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A PRELIMINARY BERIK PHONOLOGY

Peter and Susan Westrum

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ICHTISAR:

Kertas ini menyajikan analisa tatabunyi pendahuluan mengenai bahase Berik. Bahasa Berik mempunyai 30 fonim, 23 konsonan dan 7 vokal. Penjelasan mengenai fonim-fonim ini dan contoh-contohnya diberikan dalam kertas ini. Kontras ditunjukkan dengan mempergunakan titik-titik artikulasi dan distribusi dalam-kata fonim-fonim tersebut. Deskripsi, variasi, dan distribusi sukukata juga ditunjukkan. Pada akhir analisa disajikan pembicaraan mengenai kata-fonologis, yang merupakan suatu untaian satu sampai empat sukukata dengan tekanan utama hampir selalu pada sukukata pertama. Ejaan menurut pola Bahasa Indonesia juga disajikan, dan naskah bahasa Berik terdapat pada akhir kertas ini.

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0 INTRODUCTION

Kira-kira ada 1000 orang yang berbicara dalam bahasa Berik dan merupakan kelompok-kelompok kampung disepanjang sugai Tor dan terletak di pantai utara Propinsi Irian Jaya, Indonesia. Bahasa Berik tidak ada hubungan family dengan Austronesian. Berik juga "lingua franca" pada kelompok-kelompok kecil di daerah itu, yaitu Mander pada anak cabang sungai Tor dan Segar Tor pada hulu sungai Tor. Keterangan yang lengkap tentang suku Berik, bisa membaca buku karangan Oesterwal, G., People of the Tor, Assen, 1961.

Kami mulai belajar bahasa Berik di kampung Tenwer pada tanggal 1 Oktober 1973, dan melanjutkan lapangan pekerjaan ini sampai bulan September 1974 dengan hanya selama enam bulan belajar bahasa itu di daerah tersebut. Penduduk Tenwer dan daerah Tor dengan senang hati mengajar kami bahasa mereka. Terutama Matius Nussey, Niko Borom dan Magdalena Borom banyak menolong kami. Kami bekerja dibawah pimpinan Summer Institute of Linguistics yang bekerjasama dengan Universitas Cenderawasih. Kami juga berterima kasih kepada penasehat S.I.L., Nona Anne Cochran, yang sangat menolong dengan uraian-uraian.

The Berik language is spoken by about 1000 people grouped in villages along the Tor river on the north coast of the province of Irian Jaya (formerly Dutch New Guinea), Indonesia. It is a non-Austronesian language of the Tor stock. Berik is also the "lingua franca" of smaller language groups in the area, namely the Mander on a tributary of the Tor and the Segar Tor at the Tor's headwaters. For more detailed information about the Berik people, see Oesterwal, G., People of the Tor, Assen, 1961.

We began our study of the Berik language in the village of Tenwer on October 1, 1973 and have continued this field work to the present, September, 1974, with six of those months actually in the language area. The residents of Tenwer and the Tor area have willingly taught us their language. More specifically, Matius Nussey, Niko Borom, and Magdalena Borom have been especially helpful. We are doing our work under the auspices of the Summer Institute of Linguistics in co-operation with the Cenderawasih University. We are grateful for S.I.L. consultant, Miss Anne Cochran, who has helped us with the analysis.

1 INTERPRETATION

1.1 Contoid versus Vocoid

(y) versus (i)

The voiced high close front unrounded vocoid occurs in the non-syllabic position as (y) and in the syllabic position as (i).

['yap ^h aʔ]	'papaya'	['it ^h an]	'liver'
['seseyeʔ]	'black'	['k ^h itab ^h liʔ]	'give'

(w) versus (u)

The voiced high close back rounded vocoid occurs in the non-syllabic position as (w) and in the syllabic position as (u).

['weřem]	'cough'	['usnanaʔ]	'urinate'
['æwis]	'blood'	['duřuweř]	'behind'
		['guʔ]	'cassowary'

1.2 Sequence versus Unit

Contoids

Non-suspect CV patterns in Berik are as follows:

CVC	['dum]	'spatula'
CVCVC	['monap]	'room'
CVCVCVC	['witufin]	'waist'

non-suspect contoid cluster patterns in Berik are as follows:

VCCVC	['umnaʔ]	'your'
CVCCVC	['sanfeř]	'good'
CVCCVCVC	['dænfənʔ]	'one'
CVVCC	['nuɪnf]	'want to sit'

Since Berik has no non-suspect word initial dual consonant clusters or word medial triple consonant clusters,

(1) (p^h), (t^h), and (k^h) are interpreted as single segments.

['p ^h asip ^h]	'a boy's name'
['t ^h umɪ]	'eat!'
['k ^h onop ^h]	'button'
['ořt ^h uʔ]	'dirty'

(2) (b^w) is interpreted as a labialized consonant.

['b ^w εřaʔ]	'pain'
------------------------	--------

(3) The affricate (dʒ) is interpreted as a single unit and will be written as (j).

['adʒam]	/'ajam/	'I'
----------	---------	-----

Also, a lengthened nasal is interpreted as a geminate cluster of two nasals crossing a syllable boundary and will be written as CC.

These occur very rarely.

['ɪn·ai]	['ɪnnaiʔ]	'bead'
----------	-----------	--------

Vocoids

Non-suspect VC patterns in Berik are as follows:

VC	['oř]	'teeth'
VCVC	['łřis]	'thunder'
VCVCVC	['ořełeʔ]	'chin'
VCVCVCVC	['onemenʌʔ]	'wild'

Non-suspect vocoid cluster patterns in Berik are as follows:

VVCVCVC	[e'əmniʔ]	'build'
CVVCCVC	['seafteř]	'all'

There are no patterns with V final as all final vowels not followed by any other consonant are followed by a glottal stop. Since glottals only occur in this position, we conclude that they are predictable. Thus, they will no longer be written in this paper.

Since Berik has non-suspect word initial and word medial vocoid cluster,

(1) the suspect vocoid cluster (ie), (ia), (u), (ue), and (ua) which have two mora timing are interpreted as VV.

['głřien]	'shallow	['nue]	'eye'
['tiała]	'leaf'	['muarĩ]	'moon'
['nułn]	'sit'		

(2) The suspect vocoid glides (ai), (ao), (ui), and (oi) which have one mora timing and in which both vocoids receive equal stress are interpreted as complex syllable nuclei and are also written as VV.

['aiyai]	'careful!'	['tatesui]	'throw away'
['aoře]	'there'	['doi]	'money'

It is interesting to note that in all suspect vocoid clusters which have two mora timing, the first member is a high vocoid and the second member is lower. In the suspect glides which have one mora

timing, the first member is lower than the second, or both are high and close.

2 PHONEMES

2.1 Phoneme Chart

Consonants

		Labial	Alveolar	Velar
Stops	voiceless	p	t	k
	voiced	b	d	g
	voiceless, labialized		tw	kw
	voiced, labialized	bw	dw	gw
Fricatives	voiceless	f	s	
	voiceless, labialized	fw	sw	
Affricate	voiced		j	
Nasals		m	n	ŋ
Lateral			l	
Vibrant			r	
Semi-consonants		w	y	

Vowels

		Front Unrounded	Central Unrounded	Back Rounded
High	close	i		u
	open	ɪ		
Mid	close	e		o
Low	close	æ		
	open		a	

2.2 Description of Phonemes

All Berik phones are produced with egressive lung air.

