug	[su.'luk <sup>ɻ</sup> ]	'descend'
mulian	[ <sup>h</sup> mu.li.aŋ]	'back'

### Syllable Patterns

V		<b>a.pa</b> 'father'	<b>bi.a.nga</b> 'flying fox'	<b>gi.ni.u</b> 'nest'
VV	<b>io</b> 'alright'	<b>ai.ta</b> 'brother'	<b>pa.oa.tan</b> 'straighten'	<b>i.ri.au</b> 'young man'
VC	<b>un</b> 'you drink'	<b>an.nga</b> 'food'	<b>ma.ri.am.ba</b> 'sky'	<b>mu.li.an</b> 'self'
VVC	<b>aeg</b> 'my leg'	<b>aom.ba.ka</b> 'fish sp.'		
CV	<b>ga</b> 'and'	<b>sa.pa.la</b> 'tapioca'	<b>bo.lo.ma</b> 'near'	<b>mam.be</b> 'like'
CVV	<b>tou</b> 'sugar'	<b>gai.sa.la</b> 'morning'	<b>i.tau.tau</b> 'bears fruit'	<b>a.bei</b> 'tree'
CVC	<b>sat</b> 'bad'	<b>tol.nga</b> 'dance'	<b>sa.kir.kir</b> 'rubbish'	<b>ga.ga.lid</b> 'their necks'
CVVC	<b>maem</b> 'tongue'	<b>paun.nga</b> 'sorcery'	<b>i.laun</b> 'his hair'	
CCV	<b>gla</b> 'lightning'	<b>bla.la</b> 'young woman'	<b>kap.tna.mi</b> 'huge'	<b>tle.tle</b> 'post'
CCVC	<b>blos</b> 'loosened'	<b>klas.la.si</b> 'grass sp.'	<b>i.ka.krik</b> 'he's moving'	
CCVV	<b>krau</b> 'broken'			
VVV	<b>eao</b> 'you(sg)'	<b>oae.da</b> 'our friend'	<b>ba.ra.oai</b> 'bird sp.'	<b>eau.eai</b> 'at the water'
VVVC	<b>oae</b> 'my friend'	<b>eaud.nga</b> 'building'		

### Conventions: Phonological

The allophones of each phoneme are as follows.

/p/	[p <sup>h</sup> ] [p <sup>ɻ</sup> ]
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/b/	[β] [ɸ]
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/m/	
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/t/	[t <sup>h</sup> ] [t <sup>ʰ</sup> ]
/d/	[d] [ɖ] [ɗ]
/n/	[n]
/k/	[k <sup>h</sup> ] [k <sup>ʰ</sup> ]
/g/	[ɣ] [k] [k <sup>ʰ</sup> ]

/ŋ/	[ŋ]
/r/	[r]
/s/	
/l/	[l] [l̥]
/i/	[i] [i̥]

/e/	[ɛ] [ɛ̥]
/a/	[ə]
/o/	[o]
/u/	[u]

The three voiceless plosives, /p/, /t/, and /k/, have aspirated allophones [p<sup>h</sup>], [t<sup>h</sup>] and [k<sup>h</sup>], which occur morpheme initially before a vowel.

/posaposa/	[p <sup>h</sup> o.sa.p <sup>h</sup> o.sa]	<posaposa>	‘you are talking’
/takisi/	[t <sup>h</sup> a.k <sup>h</sup> i.si]	<takisi>	‘we(incl) hold’
/itama/	[i.t <sup>h</sup> a.ma]	<itama>	‘his father’
/kongge/	[k <sup>h</sup> oŋ.ge]	<kongge>	‘crooked’

The voiceless plosives may also exhibit the unreleased allophones [p<sup>ʰ</sup>], [t<sup>ʰ</sup>], and [k<sup>ʰ</sup>] word finally. These allophones are in free variation with [p], [t], and [k].

