Organised Phonology Data

Arop-Lokep (apr)
Madang and Morobe Provinces

Linguistic Classification: Austronesian, Malayo-Polynesian, Central-Eastern, Eastern Malayo-Polynesian, Oceanic, Western Oceanic, North New Guinea, Ngero-Vitiaz, Vitiaz, Korap

Population census: 3020 (2000 census)

Major villages: Long Island = Matapun, Bara, Bok, Kaut, Malala, Point Kiau; Tolokiwa Island = Bun, Awar, Nanat, Mulau; Umboi Island = Masele; Crown Island = scattered hamlets.

Linguistic work done by: SIL (Mary Raymond and Jeffrey D'Jernes)

Data checked by: Mary Raymond Chambers (February 2010) based on one year's work in the language and with data collected over 20 years by Jeffrey D'Jernes

Phonemic and Orthographic Inventory

/	ɑ	b	d	ɛ	ɨ	g	i	k	l	m	n	ŋ	o	ɔ	p	r	s	t	u	ʔ	/
<	a	b	d	e	e, ie	g	i, y	k	l	m	n	ng	o	oo	p	r	s	t	u, w		>
<	A	B	D	E	E, Ie	G	I, Y	K	L	M	N	Ng	O	Oo	P	R	S	T	U, W		>

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				r							
Tap/Flap											
Fricative				s							
Lateral Fricative											
Approx											
Lateral Approx				l							
Ejective Stop											
Implos											

p	[ˈpur]	/pur/	<pur>	'banana'
	[ɑˈsɑ.pɑ]	/ɑ+sɑpɑ/	<asapa>	'1s+carve'
	[ˈup.lo]	/uplo/	<uplo>	'spider'
	[ˌbokˈ˺ˈpu.ru]	/bokpuru/	<bokpuru>	'hawk'

	[ˈtiˌɑp˺]	/tiɑp/	<tiap>	'no'
b	[ˈbɑ.lɛ]	/bɑlɛ/	<bale>	'shelter'
	[bɔˈbɔ.nɔ]	/bɔbɔ+nɔ/	<booboonoo>	'husband+1sPOS'
	[iˈkat˺ˌbon]	/i+katbon/	<ikatbon>	'3s+mix.with.others'
t	[ˈto]	/to/	<to>	'pole'
	[ˈmɑˌtuk˺]	/matuk/	<matuk>	'coconut'
	[ˈbut˺ˌbut˺]	/butbut/	<butbut>	'joist'
	[ˈkɔr.tɔ]	/kɔrtɔ/	<koortoo>	'vine.sp'
	[sɑˈramˌbat˺]	/sarambat/	<sarambat>	'sweet.potato'
d	[ˈdiŋ]	/diŋ/	<ding>	'turban.shell'
	[ˈdɑ.ɾɑ]	/dada/	<dada>	'road'
	[ˌmod.moˈdo.no]	/modmodo+no/	<modmodono>	'short+3sPOS'
	[ˈkanˌdot˺]	/kandot/	<kandot>	'separate'
	[ˈuˌdud]	/udud/	<udud>	'backbone'
k	[ˈku.mu]	/kumu/	<kumu>	'garden'
	[ˈru.ku] ~ [ˈru.ɣu]	/ruku/	<ruku>	'coconut.shell'
	[ˈrak˺ˌrak˺]	/rakrak/	<rakrak>	'embryo'
	[ˈkos.ˌkos]	/koskos/	<koskos>	'bachelor'
	[ˈɔk˺]	/ɔk/	<ook>	'wallaby'
g	[ˈgok˺]	/gok/	<gok>	'wild'
	[gi.ˈgi.ni]	/gigi+ni/	<gigini>	'side+3sPOS'
	[i.ˈkap˺ˌgi]	/i+kapgi/	<ikapgi>	'3s+garden'
ʔ	[ˈɨʔ]	/ɨʔ/	<e>	'yes'
	[ˈmɔʔ]	/mɔʔ/	<moo>	'pig.call'
m	[ˈmɛt˺]	/mɛt/	<met>	'low.tide'
	[bɑˈrɛ.mɛ]	/barɛmɛ/	<bareme>	'clan.house'
	[i.ˈkum.tɔ]	/i+kum.tɔ/	<ikumtoo>	'3s+cover' (Lokep)
	[ˌmɔɭˈmɔɭ]	/mɔlmɔl/	<moolmool>	'true'