Consonants

- /p/ [p] Voiceless bilabial stop.
Occurs word initially, as the first member of a CC, and word finally and is in free variation with [p^h] in all these positions.
- | | | |
|---------|----------|----------------|
| /pasɪp/ | ['pasɪp] | 'a boy's name' |
| /yapka/ | ['yapka] | 'papaya' |
| /onap/ | ['onap] | 'jungle' |
- [p^h] Voiceless bilabial aspirated stop.
Occurs word initially, as the first member of a CC, and word finally and is in free variation with [p] in all these positions.
- | | | |
|---------|--------------------------------------|----------------|
| /pasɪp/ | ['p ^h asɪp ^h] | 'a boy's name' |
| /yapka/ | ['yap ^h ka] | 'papaya' |
| /onap/ | ['onap ^h] | 'jungle' |
- /b/ [b] Voiced bilabial stop.
Occurs word initially, intervocalically, and as the second member of a CC.
- | | | |
|----------|-----------|-----------------|
| /betɛf/ | ['betɛf] | 'bamboo needle' |
| /surbun/ | ['surbun] | 'born' |
| /gubi/ | ['gubi] | 'get' |
- /bw/ [b^w] Voiced bilabial labialized stop.
Occurs word initially and intervocalically.
- | | | |
|---------|-----------------------|---------|
| /bwera/ | ['b ^w ɛʁa] | 'pain' |
| /bubwa/ | ['bub ^w a] | 'ulcer' |

- /t/ [t] Voiceless alveolar stop.
Occurs in all positions and is in free variation with [t^h] in all positions.
- | | | |
|------------|--------------------------|---------|
| /tarkwena/ | ['tark ^w ɛna] | 'scab' |
| /orotona/ | ['oʔotona] | 'boil' |
| /gwetman/ | ['g ^w ɛtman] | 'near' |
| /kaktar/ | ['kaktar] | 'grass' |
| /at/ | ['at] | 'canoe' |
- [t^h] Voiceless alveolar aspirated stop.
Occurs in all positions and is in free variation with [t] in all positions.
- | | | |
|------------|--|---------|
| /tarkwena/ | ['t ^h ark ^w ɛna] | 'scab' |
| /orotona/ | ['oʔot ^h ona] | 'boil' |
| /gwetman/ | ['g ^w ɛt ^h man] | 'near' |
| /kaktar/ | ['kakt ^h ar] | 'grass' |
| /at/ | ['at ^h] | 'canoe' |
- /tw/ [t^w] Voiceless alveolar labialized stop.
Occurs word initially and as the second member of a CC.
- | | | |
|-----------|-------------------------|-----------------|
| /twɪr/ | ['t ^w ɪr] | 'uncooked sago' |
| /tantwai/ | ['tant ^w ai] | 'baby' |
- /d/ [d] Voiced alveolar stop.
Occurs word initially, intervocalically, and as the first and second member of a CC.
- | | | |
|-------------|------------------------|----------------|
| /darga/ | ['daɾga] | 'a man's name' |
| /bodɪk/ | ['bodɪk ^h] | 'headband' |
| /ɛdna/ | ['ɛdna] | 'bone' |
| /uŋgundusa/ | ['uŋgundusa] | 'large' |
- /dw/ [d^w] Voiced alveolar labialized stop.
Occurs word initially and intervocalically.

	/dwak/	['d ^w ak]	'head'
	/udwas/	['ud ^w as]	'a family name'
/k/	[k]	Voiceless velar stop. Occurs in all positions and is in free variation with [k ^h].	
	/koksa/	['koksa]	'bud'
	/abaka/	['abaka]	'a long time'
	/komkoma/	['komkoma]	'thief'
	/sirwak/	['si ^h rwak]	'betelnut'
	[k ^h]	Voiceless velar aspirated stop. Occurs in all positions and is in free variation with [k].	
	/koksa/	['k ^h ok ^h sa]	'bud'
	/abaka/	['abak ^h a]	'a long time'
	/komkoma/	['k ^h omk ^h oma]	'thief'
	/sirwak/	['si ^h rwak ^h]	'betelnut'
/kw/	[k ^w]	Voiceless velar labialized stop. Occurs word initially, intervocalically, and as the second member of a CC.	
	/kwimar/	['k ^w imar]	'jungle wanderer'
	/tokwa/	['tok ^w a]	'fire'
	/tarkwena/	['ta ^h rk ^w ena]	'scab'
/g/	[g]	Voiced velar stop. Occurs word initially, intervocalically, and as the first and second member of a CC.	
	/gom/	['gom]	'thigh'
	/tagara/	['taga ^h ra]	'chop'
	/yogbet/	['yogbet ^h]	'a woman's name'
	/dango/	['dango]	'chest'
/gw/	[g ^w]	Voiced velar labialized stop. Occurs word initially, intervocalically, and as the second	

	member of a CC.		
	/gwɪnar/	['g ^w ɪnar]	'go'
	/yafɪntogwai/	['yafɪntog ^w ai]	'girl'
	/fofangwana/	['fofang ^w ana]	'whistle'
/f/	[f]	Voiceless labiodental fricative. Occurs in all positions.	
	/fas/	['fas]	'none'
	/ofu/	['ofu]	'bee'
	/safta/	['safta]	'hit'
	/kasfɪn/	['kasfɪn]	'cassava'
	/tof/	['tof]	'foot'
/fw/	[f ^w]	Voiceless labiodental labialized fricative. Occurs word initially, intervocalically, and as the second member of a CC.	
	/fwera/	['f ^w ɛ ^h ra]	'where'
	/sofwe/	['sof ^w e]	'go'
	/fwerfwera/	['f ^w ɛ ^h f ^w ɛ ^h ra]	'thin'
/s/	[s]	Voiceless alveolar grooved fricative. Occurs in all positions.	
	/son/	['son]	'ashes'
	/tisir/	['tisi ^h r]	'go tomorrow'
	/bosna/	['bosna]	'name'
	/nensa/	['nensa]	'different'
	/fas/	['fas]	'none'
/sw/	[s ^w]	Voiceless alveolar labialized grooved fricative. Occurs word initially and intervocalically.	
	/swerma/	['s ^w ɛ ^h rma]	'gills'
	/uswam/	['us ^w am]	'a fruit'

- /j/ [j] Voiced alveopalatal grooved affricate.
Occurs word initially, intervocalically, and as the second member of a CC.
- | | | |
|-----------|------------|-----------|
| /ju/ | ['ju] | 'bird' |
| /nejam/ | ['nejam] | 'we' |
| /gamerje/ | ['gamerje] | 'not yet' |
- /m/ [m] Voiced bilabial nasal.
Occurs in all positions.
- | | | |
|-----------|-------------------------|----------|
| /mase/ | ['mase] | 'nose' |
| /gumap/ | ['gumap] | 'lap' |
| /jɪmna/ | ['jɪmna] | 'his' |
| /gwetman/ | ['g ^w etman] | 'near' |
| /mom/ | ['mom] | 'breast' |
- /n/ [n] Voiced alveolar nasal.
Occurs in all positions.
- | | | |
|-----------|------------|-------------|
| /nuna/ | ['nuna] | 'ripe' |
| /bɪnbɪni/ | ['bɪnbɪni] | 'sharp' |
| /falnu/ | ['fadnu] | 'on top of' |
| /nɪn/ | ['nɪn] | 'meat' |
- /ŋ/ [ŋ] Voiced velar nasal.
Occurs intervocalically, as the first member of a CC and word finally.
- | | | |
|--------------|---------------|-----------|
| /tɪŋinanna/ | ['tɪŋinana] | 'carry' |
| /baŋbaŋsona/ | ['baŋbaŋsona] | 'clap' |
| /aiyaŋ/ | ['aiyaŋ] | 'chicken' |
- /r/ [ɾ] Voiced alveolar flap.
Occurs intervocalically, as the first member of a CC and word finally and is in free variation with [ɹ] according to speakers idiolect.

- | | | |
|----------|-----------|------------------------|
| /foriar/ | ['fořiař] | 'arrive' |
| /irjem/ | ['iřjem] | 'day before yesterday' |
- /l/ [l] Voiced alveolar lateral.
Tends to occur intervocalically as the onset of a closed syllable, in free variation with [r] as the first member of a CC whose second member is a non-nasal, and occurs word finally following low vowels.
- | | | |
|--------------|---------------|--------|
| /fongalabar/ | ['fongalabař] | 'when' |
| /nabalsafa/ | ['nabalsafa] | 'hair' |
| /tatal/ | ['tatal] | 'vein' |
- [ɭ] Voiced alveolar lateral flap.
Tends to occur intervocalically as the onset of an open syllable and occurs word finally following central vowels.
- | | | |
|----------|-----------|---------------|
| /tesala/ | ['tesala] | 'sago leaves' |
| /jabol/ | ['jabol] | 'gable' |
- [ɮ] Voiced velar constricted lateral.
Occurs word finally after high vowels.
- | | | |
|--------|----------------------|----------|
| /gwɮl/ | ['g ^w ɮl] | 'banana' |
|--------|----------------------|----------|
- [r] Voiced retroflexed nonsyllabic vocoid.
Occurs medially in free variation with [l] as the first member of a consonant cluster whose second member is a non-nasal.
- | | | |
|-------------|--------------|--------|
| /nabalsafa/ | ['nabarsafa] | 'hair' |
|-------------|--------------|--------|
- [ɖ] Voiced alveolar retroflexed stop.
Occurs as the first member of a consonant cluster whose second member is a nasal.
- | | | |
|-----------|------------|--------|
| /bubolna/ | ['bubodna] | 'long' |
|-----------|------------|--------|
- /w/ [w] Voiced bilabial semi-consonant.
Occurs word initially, intervocalically, and as the second

member of a CC.