/itap/	[i.t <sup>h</sup> ap <sup>ʰ</sup> ]	<itap>	‘he falls’
/apap/	[a.pap <sup>ʰ</sup> ]	<apap>	‘midnight meal’
/serembat/	[se.rɛm.bat <sup>ʰ</sup> ]	<serembat>	‘sweet potato’
/sasat/	[sa.sat <sup>ʰ</sup> ]	<sasat>	‘bad things’
/kusuksuk/	[ku.suk.suk <sup>ʰ</sup> ]	<kusuksuk>	‘black’
/akrok/	[a.kɾok <sup>ʰ</sup> ]	<akrok>	‘raven’

All word final obstruents are devoiced. This rule affects the phonemes /b/, /d/, /g/, and /r/. The voiced plosives /b/ and /d/ are weakened and devoiced word finally as [β] and [ɖ] respectively. The [ɖ] allophone of /d/ is a voiceless retroflex approximant. The phoneme /g/ does not weaken word finally but is simply devoiced to [k<sup>ʰ</sup>].

/tibur/	[t <sup>h</sup> i.βur̥]	<tibur>	‘area/bush’
/arar/	[a.rar̥]	<arar>	‘be awake/alert’
/sulug/	[su.lu k <sup>ʰ</sup> ]	<sulug>	‘descend’
/matag/	[ma.ta k <sup>ʰ</sup> ]	<matag>	‘my eye’
/idabdab/	[i.ɖaβ.ɖaβ]	<idabdab>	‘he net fishes’
/lab/	[laβ]	<lab>	‘beach/shore’
/pud/	[p <sup>h</sup> u.ɖ]	<pud>	‘banana’
/udud/	[u.ɖu.ɖ]	<udud>	‘roof’

The voiced plosive phonemes, /b/, and /d/ weaken to [β], and [ɖ], intervocalically, in syllable codas, and following non-homo-organic consonants. The phoneme /g/ weakens to [ɣ] intervocalically and in non-word-final syllable codas. However, /g/ does not weaken after a consonant or word finally.

/eababa/	[ <sup>l</sup> ɛa.βa.βa]	<eababa>	‘human’
/imedameda/	[i.mɛ.ɖa.mɛ.ɖa]	<imedameda>	‘flesh/muscle’
/idabdab/	[i.ɖaβ.ɖaβ]	<idabdab>	‘he net fishes’
/didmagele/	[diɖ.mə.ɣe.le]	<didmagele>	‘clam sp.’
/muga/	[ <sup>l</sup> mu.ɣa]	<muga>	‘precede’
/ibagbage/	[i.βaɣ.βa.ɣe]	<ibagbage>	‘his- wing’
/kabkabo/	[k <sup>h</sup> aβ.ka.βo]	<kabkabo>	‘ceremonial platform’
/imadmadid/	[i.maɖ.ma.ɖi]	<imadmadid>	‘he is standing’
/kandis/	[k <sup>h</sup> an.ɖis]	<kandis>	‘contribution mat’
/mariamba/	[ma.ri.am.ba]	<mariamba>	‘sky’
/oangga/	[oŋga]	<oangga>	‘if’
/gergeu/	[ger.ge.u]	<gergeu>	‘child’
/gargar/	[gar.gar]	<gargar>	‘uncooked’

A word initial voiced plosive may weaken by influence of a phonemically identical weakened plosive in a repeated, subsequent open syllable. Such syllable repetition may be either lexical or in stem reduplication up to two syllables.

/babanga/	[βa.βa.ŋa]	<babanga>	‘wide’
/bebea/	[βe.βe.a]	<bebea>	‘defecate’
/dudunga/	[ɖu.ɖu.ŋa]	<dudunga>	‘enter’
/dadanga/	[ɖa.ɖa.ŋa]	<dadanga>	‘garden’
/gigiran/	[ɣi.ɣi.ran]	<gigiran>	‘grasp’
/gabagabada/	[ɣa.βa.ɣa.βa.ɖa]	<gabagabada>	‘our(incl) ancestors’

The retroflex flap, [ɽ], can replace any occurrence of [ɖ] in fast speech.