	['ga.ˌlam]	/galam/	<galam>	'taro.sp'
n	['nam]	/nam/	<nam>	'mosquito'
	[i.ˈsi.ni]	/i+sini/	<isini>	'3s+shine'
	[ˈran.ba]	/ranba/	<Ranba>	'Lake.Wisdom'
	[i.ˈkat.ˌnaj]	/i+kat+nai/	<ikatnai>	'3s+throw+VAL'
	[ˈkuɳ]	/kun/	<kun>	'breadfruit.tree'
ŋ	[ˈŋas]	/ŋas/	<ngas>	'left'
	[ˈni.ˌŋɛr]	/niŋɛr/	<ninger>	'chill'
	[ˌboŋ.ˈboŋ]	/boŋboŋ/	<bongbong>	'tomorrow'
	[ˈtal.ˌŋakˈ]	/talŋa+k/	<talngak>	'ear+1sPOS'
	[ˈoŋ]	/oŋ/	<ong>	'2s'
r	[ˈru]	/ru/	<ru>	'two'
	[ki.ˈro.ro]	/kiroro/	<kiroro>	'possum'
	[ˌpar.ˈma.na]	/parma+na/	<parmana>	'underside+3sPOS'
	[ˈrakˈ.ˌrakˈ]	/rakrak/	<rakrak>	'embryo'
	[ˈɛr]	/ɛr/	<er>	'tree.sp'
s	[ˈsapˈ]	/sap/	<sap>	'insect.sp'
	[ˈka.ˌsin]	/kasin/	<kasin>	'little'
	[ˌbus.ˈkɛ.ˌtɔr]	/buskɛtɔr/	<busketoor>	'fish.sp'
	[am.ˈsi]	/am+si/	<amsi>	'1pEXCL+come.down'
	[ˈkas]	/kas/	<kas>	'tobacco'
l	[ˈlɛ]	/lɛ/	<le>	'sail'
	[ˈsɨ.lɨ] ~ [ˈsɛ.lɛ]	/sɨlɨ/	<sele>	'machete'
	[ˌtal.ˈŋa.ɾi]	/ talŋa+di/	<talngadi>	'ear+3pPOS'
	[ˈsikˈ.ˌlaj]	/siklai/	<siklai>	'lemon.grass'
	[ˈlal]	/lal/	<lal>	'time'

Vowels

i   u
      ɨ
                     o

ɛ   ɔ

        ɑ

i	[ˈi.ˌpipˀ]	/ipip/	<ipip>	'kidney'
	[ˈkɑ.ˌsin]	/kɑsin/	<kasin>	'little'
	[ti.ˈni.ni]	/tini+ni/	<tinini>	'skin+3s'
ɨ	[ˈɨs.nɑ] ~ [ˈɛs.nɑ]	/ɨsnɑ/	<esna>	'ouch'
	[ˈtɨkˀ]	/tɨk/	<tiek>	'sea'
	[ˈmɨ.rɨ]	/mɨrɨ/	<mere>	'fish.sp'
ɛ	[ˈɛŋ]	/ɛŋ/	<eng>	'wind'
	[ˈtɛkˀ]	/tɛ+k/	<tek>	'faeces+1sPOS'
	[i.ˈmɛ.rɛ]	/i+mɛrɛ/	<imere>	'3s+swamp'
ɑ	[ˈɑ.tu]	/ɑtu/	<atu>	'one'
	[ˈkɑs]	/kɑs/	<kas>	'tobacco'
	[ˈgɑ]	/gɑ/	<ga>	'pig'
ɔ	[ˈɔ.kɔ]	/ɔkɔ/	<ookoo>	'canoe'
	[ˈsɔm]	/sɔ+m/	<soom>	'what+2sPOS'
	[i.ˈlɔ]	/i+lɔ/	<iloo>	'3s+heat'
o	[ˈoŋ]	/oŋ/	<ong>	'2s'
	[ˈpotˀ]	/pot/	<pot>	'bladder'
	[ˈso]	/so/	<so>	'something'
u	[ˈup.lo]	/uplo/	<uplo>	'spider'
	[ˈpur]	/pur/	<pur>	'banana'
	[ˌlu.ˈlu]	/lulu/	<lulu>	'tidal.wave'

Suprasegmentals (stress, tone, length)

Primary stress usually occurs on the penultimate syllable of multisyllabic words, with secondary stresses occurring on every second syllable to the left of the syllable carrying primary stress.

| [ˈsɑ.lɑ] | /sɑlɑ/ | <sala> | 'floor' |
| [ki.ˈro.ro] | /kiroro/ | <kiroro> | 'possum' |

| [bi.ˈɑ.ŋa] | /biaŋa/ | <bianga> | 'fruit.bat' |
| [ˌka.lu.ˈna.ja] | /ˌkalunaia/ | <kalunaia> | 'uncertain' |

Heavy (CVC) syllables must be stressed (including syllables closed with a semivowel), even if this results in a sequence of adjacent stressed syllables.

[ˈmɑ.ˌtukˠ]	/matuk/	<matuk>	'coconut'
[ˈgan.ˌnuj]	/gannui/	<gannui>	'rainbow'
[ˌbus.ˈkɛ.ˌtɔr]	/busketɔr/	<busketoor>	'fish.sp'

Subject agreement prefixes are extrametrical and are not stressed. If stress would normally be assigned to this syllable, the first syllable of the verb root is stressed instead.

[a.ˈpɛ]	/a+pɛ/	<ape>	'1s+plant'
[i.ˈsu.pu]	/i+supu/	<isupu>	'3s+peel'
[i.ˈma.ˌgor]	/i+magor/	<imagor>	'3s+shrivel'
[ku.ˌsɑ.ˈpu.tu]	/ku+saputu/	<kusaputu>	'2s+sever'
[i.ˌta.ˈpu[.ˌpu[]	/i+tapulpul/	<itapulpul>	'3s+roll.on.ground'

The reciprocal and causative prefixes are assigned stress according to the default principles described above.