/werem/ ['wɛrɛm] 'cough'

/iwɪl/ ['iɪwɪl] 'turtle'

/falwɪnɪr/ ['falwɪnɪr] 'under'

/y/ [y] Voiced palatal semi-consonant.

Occurs word initially, intervocally, and as the second member of a CC.

/yafɪntogwai/ ['yafɪntog^wai] 'girl'

/aiyu/ ['aiyu] 'sago basket'

/aolyan/ ['aolyan] 'got go'

Vowels

/i/ [i] Voiced high close front unrounded vocoid.
Occurs in all positions.

/inatnat/ ['inatnat^h] 'hiccough'

/fina/ ['fina] 'stand'

/sɪnsɪni/ ['sɪnsɪni] 'white'

/tiala/ ['tiaɭa] 'leaf'

/daiwer/ ['daiwɛr̥] 'a boy's name'

/ɪ/ [ɪ] Voiced high open front unrounded vocoid.
Occurs word initially and medially.

/ɪnnai/ ['ɪn·ai] 'beads'

/betɪk/ ['betɪk] 'mud'

/e/ [e] Voiced mid close front unrounded vocoid.
Occurs finally and in other open syllables contiguous to /s/, /y/, /t/, and preceding other vowels.

/seseye/ ['seseye] 'black'

/iye/ ['iye] 'mother'

/nabal tenur/ ['nabaɾ 'tenur] 'comb'

/eebali/ [e'ɛbali] 'do'

/seafter/ ['seafter̥] 'all'

[ɛ] Voiced mid open front unrounded vocoid.
Occurs in closed syllables and in open syllables contiguous to consonants other than /s/, /y/, and /t/.

/bes/ ['bɛs] 'vegetable'

/dɛnfena/ ['dɛnfena] 'one'

/sanfer/ ['sanfɛr̥] 'good'

/ene/ ['ɛne] 'big toe'

/æ/ [æ] Voiced low close front unrounded vocoid.
Occurs word initially and in initial syllables.

/ærem/ ['æɾɛm] 'mouth'

/wækena/ ['wækena] 'good'

/a/ [a] Voiced low open central unrounded vocoid.
Occurs in all positions and is in free variation with (ʌ) word initially, medially, and finally with a tendency to (a) in stressed syllables.

/ababara/ ['ababaɾa] 'delicious'

/kaotiar/ ['kaotiaɾ] 'enter'

/tituar/ ['tituaɾ] 'to scratch'

[ʌ] Voiced mid open central unrounded vocoid.
Occurs word initially, medially, and finally in free variation with (a) with a tendency to (ʌ) in unstressed syllables.

/ababara/ ['ʌbʌbʌɾʌ] 'delicious'

/u/ [u] Voiced high close back rounded vocoid.
Occurs word initially, medially except preceding /n/ and /k/, and finally.

/urum/	['uřum]	'bow (and arrow)'
/ofu/	['ofu]	'bee'

[u] Voiced high open back rounded vocoid.

Occurs in final syllables preceding /n/ and /k/.

/surbun/	['suřbun]	'born'
/kobuk/	['kobuk ^h]	'kapak'

/o/ [o] Voiced mid close back rounded vocoid.

Occurs in all positions.

/oso/	['oso]	'brother'
/son/	['son]	'ashes'
/gwaona/	['g ^w aona]	'yawn'
/doi/	['doi]	'money'

2.3 Phoneme Contrasts

Consonants

There are three emic points of articulation in Berik: labial, alveolar, and velar.

The stops /p/, /t/, /k/, /b/, /d/, /g/ can be subdivided into sets by a $\pm$ voicing feature and all stops except /p/ by a $\pm$ labialization feature.

Voiceless stops contrast word initially, medially, and finally.

/pasip/	'a boy's name'	/sapusona/	'sweep'
/tas/	'sago'	/orotona/	'boil'
/kasian/	'peanut'	/bokor/	'fill'
/gumap/	'lap'		
/at/	'canoe'		
/takerbak/	'a family name'		

Voiced stops and labialized stops contrast word initially and medially.

/bis/	'bee'	/gubana/	'give'
/bwisbwis/	'sweet potato'	/bubwa/	'ulcer'
/twɪn/	'pork'	/jɛntwai/	'alone'
/din/	'a type of tree'	/bodaf/	'stork'
/dwis/	'sand'	/udwas/	'a family name'
/kwimar/	'jungle wanderer'	/tokwa/	'fire'
/gina/	'arrow'	/bogal/	'human'
/gwinar/	'go'	/yafɪntogwai/	'girl'

The fricatives /f/, /fw/, /s/, /sw/ can be subdivided into sets by a $\pm$ labialization feature.

The non-labialized fricatives contrast word initially, medially, and finally.

/fon/	'net bag'	/bafa/	'why'
/son/	'ashes'	/basa/	'what'
/æref/	'crayfish'		
/bes/	'vegetable'		

The labialized fricatives and /j/ contrast word initially and medially.

/fwera/	'where'	/sofwa/	'go'
/swerma/	'gills'	/uswam/	'a type of fruit'
/jerem/	'his'	/uja/	'out-house'

The nasals /m/, /n/, /ŋ/ contrast word initially with the exception of /ŋ/, medially and finally.

/mase/	'nose'	/wambata/	'crocodile'
/nase/	'story'	/sanbaka/	'big'
		/baŋbaŋsona/	'clap'
/ijam/	'you'		
/umiyan/	'cloud'		
/aiyan/	'chicken'		

The labials /p/, /b/, /bw/, /f/, /fw/, /m/ contrast word initially and medially.

/pasɪp/	'a boy's name'	/sapusona/	'sweep'
/batol/	'cling'	/gobali/	'give'
/bwatikof/	'clam shell'	/bubwa/	'ulcer'
/fatar/	'fork'	/fofangwana/	'whistle'
/fwater/	'old'	/sofwa/	'go'
/mato/	'star'	/kokoma/	'steal'

The non-labialized alveolars /t/, /d/, /s/, /n/ contrast word initially, medially, and finally with the exception of /d/.

/tumɪl/	'eat!'	/orotona/	'boil'
/dum/	'sago spatula'	/dodok/	'a boy's name'
/suber/	'raft'	/oso/	'younger brother'
/nustona/	'sleep'	/konop/	'button'
/wat/	'palm frond'		
/bas/	'okay'		
/umiyān/	'cloud'		

The labialized alveolars /tʷ/, /dʷ/, /sʷ/ contrast with the other alveolars /j/, /l/, /r/ word medially.

/tantwai/	'baby'
/udwa/	'a family name'
/uswam/	'a type of fruit'
/uja/	'out-house'
/masola/	'beak'
/mura/	'month'

The velars /k/, /ŋ/ contrast word medially and finally.

/tiala ikɪkɪni/	'green'	/mak/	'saliva'
/tɪŋinana/	'carry'	/aiyaŋ/	'chicken'

All velar stops /k/, /kw/, /g/, /gw/ contrast word initially and

medially.

/kɪmsar/	'remember'	/bokolar/	'fill'
/kwimar/	'jungle wanderer'	/tokwa/	'fire'
/gina/	'arrow'	/tagara/	'chop'
/gwinar/	'go'	/yafɪntogwai/	'girl'

Vowels

There are seven phonemic vowels in Berik. They are differentiated as to high versus mid versus low tongue positions and front versus central versus back tongue positions and in the high front position as to close versus open. The vowels contrast word initially, medially, and finally with the exception of /ɪ/, /æ/.

/ir/	'yesterday'	/mir/	'forehead'
/ɪrem/	'your'	/mɪru/	'corn'
/erne/	'afraid'	/mererte/	'scare'
/ærem/	'mouth'	/mærien/	'illegitimate'
/arem/	'my'	/margasona/	'close'
/urum/	'bow (and arrow)'	/mura/	'month'
/or/	'teeth'	/morele/	'ankle'
/tafnaguri/	'five'		
/aore/	'there'		
/naora/	'two'		
/mɪru/	'corn'		
/nungunuboro/	'dirty'		

2.4 Phoneme Distribution

Consonants

All consonants except /ŋ/, /l/, /r/ occur word initially.

/p/	/pangawa/	'a boy's name'
/b/	/bar/	'finished'
/bw/	/bwɪl/	'a yellow fruit'
/t/	/tofra/	'short'

/tw/	/twir/	'uncooked sago'
/d/	/domara/	'see'
/dw/	/dwis/	'sand'
/k/	/kapka/	'bad'
/kw/	/kwimar/	'jungle wanderer'
/g/	/g'ri/	'deep'
/gw/	/gwora/	'cover'
/f/	/falw'nir/	'under'
/fw/	/fwerf'wera/	'thin'
/s/	/sakar/	'lower leg'
/sw/	/swerma/	'gills'
/j/	/j'li/	'ant'
/m/	/mesteren/	'die'
/n/	/naodnaora/	'four'
/w/	/wirtabab'alir/	'wash'
/y/	/yapka/	'papaya'

All consonants except /tw/ occur in the intervocalic position.