/imedameda/	[i.mɛ.ɽa.mɛ.ɽa]	<imedameda>	‘flesh/meat’
/tadada/	[t <sup>h</sup> a.ɽa.ɽa]	<tadada>	‘we(incl) pull’

The sonorants /l/, /n/, and /ŋ/ and the trilled /r/ are devoiced when they occur in consonant clusters with voiceless plosives. /n/ and /ŋ/ can only occur in clusters that have a voiceless homo-organic plosive as the first segment of the cluster (i.e. /tn- / or /kŋ- /). When such a sequence occurs, the two sounds coalesce into a plosive with a voiceless nasal release. The sequence /pm- /, while not occurring in the data, is expected to follow this pattern.

/tnan/	[t <sup>h</sup> an]	<tnan>	‘leave’
/tnag/	[t <sup>h</sup> ak <sup>ɿ</sup> ]	<tnag>	‘my mother’
/kŋor/	[k <sup>h</sup> oɾ]	<kngor>	‘fish sp.’
/sakŋa/	[sa.k <sup>h</sup> a]	<sakŋa>	‘sharpening’
/krau/	[k <sup>h</sup> rau]	<krau>	‘be broken’
/tiprususu/	[t <sup>h</sup> i.p <sup>h</sup> ru.su.su]	<tiprususu>	‘squeeze through’
/pla/	[p <sup>h</sup> la]	<pla>	‘you spit’
/klaslasi/	[k <sup>h</sup> las.la.si]	<klaslasi>	‘grass sp.’

When the sequence /tl- / occurs as a cluster, the two segments coalesce and are phonetically realized as an alveolar plosive with a voiceless lateral release.

/tletle/	[t <sup>h</sup> ɛ.t <sup>h</sup> ɛ]	<tletle>	‘fence post’
/atlotlo/	[a.t <sup>h</sup> o.t <sup>h</sup> o]	<atlotlo>	‘look in water’

Front vowels may optionally become lax interconsonantly. This usually, but not always, occurs before a nasal consonant.

/iketi/	[i.kʰɛ.ti]	<iketi>	‘he breaks’
/bageg/	[ˈba.ɣɛkʰ]	<bageg>	‘my hand’
/serembat/	[sɛ.ˈrɛm.batʰ]	<serembat>	‘sweet potato’
/keŋa/	[kʰɛ.ŋa]	<kenga>	‘rope sp.’
/imedameda/	[i.mɛ.dɑ.mɛ.dɑ]	<imedameda>	‘flesh’
/bagele/	[ˈba.ɣɛ.le]	<bagele>	‘crocodile’
/patautene/	[pʰɑ.taʊ.ˈte.ne]	<patautene>	‘just now’
/titenai/	[tʰi.tʰɛ.nɑi]	<titenai>	‘they present a gift’
/itini/	[i.tʰɪn]	<itin>	‘his skin’
/bisɪŋa/	[bi.ˈsɪ.ŋɑ]	<bisinga>	‘basket’
/nimmim/	[ˈnɪm.nɪm]	<nimmim>	‘sandfly sp.’
/ŋɪŋdɑŋa/	[ŋŋ.ˈdɑ.ŋɑ]	<ngingdanga>	‘laughter’
/tiparim/	[tʰi.pʰɑ.rɪm]	<tiparim>	‘they are conceited’
/masin/	[ma.ˈsɪn]	<masin>	‘others’

The low vowel /a/ may optionally weaken to [ə] in an unstressed, open syllable. This usually, but not always happens word finally.