[ti.ˈpɑ.ˌkan]	/ti+pa+kan/	<tipakan>	'3p+CAUS+eat'
[ti.ˈpar.ˌkapˠ]	/ti+par+kap/	<tiparkap>	'3p+REC+get'
[ti.ˌpar.ˈwɛ.tɛ]	/ti+par+wɛtɛ/	<tiparwete>	'3p+REC+speak'
[ti.ˌpa.ˈka.la]	/ti+pa+kala/	<tipakala>	'3p+CAUS+block'
[ti.ˌpar.pa.ˈka.la]	/ti+par+pa+kala/	<tiparpakala>	'3p+REC+CAUS+block'

The 3s object-marker (OM) is a lexically-specified +V suffix which attaches to the verb root (other object markers are treated as independent phonological words). If the verb root is consonant-final, the OM adds a syllable to the word. This syllable is extrametrical and does not affect stress.

| [ti.ˈga.ˌruŋ] | /ti+garuŋ/ | <tigarung> | '3p+make.dirty' |
| [ti.ˈga.ˌru.ŋu] | /ti+garuŋ+u/ | <tigarungu> | '3p+make.dirty+3s' |

If the verb root ends in a vowel, the OM replaces this vowel and is counted for stress assignment, stress falling on the penultimate syllable of the root.

| [i.ˈlo.no] | /i+lono/ | <ilono> | '3s+help' |
| [i.ˈlo.ni] | /i+lono+i/ | <iloni> | '3s+help+3s' |

If the verb root ends in the same vowel as the OM, these two vowels coalesce into a single syllable, and this final syllable takes primary stress.

| [a.ˌka.ˈma.ta] | /a+kamata/ | <akamata> | '1s+see' |
| [a.ˌka.ma.ˈta] | /a+kamata+a/ | <akamata> | '1s+see+1s' |

Complex verbs whose stems are comprised of more than one root are best analysed as having stress assigned to each root with its attending affixes. The rightmost stress is primary.

| [ti.ˌko.ro.ˈpa.la] | /ti+koro+pala/ | <tikoropala> | '3p+cut+split' |
| [ˌko.ro.pa.ˈla.ŋa] | /koro+pala+a+ŋa/ | <koropalanga> | 'cut+split+CM+NOM' |

Reduplication may be lexical or productive. Where a whole root is reduplicated, primary stress is assigned to the relevant syllable of the rightmost root.

[ˌko.ro.ˈko.ro]	/kodokodo/	<kodokodo>	'intestine'
[ˌbut˺.ˈbut˺]	/butbut/	<butbut>	'joist'
[ˌrɛ.ˈrɛ]	/rɛrɛ/	<rere>	'rope'

Not all words where one syllable appears to be a copy of another derive from reduplication processes. These non-reduplicated words follow the normal principles for stress placement.

| [ˈmos.ˌmos] | /mosmos/ | <mosmos> | 'slowly' |
| [ˈda.ra] | /dada/ | <dada> | 'road' |

In a small number of examples, minimal pairs exist between words with reduplication stress and words that do not involve reduplication.

| [ˌdɛ.ˈdɛ] | /dɛdɛ/ | <dede> | 'hook' |
| [ˈdɛ.rɛ] | /dɛdɛ/ | <dede> | 'plug' |

Where reduplication is only partial, primary stress is assigned to the whole root (i.e. the part of the word that can occur in isolation). The penultimate syllable must also be stressed.

[na.ˈtɛ.ŋɛ.ˌtɛ.ŋɛ]	/natɛŋɛtɛŋɛ/	<natengetenge>	'plant.sp'
[ˈma.ˌla.la]	/malala/	<malala>	'village'
[am.ˈpɛ.ˌlɛ.lɛ]	/am+pɛlɛlɛ/	<ampelele>	'1pEXCL+beachcomb'

The progressive form of verbs is frequently expressed with partial reduplication which effects stress placement.

[ti.ˈsu.lu]	/ti+sulu/	<tisulu>	'3p+shout'
[ti.ˈsu.ˌlu.lu]	/ti+sulu+lu/	<tisululu>	'3p+shout+RED'
[i.ˈpa.nɛ]	/i+pana+ɛ/	<ipane>	'3s+shoot+3s'
[i.ˈpa.ˌnɛ.nɛ]	/i+pana+ɛ+nɛ/	<ipanene>	'3s+shoot+3s+RED'

Tone is not a feature used to contrast words in the Arop-Lokep lexical stock. Similarly, vowel length is generally non-contrastive. However, there is a set of words in the language that have contrastive vowel length within a syllable. These words are distinguished by length that result from regular phonological processes.

The preposition /kɛ/ 'of' combines with the pronouns /di/ '3p' and /idi/ '1pINCL', and creates a minimal pair:

| [ˈki.di] | /kɛ+di/ | <kidi> | 'of+3p' |
| [⌣kiː.di] | /kɛ+idi/ | <kiidi> | 'of+1pINCL' |

Inalienable nouns whose roots end with /i/, such as /tini/ 'skin', combines with person

markers /di/ '3p' and /idi/ '1pINCL', and creates a minimal pair:

| [ti.ˈni.di] | /tini+di/ | <tinidi> | 'skin+3p' |
| [ti.ˈniː.di] | /tini+idi/ | <tiniidi> | 'skin+1pINCL' |

Geminate consonant clusters have been interpreted as two consonants across a syllable boundary, rather than as long consonants. Such clusters are rare, but they stand in contrast to single medial consonants.