/p/	/sapusona/	'sweep'
/b/	/ibirmi/	'new'
/bw/	/bubwabwenet/	'scar'
/t/	/titanbali/	'to string beads'
/d/	/bod'k/	'head band'
/dw/	/udwas/	'a family name'
/k/	/kakar/	'hot'
/kw/	/tikwana/	'stop'
/g/	/jigar/	'fish'
/gw/	/uglugwenar/	'play'
/f/	/tif'n/	'skin'
/fw/	/sofweyan/	'not go'
/s/	/bw'sa/	'cold'
/sw/	/uswam/	'a yellow fruit'
/j/	/bijua/	'distant'

/m/	/saman/	'knee'
/n/	/tanis/	'young'
/ŋ/	/tiŋinanna/	'carry'
/r/	/goro/	'loin cloth'
/l/	/gorala/	'mat'
/w/	/uwu/	'shadow'
/y/	/seseye/	'black'

The following consonants occur as the first member of a medial CC cluster:

/p/	/kopsosi/	'turn off'
/t/	/gwetman/	'nearby'
/d/	/ædna/	'bone'
/k/	/dwaksumu/	'brain'
/g/	/uglugwenar/	'play'
/f/	/kof'sana/	'stop'
/s/	/jesbaf/	'don't!'
/m/	/nemna/	'our'
/n/	/sanfer/	'good'
/ŋ/	/naodn'ŋna/	'three'
/l/	/bwelkata/	'yellow'
/r/	/tef'insarsar/	'fever'

The following consonants occur as the second member of a medial CC cluster:

/b/	/nombe/	'machete'
/t/	/samten/	'knife'
/tw/	/tantwai/	'baby'
/d/	/uŋgundusa/	'large'
/k/	/amkom/	'almost'
/kw/	/tarkwena/	'scab'
/g/	/uŋgwangeri/	'big'
/gw/	/uŋgwanfer/	'many'

/f/	/dwakfak/	'bald'
/fw/	/fwerfwer/	'thin'
/s/	/wisɨmsɨnar/	'chills'
/j/	/gamjam/	'repeat'
/m/	/gwetmana/	'nearby'
/n/	/usnanar/	'defecate'
/l/	/uglugwenar/	'play'
/r/	/fwatrimana/	'old'
/w/	/falwinir/	'under'
/y/	/nuɨnyen/	'not sitting'

Distribution of Consonants in Medial CC Clusters

First Member	Second Member																		
	b	t	tw	d	k	kw	g	gw	f	fw	s	sw	j	m	n	l	r	w	y
p		X			X						X								
t											X			X	X		X		
d															X				
k		X							X		X								
g																X		X	
f		X									X				X			X	
s	X	X							X					X	X			X	
m	X	X			X						X		X		X	X		X	
n	X	X	X	X	X				X		X	X		X				X	X
ŋ	X	X					X	X			X				X				
l		X			X				X		X			X	X			X	
r	X	X			X	X	X		X	X	X		X	X	X			X	

All medial CC clusters except /gl/ and /tr/ occur across syllable boundaries.

/pt/	/taptaseni/	'throw away'
/pk/	/sapkam/	'tobacco'
/ps/	/kopsana/	'stop'
/ts/	/gatantatsi/	'thumb'
/tm/	/gwetmana/	'near'
/tn/	/inatnat/	'hiccough'
/tr/	/fwatrimana/	'old'
/dn/	/naodniŋna/	'three'
/kt/	/kaktar/	'grass'
/kf/	/dwakfak/	'bald'
/ks/	/koksar/	'bud'
/gl/	/uglugwenar/	'play'
/gw/	/egwer/	'a woman's name'
/ft/	/seafter/	'all'
/fs/	/jafsar/	'go tomorrow'
/fn/	/tafnaguri/	'five'
/fw/	/sofwef/	'want to go'
/sb/	/nasbenar/	'angry'
/st/	/nusta/	'sleep!'
/sf/	/asfiba/	'wait'
/sm/	/kɨsmen/	'a family name'
/sn/	/susnanar/	'urinate'
/sw/	/eswat/	'broom'
/mb/	/tambor/	'toe'
/mt/	/samten/	'knife'
/mk/	/komkoma/	'steal'
/ms/	/kɨmsar/	'remember'
/mj/	/gamjam/	'repeat'
/mn/	/jemna/	'his'
/ml/	/pamlen/	'a girl's name'
/mw/	/ɨmwa/	'ear'

A PRELIMINARY BERIK PHONOLOGY

/nb/	/sanbaka/	'adult'
/nt/	/gatantatsi/	'thumb'
/ntw/	/jentwai/	'alone'
/nd/	/ungundusa/	'large'
/nk/	/nankof/	'a woman's name'
/nf/	/dænfena/	'one'
/ns/	/wækensus/	'very good'
/nsw/	/answar/	'a woman's name'
/nm/	/munm:sir/	'a boy's name'
/nw/	/tænwer/	'a village name'
/ny/	/nuɲnyen/	'not sitting'
/nb/	/baŋbaŋsona/	'clap'
/nt/	/aŋtane/	'person'
/ng/	/ungundusa/	'large'
/ngw/	/ungwanfer/	'many'
/ns/	/baŋbaŋsona/	'clap'
/nn/	/naodn:ŋna/	'three'
/lt/	/domoltesant/	'looked'
/lk/	/bwelkata/	'yellow'
/lf/	/aolfar/	'go tomorrow'
/ls/	/bolsui/	'testicle'
/lm/	/gulmos/	'a man's name'
/ln/	/bubwolna/	'laugh'
/lw/	/falw:nir/	'under'
/rb/	/sarbasin/	'hear'
/rt/	/wærtəm/	'wart'
/rk/	/kerkelna/	'hard'
/rkw/	/tarkwena/	'scab'
/rg/	/margasona/	'closed'
/rf/	/ferfer/	'palm of had'
/rfw/	/fwerfwera/	'thin'
/rs/	/barsir/	'a man's name'
/rj/	/irjem/	'day before yesterday'
/rm/	/gwɪrmir/	'tomorrow'

A PRELIMINARY BERIK PHONOLOGY

/rn/	/forna/	'bleed'
/rw/	/tænwerwer/	'a village name'

The following consonants occur word finally:

/p/	/finip/	'coast'
/t/	/ut/	'thorn'
/k/	/titik/	'floor'
/f/	/sof/	'cloth'
/s/	/æwis/	'blood'
/m/	/jam/	'he, she'
/n/	/itan/	'liver'
/ŋ/	/fian/	'a family name'
/l/	/tul/	'eel'
/r/	/ungur/	'belch'

The first member of word final consonant clusters is always an alveolar nasal. The second member can be /f/ or /t/.

/f/	/twɪnf/	'want to eat'
/t/	/nasonant/	'spoke'

Vowels

All vowels occur word initially.

/i/	/ibirmi/	'new'
/ɪ/	/ɪmna/	'yours'
/e/	/erne/	'afraid'
/æ/	/ære/	'here'
/a/	/aro/	'rain'
/u/	/uwu/	'shadow'
/o/	/orbum/	'cheek'

All vowels occur word medially.

/i/	/jina/	'house'
/ɪ/	/bermɪf/	'buttocks'
/e/	/gwebanar/	'anoint'
/æ/	/nærem/	'a paddle'

/a/	/namwer/	'today'
/u/	/buruwa/	'bark basket'
/o/	/tupsomer/	'walk'

The following vowels occur as the first member of a VV cluster across syllable boundaries:

initial	/e/	/eebali/	'do'
medial	/i/	/gɪrien/	'shallow'
	/e/	/seafter/	'all'
	/u/	/muar/	'moon'
final	/i/	/sia/	'yes'
	/u/	/nue/	'eye'

The following vowels occur as the second member of a VV cluster across syllable boundaries:

initial	/e/	/eemni/	'build'
medial	/ɪ/	/nuɪn/	'sit'
	/e/	/nuefo/	'tear'
	/a/	/kasian/	'peanut'
final	/e/	/sirue/	'stand up!'
	/a/	/foria/	'arrive'

The following vowels occur as the first member of a complex syllable nucleus:

initial and medial	/a/	/aiyu/	'sago basket'
		/gwaona/	'yawn'
final	/a/	/aiyai/	'careful!'
	/u/	/tetesui/	'open'
	/o/	/doi/	'money'

The following vowels occur as the second member of a complex syllable nucleus:

initial, /i/	/aiya/	'older brother'	
medial,	/asaiyu/	'laddle'	
final	/bai/	'don't want'	
	/o/	/aodna/	'go'
		/naora/	'two'
		/nao/	'rattan'

Distribution of Vowels in VV Clusters

Since vowels in a complex syllable nucleus do not co-occur with single vowels in clusters as the nuclei of two syllables, there are no triple vowel clusters. Therefore, in the following chart V.V and complex syllable nuclei VV are combined.