/palata/	[pʰɑ.lə.tə]	<palata>	‘platform’
/sabale/	[sə.ˈβɑ.le]	<sabale>	‘tomorrow’
/gelema/	[gɛ.lɛ.mə]	<gelema>	‘crayfish’
/barikia/	[ba.ˈri.ki.ə]	<barikia>	‘new clothes’
/kuakua/	[kʰu.ˈɑ.ku.ə]	<kuakua>	‘have elephantitis’
/sia/	[ˈsi.ə]	<sia>	‘reef’
/soa/	[ˈso.ə]	<soa>	‘lift’
/aluagau/	[ɑ.ˈlu.ə.ɣɑʊ]	<aluagau>	‘helper’

A high vowel will become a non-syllabic onglide preceding any other vowel and following either a word boundary or another vowel.

A non-low vowel will become a non-syllabic onglide preceding /o/ or /a/ and following either a word boundary or another vowel.

/eaba/	[ˈɛɑ.βɑ]	<eaba>	‘man’
/iaba/	[ˈiɑ.βɑ]	<iaba>	‘banana sp.’
/saoa/	[ˈsɑ.ɔɑ]	<saoa>	‘what thing?’
/kaua/	[kʰɑ.ʉɑ]	<kaua>	‘dog’
/iboboəo/	[i.βo.ˈβo.ɛo]	<iboboəo>	‘be sleepy’
/iboroio/	[i.ˈβo.ro.ɪo]	<iboroio>	‘his lung’
/eaoa/	[ˈɛɑ.ɔɑ]	<eaoa>	‘lime powder’
/uuig/	[ˈu.ʉikʰ]	<uuig>	‘my tail’
/ieieingɑ/	[i.ɛi.ɛi.ŋɑ]	<ieieinga>	‘pain’
/ueue/	[ˈʉe.ʉe]	<ueue>	‘uncover stone oven’
/laoe/	[ˈlɑ.ɔe]	<laoe>	‘fruit season’
/iuon/	[i.ˈʉon]	<iuon>	‘be full’
/ual/	[ʉɑ]	<ual>	‘sago hammer’
/oalum/	[ˈɔɑ.lum]	<oalum>	‘your fame’

The above rules may apply across morpheme boundaries only in fast speech. These rules produce the following onglide sequences, all of which occur in the data.

[jɑ iɛ iə ɪɑ ʉɑ ʉo ʉi ɛɑ ɛo ɔe ɔɑ]

A non-low vowel will become a non-syllabic offglide following /o/ or /a/.

A high vowel will become a non-syllabic offglide following a vowel that shares the same value for [back].

/aita/	[ <sup>1</sup> aᵢ.ta]	<aita>	‘brother’
/aeg/	[aᵛk <sup>1</sup> ]	<aeg>	‘my leg’
/aulaŋa/	[aᵛ. <sup>1</sup> la.ŋa]	<aulaŋa>	‘rafter poles’
/aol/	[aᵛl]	<aol>	‘we(excl) buy’
/moi/	[moᵢ]	<moi>	‘taro’
/moe/	[moᵛ]	<moe>	‘pandanus mat’
/goibe/	[ <sup>1</sup> goᵢ.βe]	<goibe>	‘alright’
/abei/	[ <sup>1</sup> a.βeᵢ]	<abei>	‘wood’
/borou/	[ <sup>1</sup> bo.roᵛ]	<borou>	‘magic’
/kapei/	[ <sup>1</sup> k <sup>h</sup> a.peᵢ]	<kapei>	‘big’
/eine/	[ <sup>1</sup> eᵢne]	<eine>	‘this one’
/kouŋa/	[ <sup>1</sup> k <sup>h</sup> oᵛ.ŋa]	<kouŋa>	‘batting stick’

Again, these rules do not apply across morpheme boundaries unless they occur in fast speech. These rules apply to the following sequences, all of which occur in the data.

[oᵢ oᵛ oᵛ eᵢ aᵢ aᵛ aᵛ aᵛ]

### Conventions: Orthographic

There are only two situations in which the Bariai orthography overdifferentiates. Both are cases of morphophonemic variation, rather than common allophonic variation. In each of these cases the graphemic representation follows the phonetic pronunciation.