[kad.ˈdɛ.nɛ]	/kaddɛ+nɛ/	<kaddene>	'back+3sPOS'
[ˈka.ɾa. ˌka.ˈdɛ.nɛ]	/kadakadɛ+nɛ/	<kadakadene>	'pith+3sPOS'
[ˌmaɾ.ˈra.na]	/marra+na/	<marrana>	'light+3sPOS'
[maɾ.ˈrɛ.nɛ]	/maɾɛ+nɛ/	<marene>	'skull.center+3sPOS'
[i.ˈkat.tɛ]	/i+kattɛ/	<ikatte>	'3s+throw'
[i.ˌka.ɾa.ˈka.ti]	/i+kaɾa+kat+i/	<ikatte>	'3s+chew+sever+3sPOS'
[ˈsal.ˌlau]	/sallau/	<sallau>	'malaise'
[i.ˈsa.ˌlau]	/i+salau/	<isalau>	'3s+singe'
[ˈkaj.jɛ]	/kai.iɛ/	<kaiye>	'many'
[ka.ˈjɛ]	/ka+iɛ/	<kaye>	'2p+with.3sPOS'

Contractions of certain syllable types are not uncommon in Arop-Lokep. This process involves the elision of a reduplicated root leaving only the root's first syllable onset consonant as a trace. Reduplicated roots beginning with any consonant phoneme other than the plosives appear capable of undergoing contraction. This process results in variation between geminate and single consonants, and can lead to a geminate occurring word-initially, in violation of the constraint discussed previously. This is the only situation in which a word-initial geminate may occur.

Origins of contracted forms:

[i.ˈlu.lu]	/i+lulu/	<ilulu>	'3s+vomit'
[ˌil.ˈlu]	/i+llu/	<illu>	'3s+vomit'
[ti.ˌma.ta.ˈma.ta]	/ti+mata+mata/	<timatamata>	'3p+die+die'
[ˌtim.ˈma.ta]	/ti+m+mata/	<timmata>	'3p+die+die'
[ˌnoŋˈnoŋ]	/noŋnoŋ/	<nongnong>	'coconut.leaf.spine'
[ˈnnoŋ]	/nnoŋ/	<nnong>	'coconut.leaf.spine'
[ˌsa.ga.ˈsa.ga]	/sagasaga/	<sagasaga>	'stretcher'
[ˈssa.ga]	/ssaga/	<ssaga>	'stretcher'

Contrasts between geminates and non-geminates:

[ˈraj]	/rai/	<rai>	'year'
[ˈrraj]	/rrai/	<rrai>	'afternoon'
[naʲ.ˈi.ŋi]	/nai+i+ŋi/	<naingi>	'boil+CM+NOM'
[nnaʲ.ˈi.ŋi]	/nnai+i+ŋi/	<nnaingi>	'give.away+CM+NOM'

The extrametrical subject agreement prefixes become stressed when closed with a geminate consonant. Following the 1st person plural exclusive prefix /am +/, the geminate is

degeminated to avoid a sequence of three consonants, and /ɑm +/ becomes stressed.

[ˌɑlˈluŋ]	/ɑ+lluŋ/	<allung>	'1s+trick'
[ˌɑmˈluŋ]	/ɑm+lluŋ/	<amlung>	'1s+trick'
[ˌɑrˈriw]	/ɑ+rriw/	<arriu>	'1s+wash'
[ˌɑmˈriw]	/ɑm+rriw/	<amriu>	'1pEXCL+wash'

Syllable Patterns

V	[ˈi]	[ˈiˌpipˑ]	[siˈɑ.nɑ]	[iˈlu.ɑ]
	/i/	/ipip/	/siɑ+nɑ/	/i+lu+ɑ/
	<i>	<ipip>	<siana>	<ilua>
	'fish'	'kidney'	'brain+3sPOS'	'3s+plant+3s'
CV	[ˈto]	[ˈbuˌrum]	[ˌkan.piˈti.ki]	[iˈrɛ]
	/to/	/burum/	/kanpitiki/	/i+rɛ/
	<to>	<burum>	<kanpitiki>	<ire>
	'pole'	'cargo'	'star'	'3s+build'
VC	[ˈupˑ]	[ˈup.lo]	-	[ˈnɑ.olˑ]
	/up/	/uplo/		/naol/
	<up>	<uplo>		<naol>
	'digging.stick'	'spider'		'sound'
CVC	[ˈnam]	[ˌkan.pi.ˈti.ki]	[sa.ˈram.ˌbatˑ]	[ˈma.ˌtukˑ]
	/nam/	/kanpitiki/	/sarambat/	/matuk/
	<nam>	<kanpitiki>	<sarambat>	<matuk>
	'mosquito'	'star'	'sweet.potato'	'coconut'

Conventions: Phonological

The phonemes /p/, /t/ and /k/ occur in all environments. They are unreleased in syllable coda position ([pˑ], [tˑ], [kˑ]).

[ˌbutˑˈbutˑ]	/butbut/	<butbut>	'joist'
[ˈmaˌtukˑ]	/matuk/	<matuk>	'coconut'
[ˈtiˌɑpˑ]	/tiap/	<tiap>	'no'

The phone [k] is in free variation with [ɣ] between vowels.

| [ˈɔ.kɔˑ] ~ [ˈɔˑ.ɣɔ] | /ɔkɔ/ | <ookoo> | 'canoe' |
| [ˈpoˌkaj] ~ [ˈpoˌɣaj] | /pokai/ | <pokai> | 'tree.sp' |

Only four instances of the glottal stop /ʔ/ have been observed. Distribution is limited to word-final position. It is worth noting that all four words also tend to occur utterance-finally, and that they are all functional words rather than major lexical class items.