Note that in the complex syllable nuclei the first member is lower than the second or both are high and close. For ease of reading the chart these complex syllable nuclei are joined VV on the chart.

	First Member	Second Member
	i	u e a o
i		ie ia
e		ee ea
a	aj	ao
u	uj	ue ua
o	oj	

initial	/ee/	/eemni/	'build'
	/ai/	/ai/	'I, this'
	/ao/	/ao/	'come'
medial	/ie/	/gɪrien/	'shallow'
	/ia/	/tiala/	'leaf'
	/ea/	/seafter/	'all'

	/ai/	/taini/	'adopted'
	/ao/	/kaotia/	'enter'
	/ui/	/nuin/	'sit'
	/ue/	/nuesafa/	'eyelash'
	/ua/	/tituar/	'to scratch'
	/oi/	/bastantoiya/	'little'
final	/ia/	/sia/	'yes'
	/ai/	/gitawai/	'boy'
	/ao/	/sufsao/	'a boy's name'
	/ui/	/aiyaŋsui/	'egg'
	/ue/	/nue/	'eye'
	/ua/	/bijua/	'distant'
	/oi/	/doi/	'money'

All vowels except /ɪ/ and /æ/ occur word finally.

/i/	/jɪli/	'ant'
/e/	/berbere/	'red'
/a/	/ɪmwa/	'ear'
/u/	/ortu/	'dirty'
/o/	/goro/	'loin cloth'

3 THE SYLLABLE

The basic syllable structure with single mora timing in Berik is (C₁) V (V) (C₂) (C₃) in which V is the nucleus and may be filled by any vowel. C₁ may be filled with any consonant except /ŋ/. C₂ may be filled by any consonant except voiced and labialized stops. C₃ may be filled only by /f/ or /t/ when C₂ is /n/.

3.1 Syllable Contrast

Nine distinct and contrastive syllable types have been found. These are: V, VV, VC, VVC, CV, CVC, CVV, CVCC, and CVVCC. CV is the most common syllable type, occurring in 52% of our data. CVC occurs in 34% of the data. All other patterns occur in less than 5% of the

words. All syllable types except VVC occur as monosyllabic words. CVVCC only occurs as a monosyllabic word. We have as yet discovered only one word with this syllable type, and this word is the desiderative form of nuin 'sit'. When the desiderative suffix is affixed to the stem the two syllable stem is contracted into a syllable of one mora timing. See the chart showing the distribution of syllable types for contrastive examples of these monosyllabic words.

The syllable types V, VC, CV, CVC, CVV contrast word initially, medially, and finally. Syllable breaks are indicated by a period between syllables.

initial

V.CVC	/ɪ.ris/	'thunder'
VC.CVC	/uŋ.gur/	'belch'
CV.CVC	/be.rek/	'tin can'
CVC.CVC	/bos.taf/	'jump'
CVV.CVC	/dai.wer/	'a boy's name'

medial

CV.V.CV	/nu.e.fo/	'tear'
CV.VC.CV	/nu.ɪn.te/	'sit!'
CV.CV.CV	/go.ba.li/	'give'
CV.CVC.CV	/ga.mer.je/	'not yet'
V.CVV.CV	/a.sai.yu/	'ladder'

final

CV.V	/si.a/	'yes'
CV.VC	/mu.ar/	'moon'
CV.CV	/na.sa/	'who'
CV.CVC	/mo.nap/	'room'
CV.CVV	/su.sui/	'throw away'

The syllable types VV and VVC occur only word initially. They contrast with all other syllable types.

VV.CV	/ai.yu/	'sago basket'
VVC.CV	/aod.na/	'go'
V.CV	/o.fu/	'bee'
VC.CV	/am.na/	'my, mine'
CV.CV	/ma.se/	'nose'
CVC.CV	/saf.ta/	'hit'
CVV.CV	/nao.ra/	'two'

The syllable type CVCC occurs alone or word finally and contrasts with all other syllable types except VV and VVC as these occur only word initially and never alone.

CV.CV.CVCC	/na.so.nant/	'spoke'
CV.CV.V	/ja.fi.a/	'I'm going'
CV.CV.VC	/ti.tu.ar/	'to scratch'
CV.CV.CV	/ta.na.mu/	'heel'
CV.CV.CVC	/gwe.ba.nar/	'anoint'
CV.CV.VCC	/gi.ta.wai/	'boy'

3.2 Syllable Variation

Two syllable types, VC and CVC, have the allosyllable C. These allosyllables are the result of contractions which occur in the Berik language. The ones we have encountered are:

- (1) The imperative marker /das/ when placed before verbs

/das tate/	'lie down!'
/das nuunte/	'sit down!'
/das ti/	'go!'

in the contracted form becomes a syllabic [ʃ]:

['ʃtate]	['ʃnuunte]	['ʃti]
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This single consonant, syllabic [ʃ], is an allosyl of the syllable type CVC and occurs only in such contracted forms.

- (2) The Berik word /eŋ.ga/ which means 'yes' in the contracted form becomes ['ŋga]. This single consonant, syllabic [ŋ] is an allosyl

of the syllable type VC and occurs only in this contracted form. The apostrophe will be used orthographically to indicate the omitted phonemes 'state, 'nga.

3.3 Syllable Distribution

As is noted in the contrast section, the syllable types VV and VVC occur only word initially and the type CVCC occurs alone or word finally. The following chart (p. 32) illustrates the distribution of the basic syllable types in relation to each other in the first and second positions of Berik words. Monosyllabic words are given in first column.

4 THE PHONOLOGICAL WORD

The phonological word in Berik is a sequence of one to four syllables with one primary stress always occurring word initially except in the case of word initial /e/ followed by /e/ in which case the stress falls on the second syllable. Since stress is predictable, it is non-phonemic and has not been written other than in the phonetic transcription.

/gu/	['gu]	'cassowary'
/amkom/	['am.kom]	'almost'
/sarbasɪn/	['saɾ.ba.sɪn]	'hear'
/fongalabar/	['foŋ.ga.la.baɾ]	'when'
/eebali/	[e'ebʌli]	'do'

Compound words may have more than four syllables and more than one stress. See Section 4.2.

4.1 The Shape of the Phonological Word

One syllable words utilize all but one of the nine syllable type types.

V	/i/	'heart'
VV	/ao/	'come'

Distribution of Basic Syllable Types

First Position	Second Position			
	Mono-syllabic Words	V	VC	CVC
V	/o/ 'soil'	/e.e.m.ni/ 'build'	/e.ne/ 'big toe'	/o.bop/ 'spider'
VV	/ai/ 'this'		/ai.yu/ 'sago basket'	/ai.yan/ 'chicken'
VC	/ir/ 'yesterday'		/er.er.te/ 'scare'	/am.kom/ 'almost'
VVC			/aod.na/ 'go'	/aol.sar/ 'go tomorrow'
CV	/gu/ 'cassowary'	/si.a/ 'yes'	/mu.ar/ 'moon'	/tu.ml/ 'eat!'
CVC	/bar/ 'finished'		/for.so/ 'blow'	/sir.wak/ 'betelnut'
CVV	/bai/ 'don't want'		/nao.ra/ 'two'	/tan.twai/ 'baby'
CVCC	/twɪnf/ 'want to eat'			/dai.wer/ 'a name'
CVVCC	/nuɪnf/ 'want to sit'			

VC	/or/	'teeth'
VVC	--	--
CV	/nu/	'day'
CVC	/mif/	'lips'
CVV	/nao/	'rattan'
CVCC	/twɪnf/	'want to eat'
CVVCC	/nuɪnf/	'want to sit'

Two syllable words are composed of the following combinations of syllable types:

V.CV	/u.wa/	'father'
V.CVC	/u.swam/	'a red fruit'
VV.CV	/ai.yu/	'sago basket'
VV.CVV	/ai.yai/	'careful!'
VV.CVC	/ai.yaŋ/	'chicken'
VVC.CV	/aod.na/	'go'
VVC.CVC	/aol.yan/	'not going'
VC.CV	/aŋ.gwa/	'man'
VC.CVC	/am.kom/	'almost'
VC.CVV	/in.nai/	'bead'
CV.V	/si.a/	'yes'
CV.CV	/tu.tu/	'upper arm'
CV.VC	/mu.ar/	'moon'
CV.CVC	/da.fef/	'afternoon'
CV.CVV	/swa.rao/	'go back'
CVV.CV	/tai.ni/	'adopted'
CVV.CVC	/dai.wer/	'a name'
CVC.CV	/nus.ta/	'sleep'
CVC.CVV	/jen.twai/	'alone'
CVC.CVC	/tam.bor/	'toe'

Three syllable words are composed of the following combinations of syllabic types:

V.CV.CV	/u.da.ra/	'airplane'
V.CVC.CV	/i.bir.mi/	'new'
V.CVV.CV	/a.sai.yu/	'ladle'
VC.VC.VC	/er.er.te/	'scare'
VC.CVC.CVC	/uŋ.gwan.fer/	'many'
CV.V.CV	/nu.e.fo/	'tear'
CV.VC.CV	/nu.ɪn.te/	'sit'
CV.VC.CVC	/nu.ɪn.yen/	'not sitting'
CV.CV.V	/ja.fi.a/	'going'
CV.CV.VC	/ti.tu.ar/	'to scratch'
CV.CV.CV	/go.ba.li/	'give'
CV.CV.CVV	/gi.ta.wai/	'boy'
CV.CV.CVC	/gwe.ba.nar/	'anoint'
CV.CV.CVCC	/na.so.nant/	'spoke'
CV.CVC.CV	/ga.mar.je/	'not yet'
CV.CVC.CVC	/ta.gar.sus/	'tall'
CVV.CV.V	/kao.ti.a/	'enter'
CVC.CV.CV	/tar.kwe.na/	'scab'
CVC.CV.CVC	/sar.ba.sɪn/	'hear'
CVC.CVC.V	/bɪn.bɪn.i/	'sharp'
CVC.CVC.CV	/ker.kel.na/	'hard'
CVC.CVC.CVC	/gwir.mir.jem/	'day after tomorrow'

Four-syllable words are composed of the following combinations of syllabic types:

V.V.CV.CV	/e.e.mɪ.ni/	'build'
V.CV.CV.CV	/o.ro.to.na/	'boil'
VC.CVC.CV.CV	/uŋ.gun.du.sa/	'large'
CV.CV.CV.CV	/ki.to.ba.li/	'give'
CV.CV.CV.CVC	/fo.sa.bo.sir/	'bathe tomorrow'
CV.CVC.CV.CV	/fo.faŋ.gwa.na/	'whistle'
CV.CVC.CV.CVV	/ya.fɪn.to.gwai/	'daughter'
CV.CVC.CV.CVCC	/do.mol.te.sant/	'looked'

CVV.CV.CV.CV	/tap.ta.se.ni/	'throw away'
CVC.CV.CV.CVC	/foŋ.ga.la.bar/	'when'
CVC.CVC.CV.CV	/nuŋ.ger.ne.ne/	'run'
CVC.CVC.CVV.CV	/bas.tan.toi.ya/	'little'

4.2 Compound Words

Compound words do occur in Berik. They have three, four, or five syllables. The primary stress often occurs on the first syllable and a secondary stress occurs on the first syllable of the second part of the compound. In some cases there is primary stress on the first syllable of the second part of the compound.

/o.re.le.sa.fa/	['o.ɾe.ɾe.'sa.fa]	'beard'
/nu.e.tɪ.fɪn/	[nu.e.'tɪ.fɪn]	'eyelid'

4.3 Word Repetition

Repeating whole words or syllables of words occurs in Berik. In such cases, the initial syllable of the repeated part of the word receives the same stress as the initial syllable of the word.

/wækenwækensusu/	['wæken'wækensusu]	'best'
/gwetmangwetmansus/	['g ^w etman'g ^w etmansus]	'nearest'

4.4 Influence of Other Languages on Berik Words

Bahasa Malayu and more recently Bahasa Indonesia have had their influence on Berik speakers all through the 1900's. Words which have been borrowed with no change in form or meaning include:

<u>Berik</u>	<u>Indonesian</u>	<u>English</u>
<u>pakaian</u>	'pakaian'	'clothes'
<u>kursi</u>	'kursi'	'chair'
<u>meja</u>	'meja'	'table'

Other words display affixation, yet retain the essential meaning of the borrowed word.

<u>tulistabalir</u>	'tulis'	'write'
---------------------	---------	---------

The phoneme /h/ has also been introduced to Berik speakers as non-Berik names have been chosen for children and adults. /h/ occurs name initially and medially:

/hans/ /pɪnehas/
/habel/ /abraham/

5 TENTATIVE ORTHOGRAPHY

At present only a very few Berik speakers are literate. Schools are being established in rural areas and primary education is being conducted in the national language, Bahasa Indonesia. Many adult men speak Bahasa Indonesia. As both men and women now become literate, it is important that Berik orthography conforms to Bahasa Indonesia.

Thus, because the phoneme /ŋ/ in Bahasa Indonesia is written as 'ng', we have chosen this also.

As there are no minimal pairs showing contrast between /ɪ/ and /i/ we have chosen to symbolize them both as 'i'. For ease of writing and typing we have chosen 'aa' for /æ/. The phonemes /ɪ/ and /æ/ do not occur in Bahasa Indonesia.

The Berik phonemes, their allophones and a proposed orthography are listed below.

Phonemes	Allophones	Orthographic Symbols
p	p, p ^h	p
b	b	b
bw	b ^w	bw
t	t, t ^h	t
tw	t ^w	tw
d	d	d
dw	d ^w	dw
k	k, k ^h	k
kw	k ^w	kw
g	g	g
gw	g ^w	gw
f	f	f
fw	f ^w	fw
s	s	s
sw	s ^w	sw
j	j	j
m	m	m
n	n	n
ŋ	ŋ	ng
l	l, ɭ, ɭ̥, r, d̥	l
r	ɻ, ɻ̥	r
w	w	w
y	y	y
i	i	i
ɪ	ɪ	i
e	e, ɛ	e
æ	æ	aa
a	a, ʌ	a
u	u, ʊ	u
o	o	o

6 TEXT - "Hunting Wild Boar"

Niko Borom gave this story during a linguistic workshop at Sawar, Irian Jaya, on September 9, 1974. Sentences are numbered. / signifies the termination of a phonological phrase, and // signifies the end of a phonological sentence. An English and Indonesian free translation follow the story.

1. Ai ranusunt arao onap jamere tatait// 2. Samem gahep
I went rain jungle to.there far slowly at.there
- wofeafsant/enggama awilsint// 3. Fona jimwer/ai sarsant
walked.around then crossed river other.side I heard
- twina gola targabisint// 4. Anetwin tafna termat/
boar nest.leaf cutting shoot.boar underarm entered
- enunggirtisint Tefer annap/gajep tersent// 5. Jewerga ai
it.ran Tefer headwaters at.there died there.at I
- tererbiswitisint/nuna ai tetesant// 6. Emai anggatesant twina
search-for eye I raised I saw boar
- dukawer/ai domoltesant// 7. Ai gusunt maigam nuisana/aje gamjam
head I looked I thought still living I again
- ai fagatasant okokame// 8. Tini ai goltesant/gamer ai
I jumped backwards stick I grabbed then I
- tobalsiusint twin sagabe// 9. Gamer ai farebisnensent/ai
threw.towards boar on.back then I tied I
- tianggonsant// 10. Mariana enejita neleboge/jega jebar
carried Mariana mother.father we.met he.pl. together
- aite tianggonfalsanyan// 11. Ai wesant/taban ai sinulsunt jebe duka
I carried.return I cut until I divided his
- tetmisint// Tabana gaaf.
gave until here

'I walked quite far into the rainy forest. I slowly walked around, crossed a river, and there I heard a pig cutting leaves for a shelter. Quickly I shot it behind its front foreleg. And it ran towards the head waters of Tefer stream and there it died. At that place as I was searching for it, I lifted my head. I noticed the pig's head as I gazed. I thought it was still alive so I jumped back. Then I picked up a stick and threw it at the pig's back. Then I tied its legs and carried it. I met Mariana's mother and father. They helped me carry the pig and we returned home. I cut and divided up the meat and gave away his head too. That's all!'