The first situation in which overdifferentiation occurs is on roots beginning with sequence /oa/. When these roots occur with a prefix ending in /i-/, the stem initial /o/ becomes [u] .

/∅- oatai/	[ <sup>1</sup> oᵛ.taᵢ]	<oatai>	‘you(sg) know’
/i- oatai/	[i. <sup>1</sup> uᵛ.taᵢ]	<iuatai>	‘he knows’
/ti- oatai/	[t <sup>h</sup> i. <sup>1</sup> uᵛ.taᵢ]	<tiuatai>	‘they know’
/oadi -d/	[ <sup>1</sup> oᵛ.dᵢᵛ]	<oadid>	‘their odor’
/i- oadi/	[i. <sup>1</sup> uᵛ.dᵢᵛ]	<iuad>	‘his odor’

The other situation in which overdifferentiations occurs is on the postpositional locative clitic /=eai/. The initial /e/ vowel of this clitic is raised to /i/ when it follows a syllable containing a high vowel.

/dubu =eai/	[ <sup>1</sup> du.βu.ᵢaᵢ]	<dubuiai>	‘level area =LOC’
/giniu =eai/	[ <sup>1</sup> gi.ni.u.ᵢaᵢ]	<giniuiai>	‘nest =LOC’
/laulau =eai/	[ <sup>1</sup> laᵛ.laᵛ.ᵢaᵢ]	<laulauiai>	‘leaf =LOC’
/tibur =eai/	[t <sup>h</sup> i.βu.ri.ᵢaᵢ]	<tiburiai>	‘bush =LOC’
/sil =eai/	[ <sup>1</sup> si.li.ᵢaᵢ]	<siliai>	‘deep part =LOC’
/lum =eai/	[ <sup>1</sup> lu.mi.ᵢaᵢ]	<lumiai>	‘men’s house =LOC’

The phoneme /ŋ/ is symbolised in the Bariai orthography as <ng> for three main reasons: 1) it follows the precedent of both Tok Pisin and English, 2) <ng> can easily be typed on a common computer or typewriter, and 3) the Bariai people strongly favored <ng> over <ŋ> in an orthography survey we conducted in 1994. Although Maleu, a neighboring language, has used <ŋ> in the past, most of the Bariai people we interviewed were unfamiliar with the <ŋ> symbol, and seemed naturally inclined to accept the digraph <ng>. Although there is potential confusion on some particular sequences involving the phoneme /ŋ/, the Bariai literacy committee preferred to consistently use the digraph, <ng> for all occurrences of /ŋ/.

/gangano/	[gan. <sup>1</sup> ga.no]	<gangano>	'taro sp.'
/apingui/	[a.pɪn. <sup>1</sup> ɡui]	<apingui>	'month sp.'
/anŋa/	[ <sup>1</sup> an.ŋa]	<annga>	'food'
/koŋge/	[ <sup>1</sup> k <sup>h</sup> oŋ.ge]	<kongge>	'crooked'
/sak -ŋa/	[ <sup>1</sup> sa.k <sup>o</sup> a]	<saknga>	'sharpen -NR'
/kŋor/	[k <sup>o</sup> or]	<kngor>	'fish sp.'

Since all four non-low vowels can occur in vowel ongliding sequences, we have chosen not to symbolize any of them with <y> or <w>. To do so would underdifferentiate phonemic contrasts in the following examples.

/iaba/	[ <sup>1</sup> i.a.βa]	<iaba>	'banana sp.'
/eaba/	[ <sup>1</sup> e.a.βa]	<eaba>	'man'
/oalum/	[ <sup>1</sup> o.a.lum]	<oalum>	'your reputation'
/ual/	[ <sup>1</sup> u.a.l]	<ual>	'gloss'

Our orthography survey revealed that the people much prefer to write <i>, <e>, <o> and <u> rather than <y> or <w> in any example.