[ˈɔʔ]	/ɔʔ/	<oo>	'COMP'
[ˈɨʔ]	/ɨʔ/	<e>	'yes'
[ˈnɑʔ]	/nɑʔ/	<na>	'no'
[ˈmɔʔ]	/mɔʔ/	<moo>	'pig.call'

The distribution of the phoneme /b/ is strictly limited. It occurs only as a syllable onset in

word-initial position and when following another consonant. It also occurs intervocalically but only as a copy of a word-initial syllable. It does not occur in syllable coda position.

[ˈbɑ.lɛ]	/bɑlɛ/	<bale>	'shelter'
[iˈkatʼ.ˌbon]	/i+katbon/	<ikatbon>	'3s+mix.with.others'
[ˌbi.ˈbi]	/bibi/	<bibi>	'coconut.sp'
[ˌbɑ.ɾa.ˈbɑ.ɾa]	/badabada/	<badabada>	'storehouse'

The phoneme /d/ occurs in all environments; however, examples of /d/ in syllable coda position are very rare (it is the only voiced obstruent to occur in this position). The phoneme /d/ occurring between vowels at the beginning of an unstressed syllable is realized as [ɾ].

[ˈdɑ.ɾa]	/dada/	<dada>	'road'
[tɑ.ˈu.ru]	/taudu/	<taudu>	'moon/month'
[i.ˈdɛ]	/i+dɛ/	<ide>	'3s+hand.carry'

In the Arop 1 dialect, /d/ in syllable coda position or followed by a morpheme boundary may be realized as the alveolar trill [r]. This has most commonly been observed following high back vowels, but can also occur after a front vowel.

[ˌtud.ˈŋa.na] ~ [ˌtur.ˈŋa.na]	/tudŋa+na/	<tudngana>	'back+3sPOS'
[ɑ.ˈjod] ~ [ɑ.ˈjor]	/a+iod/	<ayod>	'1s+whistle'
[kɑ.ˈtɛ.ɾɛ] ~ [kɑ.ˈtɛd] ~ [kɑ.ˈtɛr]	/katɛdɛ/	<katede>	'breath+1pINCL'

The distribution of the phoneme /g/ is strictly limited in the same way as /b/. Thus it occurs only as a syllable onset in word-initial position and when following another consonant. It also occurs intervocalically but only as a copy of a word-initial syllable. It does not occur in syllable coda position.

[ˈgɑ]	/ˈga/	<ga>	'pig'
[ˈboŋ.ˌgaj]	/boŋgai/	<bonggai>	'banana.sp'
[ˌgo.ˈgo]	/gogo/	<gogo>	'tree.sp'

The phonemes /s/, /m/, /n/, /ŋ/, /l/ and /r/ occur in all environments. The phonemes /n/ and /l/ are realized as retroflex [ɳ] and [ɭ] in syllable coda position when following a back vowel. A transitional [d] occurs before /r/ at the beginning of a stressed syllable when following the phoneme /n/.

[ˈkuɳ]	/kun/	<kun>	'breadfruit.tree'
[ˌmɔɭ.ˈmɔɭ]	/mɔlmɔl/	<moolmool>	'true'
[ˌan.ˈdraŋ]	/anraŋ/	<anrang>	'pandanus.sp'

The phonemes /i/, /ɛ/, /ɑ/, /o/, /ɔ/ and /u/ occur in all relevant environments. The phoneme /ɨ/ occurs interconsonantally and syllable-finally. Only one occurrence of syllable initial /ɨ/ has been observed, and only among older speakers; in this word it is in free variation with [ɛ]. It is a relatively rare phoneme, occurring only 61 times in a check of 1,693 words.

| [ˈɨs.nɑ] ~ [ˈɛs.nɑ] | /ɨsnɑ/ | <esna> | 'ouch' |

[ˈbɨ]	/bɨ/	<bie>	'biggish'
[ˈbɛ]	/bɛ/	<be>	'CONJ'
[ˈtɨkˑ]	/tɨk/	<tiek>	'sea'
[ˈtɛkˑ]	/tɛ+k/	<tek>	'faeces+1sPOS'

The semivowels [w] and [j] are in an allophonic relationship with the high vowel phonemes /u/ and /i/, respectively.

The phonemes /u/ and /i/ are realised as the syllable codas [w] and [j] in two environments: 1) when preceded by a vowel and followed by juncture, and 2) when preceded by a vowel and followed by another consonant that is not word-final. The [w] and [j] allophones serve as syllable onsets in three environments: 3) when in intervocalic position, 4) when preceded by juncture and followed by another vowel, and 5) when preceded by a consonant that is not word-initial and followed by another vowel.