'Dalam hujan rintik-rintik saya berjalan jauh ke dalam hutan. Perlahan-lahan saya berjalan mengelilingi hutan, dan menyeberangi sungai. Tiba-tiba saya mendengar suara babi sedang membuat perlindungan dengan daun-daunan. Dengan cepat saya panah babi itu tepat pada pangkal paha kaki muka. Dan babi itu lari ke arah hulu sungai Tefer kemudian mati disitu. Di tempat itu saya mencari-cari dimana babi itu. Saya amat-amati tempat itu dan saya melihat kepala babi itu. Saya kira babi itu masih hidup maka saya meloncat kebelakang. Kemudian saya mengambil sepotong kayu dan saya lemparkan pada punggung babi itu. Selanjutnya saya ikat kaki babi itu dan saya panggul. Dalam perjalanan pulang saya bertemu dengan ayah ibunya Mariana dan mereka menolong saya memikul babi itu. Sampai dirumah saya potong babi itu dan dagingnya saya bagi-bagikan, juga kepalanya. Sekian.'

Hiroko Oguri and Carol Erickson

ICHTISAR:

Isirawa, yang juga dikenal dengan nama Saberi, adalah bahasa yang dipakai di Kecamatan Sarmi, Kabupaten Jayapura. Bahasa ini dipakai oleh kira-kira 2000 penduduk, yang bertempat-tinggal di 18 desa, 10 di antaranya terletak di sepanjang pantai utara Irian Jaya.

Kertas ini menyajikan deskripsi sistim tatabunyi bahasa Isirawa, dan memberikan saran mengenai sistim ejaan bahasa itu, yang mencakup 13 konsonan dan 8 vokal. Kertas ini didasarkan pada analisa pendahuluan tentang tingkat di atas sukukata dengan naskah bahasa yang terbatas.

Kerja-lapangan dilaksanakan dengan bantuan the Summer Institute of Linguistics dengan kerjasama dengan Universitas Cenderawasih.

- 0 INTRODUCTION
- 1 INTERPRETATION
- 2 OUTLINE OF PHONEMES
- 3 THE SYLLABLE
- 4 THE PHONOLOGICAL WORD
- 5 THE PHONOLOGICAL PHRASE
- 6 THE PHONOLOGICAL SENTENCE
- 7 TENTATIVE ORTHOGRAPHY
- 8 INFLUENCE OF OTHER LANGUAGES
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0 INTRODUCTION

The Isirawa language (also known as Saberi) is spoken in the Sarmi Kecamatan (subdistrict) of the Jayapura Kabupaten (district), located along the north coast of the province of Irian Jaya, Indonesia. Approximately 2000 speakers live in about 18 villages, 10 of these along the coast. Isirawa is a Non-Austronesian language and according to Anceaux and Voorhoeve is tentatively classified as a family-level isolate within the Kwerba stock. There seem to be a few minor dialect-

tical differences between the villages east of Amsira and those west of Amsira. The village in which we did our field work uses both, but this analysis is based primarily on the east one. We began work on November 5, 1973 under the auspices of the Summer Institute of Linguistics in conjunction with the Cenderawasih University, and have had 7 months of actual field work. Our principal language teachers have been Toncë Mammin, Ruben Merne, Filipus Mamawiso, and Salmon and Makarita Numreh, all approximately 25 to 30 years of age. The other 230 men, women, and children who make up the village have played a large part in helping us learn their language. About 15 of the men are able to read and write the national language. Most of the men are reasonably fluent in the national language, but the women know only enough to buy and sell their produce in Sarmi.

We have only done a preliminary analysis of the levels above the syllable, based on limited text material. We would like to gratefully acknowledge the help of S.I.L. consultant, Miss Anne Cochran, whose guidance and encouragement helped speed our analysis.

Throughout the paper an Indonesian gloss has been typed in italics.

1 INTERPRETATION

1.1 The Suspect Segments Which May Be Either Consonant or Vowel

1.1.1 [y] versus [i]

The semi-consonant [y] occurs as the onset of a syllable and [i] occurs as the nucleus.

/e'riya/	'crocodile'	<i>buaya</i>
/'popisein/	'hit him'	<i>pukul dia</i>

1.1.2 [w] versus [u]

The semi-consonant [w] occurs as a syllable onset while [u] functions as the nucleus.

/iwa/	'heavy'	<i>berat</i>
/u'nunu/	'fly'	<i>lalat</i>
/sese'kausa/	'to knock'	<i>mengetok</i>

1.2 The Suspect Segments Which May Be Either Sequences or Unit

1.2.1 C^əř versus CVř

C^əř could possibly be interpreted as CVř but since [př] never occurs with a transition vocoid between the consonants, and as stress usually occurs on the penultimate syllable, C^əř has been interpreted as a sequence of consonants.

/apre/	[apře]	'bird'	<i>burung</i>
/a'presa/	[a'přesa]	'lower arm'	<i>lengan bawah</i>
/pran'ka/	[přan'ka]	'cooking pot'	<i>periuk</i>
/mri/	[mři] ~ [m ^ə ři]	'one'	<i>satu</i>
/sřifa/	[sřifa]	'language'	<i>bahasa</i>
/krai krai/	[křai křai] ~ [k ^ə řai k ^ə řai]	'bird type'	<i>macam burung</i>

1.2.2 The Affricate [tš]

[tš] has been interpreted as a unit [č] as the second member of the other consonant clusters is always [ř] and as [š] never occurs as a separate phone.

1.3 Vowel Clusters

The following vowel clusters occur: [ia], [io^ː], [u], [ei], [e^ːi], [eu], [i], [u], [ai], [ao], [ao^ː], [au], [o^ːi], [o^ːa], [oi], [oe], [oa], [ui], [ue], [ua], [i*ː*i], [εao^ː], [o^ːu], and [oi].

[pia'niba]	'4 days ago' or '4 days from now'	<i>empat hari yang lalu atau empat hari yang akan datang</i>
['pinio ^ː]	'morning'	<i>pagi</i>
[ɪnɪ'niuna]	'shade'	<i>sombar</i>
[te'teina]	'to hear'	<i>dengar</i>
[se ^ː iʔ]	'bird of paradise'	<i>burung Cenderawasih</i>

[pipi'seuna]	'hit her'	<i>pukul dia (perempuan)</i>
[t'ɬiya]	'short'	<i>pendek</i>
[sauʔ] ~ [səuʔ]	'arm band'	<i>gelang tangan</i>
['aifa]	'coconut'	<i>kelapa</i>
[sao]	'house'	<i>rumah</i>
['kao ^ː ra]	'tree type'	<i>macam pohon</i>
[sese'kausa]	'knock'	<i>ketok</i>
[mo ^ː 'ɬifa]	'here'	<i>disini</i>
[po ^ː a'riβinane]	'let's go'	<i>marilah</i>
[momo ^ː 'tesa]	'to buy'	<i>beli</i>
[mo ^ː toeka]	'squash'	<i>labu</i>
[momo'moara]	'insane'	<i>orang gila</i>
[pui'kes]	'to sweep'	<i>menyapu</i>
[fuʔue'tama]	'shrimp type'	<i>macam udang</i>
[sua]	'insect type'	<i>macam serangga</i>
[wɪwɪdi'aina]	'to write'	<i>tulis</i>
[sɪsɪɛao ^ː 'fani]	'place name'	<i>nama tempat</i>
[ro ^ː ro ^ː 'auna]	'to pluck or cut off fruit'	<i>memetik</i>
[asɪ'moat]	'(male) friend'	<i>kawan (laki-laki)</i>

1.3.1 Diclusters

In considering these vowel clusters, there might be three solutions: First, they could be the nuclei of two or three syllables; second, they could be vowel glides; and third, they could be complex syllable nuclei.

Solution 1:

As there are univalent vowel clusters, it would be possible to interpret all clusters as sequences but for the following reasons this has not been considered favorable. First, all of these clusters are of one mora timing. Second, where two vowels occur as the nuclei of two syllables, a distinct semi-consonant is articulated between the vowels in contrast to a lack of a semi-consonant where two vowels

occur as the nucleus of one syllable.

['suwa]	'tree type'	<i>macam pohon</i>
[sua]	'insect type'	<i>macam serangga</i>
[so'soa]	'vegetables'	<i>sayur-sayuran</i>
[mε'bo'wa]	'cigarette paper'	<i>kertas rokok</i>

Third, on some words, stress fluctuates between speakers from one vowel to another within the same cluster.

[mo'ʔifa] ~ ['mo'ʔifa]	'here'	<i>disini</i>
[mama'una] ~ [ma'mauna]	'to see'	<i>lihat</i>
[paʔa'ufa] ~ [pa'ʔaufa]	'tree type'	<i>macam pohon</i>

Fourth, stress never occurs before the antepenultimate syllable, therefore if vowel clusters are interpreted as sequences, a new stress pattern would be set up.