The orthographic representation of the phoneme /b/ is the only area of the Bariai orthography in which we have found significant differences among people we interviewed. Exactly fifty percent of the people we interviewed preferred the grapheme <v> in word medial and some word final occurrences of the phoneme /b/. In 1994 the Bariai literacy committee held a meeting in which this issue was thoroughly discussed. At that time a unanimous decision was made to not overdifferentiate the allophonic variation of the phoneme /b/, but to simply use <b> for all occurrences. The main reason for adopting this position is that it is simpler for teachers to teach children one symbol that occurs in many environments, rather than different symbols, occurring in separate environments. The explanation of the distribution of the [β] allophone of /b/ is fairly complex, so the spelling rule for the use of a potential <v> grapheme would not be a simple matter. Although some people have the tendency to use the <v> grapheme when writing the language, we have not ever heard anyone urging us to adopt the <v> grapheme. The Gospel of Mark has been in use since 1998, and a vernacular curriculum for prep-school and grade one has been developed using this orthography and has been successfully used without complaint since 1995.

### Transcription of a recorded passage

/ gaisala ŋan ado ede | eaba ede ibada ele ido ila dadangai || ila aea dadangai ga  
 igera gaea ianian aea dadanga || io | ei ibada ele ido igal ŋan gaea || be gaea imate  
 eta mao || ei ibada abei kaptnami tau | ilado ga inasi gaea | inasi gaea ga ila irau  
 gaea | ta gaea imate || gaea imate | ta eaba ibaba iuae || ikeo | eao nam | gitarua  
 tabisi gaea || ta gisirua tibisi gaea ila tuangai || tibisi gaea ila tuangai ta tinono ||  
 tinono ta titotoi ta gisingada gid panua toa tuangai tian || /

< Gaisala ngan ado ede, eaba ede ibada ele ido ila dadangai. Ila aea dadangai ga igera gaea ianian aea dadanga. Io, ei ibada ele ido igal ngan gaea. Be gaea imate eta mao. Ei ibada abei kaptnai tau, ilado ga inasi gaea. Inasi gaea ga ila irau gaea, ta gaea imate. Gaea imate, ta eaba ibaba iuae. Ikeo, "Eao nam, gita rua tabisi gaea," Ta gisirua tibisi gaea ila tuangai. Tibisi gaea ila tuangai ta tinono, Tinono ta titotoi ta gisingada gid panua toa tuangai tian. >

'One morning, a man went to his garden carrying his spear. There he saw a pig eating the food in his garden. So, he shot at the pig with his spear, but the pig didn't die. He fetched an enormous piece of wood and ran after the pig. He caught up with the pig and pounded it with the piece of wood until it died. When the pig was dead he called to his friend, "Come here! Help me carry this pig." The two of them carried the pig to the village. They cooked it and cut it up. Together with the people of the village they ate it.'

## Orthography Chart

The following chart displays the orthography of Bariai, with the orthography of Maleu, the only neighboring language for which I have information. Two languages, Lusi and Kove, which are more closely related to Bariai than Maleu, have developed orthographies for use in vernacular prep and elementary schools, but I have been unable to contact the leaders of these projects to determine what orthographies they are using. According to Goulden (1996:67), both /b/ and /β/ phonemes exist in these languages so I would expect them to be using the grapheme, <v> which is a difference from Bariai.

Bariai Phonemes	Bariai Graphemes	Maleu Phonemes	Maleu Graphemes
a	a	a	a
b	b	β	v, b
d	d		(see 's')
e	e	e	e
g	g	ɣ	g
i	i	i	i
k	k	k	k
l	l	l	l
m	m	m	m
n	n	n	n
ŋ	ng	ŋ	ŋ
o	o	o	o
p	p	p	p
r	r	r	r
s	s	s	s, d
t	t	t	t
u	u	u	u
		w	w

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