1)	[ˈboj]	/boi/	<boi>	'planetary.star'
	[ˈɑw]	/ɑu/	<au>	'1s'
2)	[ˈsɑwˌrɑkˑ]	/sɑurɑk/	<saurak>	'sea.urchin'
	[ˈmɑjˌlɑŋ]	/mɑilɑŋ/	<mailang>	'feast'
3)	[ˈkɑˌwɑl]	/kɑuɑl/	<kaual>	'mountain'
	[ˈkɑˌjor]	/kɑior/	<kaior>	'cassowary'
4)	[ˈwɑ.sɑ]	/uɑsɑ/	<wasa>	'bird.sp'
	[ˈjo.ro]	/ioro/	<yoro>	'NE.wind'
5)	[amˈwɛ]	/am+uɛ/	<amwe>	'1pEXCL+float'
	[iˈmɑr.jɔ]	/i+mɑriɔ/	<imarioo>	'3s+rest'

In all other environments, the phonemes /u/ and /i/ serve as the syllable nuclei [u] and [i]: 1) when preceded by a consonant and followed by juncture, 2) when followed by a word-final consonant, 3) when interconsonantal, 4) when preceded by juncture and followed by a consonant, and 5) when preceded by a word-initial consonant.

1)	[ˈku.mu]	/kumu/	<kumu>	'garden'
	[ˈsi.ɣi]	/siki/	<siki>	'kingfisher'
2)	[ˈupˑ]	/up/	<up>	'digging.stick'
	[ˈipˑ]	/ip/	<ip>	'tree.sp'
3)	[ˈkutˑ]	/kut/	<kut>	'louse'
	[ˈpir]	/pir/	<pir>	'coconut.sprout'
4)	[ˈu.ru]	/udu/	<udu>	'inland'
	[ˈi.ri]	/idi/	<idi>	'1pINCL'
5)	[kuˈmɑn]	/ku+mɑn/	<kuman>	'2s+come.across'
	[ˈti.ˌɑpˑ]	/tiɑp/	<tiap>	'no'

A notable feature of Arop-Lokep phonology is the word pattern (C)VV$_i$CV$_i$, wherein the two

vowels designated as V$_i$ can stand for any of the vowels in the phonemic inventory but are exactly identical to each other. Such words always syllabify in the pattern (C)V.V.CV., even where V$_i$ is a high vowel /u/ or /i/. Inalienable noun roots ending in a high vowel also always realize this vowel as [u] or [i], rather than as a semivowel, even where the syllabification rules described above would predict otherwise.

[gɑˈu.nu]	/gɑunu/	\<gaunu\>	'dog'
[ɑʲˈi.ri]	/ɑiri/	\<airi\>	'day.before.yesterday'
[ˈti.ˌuk˺]	/tiu+k/	\<tiuk\>	'grandrelative+1sPOS'
[tiˈu.nu]	/tiu+nu/	\<tiunu\>	'grandrelative+3sPOS'
[ti.ˈu.ˌmɑm]	/tiu+mɑm/	\<tiumam\>	'grandrelative+1pEXCL.POS'

Conventions: Orthographic

The phoneme /ʔ/, which has a low functional load, is not represented in the orthography.

The digraph \<ng\> is used for the velar nasal /ŋ/, as in the Tok Pisin orthography.

The low back rounded vowel /ɔ/ is written as \<oo\>. Long Islanders have not been differentiating /ɔ/ and /o/ in their written materials, writing both as \<o\>. The neighbouring language Sio uses the symbol \<â\> for /o/, while Yabêm, which also has a seven-vowel system, uses \<ê\>, \<e\>, \<ô\> and \<o\> for /e/, /ɛ/, /o/ and /ɔ/ respectively. The use of \<o\> for both /ɔ/ and /o/ by Long Island writers suggests that their perception of /ɔ/ is closer to the symbol \<o\> than the symbol \<a\>. It was therefore recommended to the Poonoo Language Committee that the symbol \<o\> be modified to represent /ɔ/. Their suggestion was that since the sound of the phoneme /ɔ/ was just like the sound of the phoneme /o/ except the former is "pulled" longer than the latter, the former should be written with the digraph \<oo\>. This digraph has been successfully used in the limited distribution of published Scripture and literacy materials under trial orthography status.

The phonemes /ɨ/ and /ɛ/ have also not been differentiated in Long Island writing conventions, both being written as \<e\>. In the trial orthography it was proposed that /ɨ/ be represented by the digraph \<ie\>. This digraph can cause confusion when situated interconsonantally in a CVC syllable, as a syllable boundary would normally be expected between two vowels in such an environment. Because of the high degree of variation between speakers, and because the phoneme occurs very infrequently in the language, it is now recommended that it should generally be left under-differentiated and written as \<e\>.

Where minimal pairs are concerned, the trial orthography has been relatively successful in distinguishing words such as /tɨk/ 'sea' and /tɛ+k/ 'faeces+1sPOS' (written \<tiek\> and \<tek\> respectively), /i+pɨ/ '3s+paddle' and /i+pɛ/ '3s+plant' (written \<ipie\> and \<ipe\>); these spellings should therefore be retained.

The semivowels have been analysed as allophones of the vowels /i/ and /u/. However, the symbols \<w\> and \<y\>, which are also used in the Tok Pisin orthography, are a useful aid to reader fluency, breaking up vowel sequences in words such as /i+iimi/ '3s+buy' and /ku+uuk/ '2s+cough'. The following spelling rules are suggested. 1) High vowels occurring

word-initially followed by another vowel will be written as semivowels (e.g. /iɛlɛi/ 'why' is written as <yelei>, /uɑsɑ/ 'bird.sp' as <wasa>). 2) Verb root initial high vowels will be written as semivowels (e.g. /i+iimi/ '3s+buy' as <iyimi>, /ku+uuk/ '2s+cough' as <kuwuk>, and /ɑm+iimi/ '1p.EXCL+buy as <amyimi>, /ɑm+uuk/ '1p.EXCL+cough' as <amwuk>). 3) All high vowels that occur between other vowels will be written as semivowels. However, in word classes where morphophonemic processes potentially impact the environment of that vowel, it will be written as a high vowel (e.g. /kɑuɑl/ 'mountain' as <kawal>; however, /i+kɑu+ɑ/ '3s+get+CM' is written as <ikaua> as it can undergo a morphophonemic process that produces /kɑu+ngu/ 'get+NOM' and is written as <kaungu>).

Words reflecting lexical reduplication, or productive reduplication that serves to modify the basic meaning of the concept, are written as one word (e.g. /kodokodo/ <kodokodo> 'intestine', /i+pɑnɑ+ɛ+nɛ/ <ipanene> '3s+shoot+3s+RED'. However, lexical items that are reduplicated and express a meaning different from their component parts are written as two words (e.g. /ki/ '3s' plus /ki/ '3s' is written as <ki ki> 'distinct', and /mɑtɑ+nɑ/ 'eye+3s' plus /mɑtɑ+nɑ/ 'eye+3s' is written as <matana matana> 'different.types'.

Sample Text: Phonemic transcription

/ ŋa bɛ agasa bɛtaŋa kiau modmodono pattu ŋa || airi au aiɛ iɛp amlo bɛ lo ampa karam || ammadit kɛ rumu ki amlo paŋ rumu kiau || motoŋ auɛtɛ paŋa || si kuuud dɔkɔt || alo lo alonlon lɛ asi lo ŋan bɛ aru tapa karam || alonlon asi || motoŋ ator di rara kiau iɛ matau kiau || ŋan tiuɛtɛ || ikɨn rumu kidi kolman || motoŋ ala la akauu aman || motoŋ la auɛtɛ paŋ iɛp || tɔl kiau || aru tapa || amru amkiu di gaunu ru || mukana atu inbɛ kɔrɔnɔ atu amlo || amlo kakau kɛ isakɛl || motoŋ amru ampa amdi amkamata kai butana atu || motoŋ la auɛtɛ paŋa || tɔl kiau || kutara kai du || atara kai kɛ madini || amtara a idu tana amdada amdu ŋan du akamata kiroro atu || ipa ilo paŋ manoŋ kaini || motoŋ auɛtɛ paŋa || iɛp kusi || kiroro bi ipa || isi motoŋ auɛtɛ || tɔl kiau || matau kioŋ man || man atara idu tana idu amkauu || apauu || motoŋ atoru || sɛ bɛ isola || motoŋ amru ampa mulu || amdu amtara || auɛtɛ paŋa || kutara manoŋ atu || ŋan du isauloko || atara balbal iduku a idu || ŋan du amkaua kiroro san mulu || motoŋ amru ampa mulu || motoŋ amtara sɨp san mulu || ŋan idu || ŋan kiroro ki siap || ampa mulu amdi || auɛtɛ paŋa || kukodo dɔkɔt || atara sɨp i a idu || idu ŋan amkaua kiroro pakara somai || motoŋ apauu a imot || motoŋ iɛp isola || tɔl kiau isola || amsɛ arono || motoŋ auɛtɛ paŋa || dada na i || a tadu paŋ tɨk || iiɛi nɛ || ɛʔ || tadu || amtɔ dada amsi || motoŋ atoru || bɛ kuiin matuk tɔ tiap || ŋan iiɛi nɛ || taiin matuk || amru ampot || motoŋ arɔkɔ matuk || arɔkɔ matuk asi amiin || amsi rumu kiau || motoŋ la auɛtɛ paŋa || kumariɔ kasin ŋan lo kudu paŋ rumu kioŋ || ammariɔ motoŋ atoru || olɛ kusolo kiroro atu tɔ tiap || ŋan iiɛi nɛ || au rimak isauɛ iɛ salauŋu kiroro tiap || sila ikɨn || akap bus lɛu a adu || motoŋ la isolo bus a isi paŋ rumu ki || lɛ bɛtaŋa kiau imot naŋa /

Sample Text: Orthography

Nga be agasa betanga kiau modmodono pattu nga. Airi au aye Yep amlo be lo ampa karam. Ammadit ke rumu ki amlo pang rumu kiau. Motong awete panga, "Si kuwud dookoot. Alo lo

alonlon le asi lo ngan be aru tapa karam."

Alonlon asi, motong ator di rara kiau ye matau kiau. Ngan tiwete, "Iken rumu kidi kolman."

Motong ala la akauu aman. Motong la awete pang Yep. "Tool kiau, aru tapa."

Amru amkiu di gaunu ru, mukana atu inbe kooroonoo atu amlo. Amlo kakau ke Isakel, motong amru ampa amdi amkamata kai butana atu. Motong la awete panga, "Tool kiau, kutara kai du. Atara kai ke madini."

Amtara a idu tana amdada amdu ngan du akamata kiroro atu. Ipa ilo pang manong kaini. Motong awete panga, "Yep kusi. Kiroro bi ipa."

Isi motong awete, "Tool kiau, matau kiong man." Man atara idu tana idu amkauu. Apauu, motong atoru, "Se be isola?"

Motong amru ampa mulu. Amdu amtara. Awete panga, "Kutara manong atu." Ngan du isauloko. Atara balbal iduku a idu, ngan du amkaua kiroro san mulu.

Motong amru ampa mulu. Motong amtara sep san mulu. Ngan idu. Ngan kiroro ki siap. Ampa mulu amdi. Awete panga, "Kukodo dookoot. Atara sep i a idu." Idu ngan amkaua kiroro pakara somai.

Motong apauu a imot. Motong Yep isola. Tool kiau isola. Amse arono, motong awete panga, "Dada na i. A tadu pang tiek." Iyei ne, "E, tadu." Amtoo dada amsi. Motong atoru, "Be kuyin matuk, too tiap?"

Ngan iyei ne, "Tayin matuk."

Amru ampot. Motong arookoo matuk. Arookoo matuk asi amyin. Amsi rumu kiau. Motong la awete panga, "Kumarioo kasin ngan lo kudu pang rumu kiong."

Ammarioo motong atoru, "Ole kusolo kiroro atu, too tiap?"

Ngan iyei ne, "Au rimak isawe ye salaungu kiroro tiap. Sila iken. Akap bus leu a adu."

Motong la isolo bus a isi pang rumu ki. Le betanga kiau imot nanga.

Sample Text: Free translation

Now I'm going to tell you a short bit of my talk. The day before yesterday, Jeff and I went up to go up and walk in the jungle. We started from his house and we went up to my house. Then I said to him, "Come and have a seat. I'll go up and change my clothes, then I'll come down and then the two of us will walk in the jungle."

I changed my clothes and came down, then I asked my relatives for my axe. Then they said, "It's in the elders' house."

Then I went across and got it and came across. Then I spoke to Jeff. "My friend, let's go."

We two called the two dogs, one black one and one red one, and we went up. We went up to Isakel's cacao plantation, then we two walked and went inland and saw a tree overgrown (with vines). Then I said to him, "My friend, chop the tree down. I'll chop the tree from its side."

We chopped it and it fell down to the ground; we ran and went down then as we went down we saw a possum. It was going to the trunk of a manong tree. Then I said to him, "Jeff, come down. There's a possum going."

He came down, then I said, "My friend, give me your axe." I chopped and it went down to the ground and we got it. I bound it, then I asked him, "Who's going to carry it?"

Then the two of us walked again. We went down and we chopped. I said to him, "Chop down a manong tree." Then going down it was hung up. I chopped a balbal tree and it broke off and went down, then we got another possum.

Then the two of us walked again. Then we cut down a palm tree again. Then it went down. But it didn't have any possums. We walked again and went inland. I said to him, "You stand by. I'll chop this palm tree and it will go down." It went down then we got a very big female possum.

Then I bound it and it was finished. Then Jeff carried it. My friend carried it. We came up to a ridge, then I said to him, "Here's the road. And we'll go down to the ocean." He spoke like this, "Yes, let's go down." We followed the road and came down. Then I asked him, "Do you want to drink coconut, or not?"

Then he spoke like this, "Let's drink coconut."

The two of us came inland. Then I climbed a coconut tree. I climbed the coconut and came down and we drank. We came down to my house. Then I said to him, "You rest a little then go down to your house."

We rested then I asked him, "Perhaps you'll take a possum, or not?"

Then he spoke like this, "My wife doesn't know how to singe possums. It can stay here. I'll only take taro and go down."

Then he carried the taro and came down to his house. And so my story finishes here.

Orthography Chart

Arop-Lokep Phonemes	Arop-Lokep Trial Orthography	**Arop-Lokep Present Orthography**	Tok Pisin Orthography
/ɑ/	<A,a>	**<A,a>**	<A,a>
/b/	<B,b>	**<B,b>**	<B,b>
/d/	<D,d>	**<D,d>**	<D,d>
/ɛ/	<E,e>	**<E,e>**	<E,e>
/ɨ/	<Ie,ie>	**<E,e,ie>**	
/g/	<G,g>	**<G,g>**	<G,g>
/i/	<I,i,Y,y>	**<I,i,Y,y>**	<I,i,Y,y>
/k/	<K,k>	**<K,k>**	<K,k>
/l/	<L,l>	**<L,l>**	<L,l>
/m/	<M,m>	**<M,m>**	<M,m>
/n/	<N,n>	**<N,n>**	<N,n>
/ŋ/	<Ng,ng>	**<Ng,ng>**	<Ng,ng>
/o/	<O,o>	**<O,o>**	<O,o>
/ɔ/	<Oo,oo>	**<Oo,oo>**	
/p/	<P,p>	**<P,p>**	<P,p>
/r/	<R,r>	**<R,r>**	<R,r>
/s/	<S,s>	**<S,s>**	<S,s>
/t/	<T,t>	**<T,t>**	<T,t>
/u/	<U,u,W,w>	**<U,u,W,w>**	<U,u,W,w>
/ʔ/	<g>		

Table of Abbreviations and Symbols

C	Consonant
CAUS	Causative
CM	Class marker
COMP	Completed action
CONJ	Conjunction
EXCL	Exclusive
INCL	Inclusive
NOM	Nominalization
OM	Object marker
p	Plural
POS	Possessive
REC	Reciprocal
s	Singular
V	Vowel
VAL	Valence
1	First person
2	Second person
3	Third person
.	Syllable boundary
#	Word juncture
' '	Gloss
[ ]	Phonetic representation
/ /	Phonemic representation
∪	Primary stress
∩	Secondary stress
+	Morpheme boundary

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