['wamuʔai]	'shark'	<i>ikan gorano</i>
['ʔaitiya]	'banana type'	<i>macam pisang</i>

Solution 2:

That they could be vowel glides does not seem feasible either because: First, there are the non-suspect clusters [oa] and [oe].

[momo'moaʔa]	'insane'	<i>orang gila</i>
[soso'soεta]	'dirty'	<i>kotor</i>

Second, there are the reverse sequences of [ua] and [au], [eu] and [ue], and [oa] and [ao].

[sua]	'insect type'	<i>macam serangga</i>
[na'nau]	'bamboo type'	<i>macam bambu</i>
[pipi'seuna]	'to hit (a female)'	<i>pukul (perempuan)</i>
[fuʔue'tama]	'shrimp kind'	<i>macam udang</i>
[soa]	'fish scales'	<i>sisik</i>
[sao]	'house'	<i>rumah</i>

Solution 3:

Since each of the two vowels in these clusters seem to be of equal length even though spoken in one mora of time, and since the stress fluctuates in some words with different speakers, the preferable solution is interpreting them as complex syllable nuclei.

1.3.2 Triclusters

The vowel clusters [iaɪ], [oʔau], and [oai] are definitely perceived as one unit of time. There is no articulation of a semi-consonant between the vocoids and like the diclusters, each vowel has equal time. Since there are no consonant clusters syllable final, the final vowel cannot be interpreted as a semi-consonant. For these reasons, they have been set up as complex syllable nuclei also.

2 OUTLINE OF PHONEMES

2.1 Charts

Consonants				
	labial	alveolar	alveopalatal	velar
stop	p	t		k
fricative	f	s	ʃ	h
nasal	m	n		
flap		r		
semi-consonant	w		y	

Vowels

		front	central	back
high	cl.	i		u
	op.	ɪ		
mid	cl.			o
	op.	ɛ	ʌ	ə
low			a	

2.2 Description of Phonemes

All phonemes are produced with egressive lung air.

All vowels except for [ʌ] tend to be longer in stressed position than the same vowels in unstressed positions.

Consonants:

/p/ [P] Voiceless bilabial unreleased stop occurs only word finally.

/poɾɪp/ [poɾɪP] 'go to sleep' *tidur lah*

[b] Voiced bilabial stop fluctuates freely with [p] following a nasal.

/ko'mampa/ [ko'mamba] ~ [ko'mampa] *pulau*
'island'

[p] Voiceless bilabial stop occurs elsewhere.

/'pina/ ['pina] 'ocean' *laut*
/'apɾe/ ['apɾe] 'bird' *burung*

/t/ [t] Voiceless alveolar stop occurs both word initially and medially.

/tɛ'teina/ [tɛ'teina] 'to hear' *dengar*
/pu'mita/ [pu'mita] 'flood' *banjir*

/k/ [k] Voiceless velar unreleased stop occurs only word finally except when following [ʌi] and [ʌu].

/so'wɛk/ [so'wɛk] 'all' *semua*

[ʔ] Voiceless glottal stop occurs only in one syllable words after [ʌi] and [ʌu].

/sʌuk/ [sʌuʔ] 'armband' *gelang tangan*

/sʌik/ [sʌiʔ] 'bird of paradise' *burung Cenderawasih*

[k] Voiceless velar stop occurs elsewhere.

/ka'fora/ [ka'foɾa] 'black' *hitam*

/ai'ki/ [ai'ki] 'mother' *ibu*

/m/ [m] Voiced bilabial nasal occurs initially, medially, and finally.

/'muna/ ['muna] 'mouth' *mulut*

/'no'ma/ ['no'ma] 'hot' *panas*

/mam/ [mam] 'enough' *cukup*

/n/ [ñ] Voiced alveopalatal nasal occurs before high close front unrounded vocoid [i] fluctuating with [n] between speakers.

/'nani/ ['ñañi] ~ ['nani] *anjing*
'dog'

/ni'nifa/ [ñi'ñifa] ~ [ni'nifa] *dingin*
'cold'

[ŋ] Voiced velar nasal occurs before the velar voiceless stop [k] fluctuating with [n] between speakers.

/sankʌ'kʌmma/ [saŋkʌ'kʌmma] ~ [sankʌ'kʌmma]

'medicinal plant' *tanaman bahan obat*

/pran'ka/ [pɾaŋ'ka] ~ [pɾan'ka] *periuk*

'cooking pot'

- [n] Voiced alveolar nasal occurs elsewhere.
- | | | | |
|---------|---------|------------|---------------|
| /'ɪna/ | ['ɪna] | 'mosquito' | <i>nyamuk</i> |
| /'noti/ | ['noti] | 'smoke' | <i>asap</i> |
- /f/ [f] Voiceless labiodental fricative occurs word initially, medially, and finally.
- | | | | |
|----------|----------|----------|--------------|
| /'fona/ | ['fona] | 'turtle' | <i>penyu</i> |
| /'tofɛ/ | ['tofɛ] | 'near' | <i>dekat</i> |
| /ba'raf/ | [ba'ɾaf] | 'dawn' | <i>siang</i> |
- /s/ [s] Voiceless alveolar grooved fricative occurs word initially, medially, and finally.
- | | | | |
|------------|------------|------------------|---------------------------|
| /'sana/ | ['sana] | 'open sore' | <i>luka</i> |
| /isi'mara/ | [isi'maɾa] | 'song' | <i>nyanyian</i> |
| /'potɛɾɪs/ | ['potɛɾɪs] | 'go home (many)' | <i>pulanglah (banyak)</i> |
- /č/ [č] Voiceless alveolar grooved affricate occurs in word initial and medial positions only.
- | | | | |
|----------|----------|------------------|-----------------------|
| /'čara/ | ['čaɾa] | 'Cassowary tree' | <i>pohon Kasuwari</i> |
| /'maičɛ/ | ['maičɛ] | 'later' | <i>nanti</i> |
- /h/ [h] Voiceless glottal fricative restricted to several words, some of which fluctuate freely with [s].
- | | | | |
|--------------|-----------------------|--------------|-----------------------|
| /ha/ | [ha] | 'yes' | <i>ya</i> |
| /horan'tiya/ | [hoɾan'tiya] | 'plant type' | <i>macam tanaman</i> |
| /pɛ'sɛmɪ/ | [pɛ'sɛmɪ] ~ [pɛ'hɛmɪ] | 'there is' | <i>ada</i> |
| /ma'sɪta/ | [ma'sɪta] ~ [ma'hɪta] | 'daughter' | <i>anak perempuan</i> |
- /r/ [ɾ] Voiced alveolar flap fluctuates with voiced short alveolar flap [d̥] except before [i].

- | | | | | |
|-------------|-------------|---|-------------|---------------|
| /piri'sira/ | [pidi'sida] | ~ | [pidi'siɾa] | <i>ramput</i> |
| | | | | 'hair' |
- | | | | | |
|---------|---------|---|---------|--------------|
| /'rara/ | ['ɾaɾa] | ~ | ['ɾaɾa] | <i>jalan</i> |
| | | | | 'road' |
- [ɾ̃] Voiced alveolar trill occurs only contiguous to another consonant.
- | | | | |
|----------------|-----------------|----------------|---------------|
| /far'so/ | [faɾ̃'so] | 'canoe paddle' | <i>dayung</i> |
| /'mirtu/ | ['miɾ̃tu] | 'corn' | <i>jagung</i> |
| /čočoka'krɪna/ | [čočoka'kɾ̃ɪna] | 'to pull' | <i>tarik</i> |
- [d̥] Voiced short alveolar flap occurs elsewhere.
- | | | | | |
|-----------|-----------|-------|-------------|-------------------|
| /ri'ri/ | [di'di] | 'new' | <i>baru</i> | |
| /sa'bɪɾɛ/ | [sa'bɪɾɛ] | ~ | [sa'bɪde] | <i>lalat babi</i> |
| | | | | 'horsefly' |
- /b/ [b] Voiced bilabial fricative occurs word initially, medially, and finally.
- | | | | |
|-------------|-------------|----------------|-------------------|
| /'biso/ | ['biso] | 'big' | <i>besar</i> |
| /'iba/ | ['iba] | 'sound' | <i>buayi</i> |
| /'patakɾab/ | ['patakɾab] | 'disintegrate' | <i>memecahkan</i> |
- /w/ [g̊] Voiced lenis velar fricative occurs only between back vocoids fluctuating with [w].
- | | | | | |
|-----------------|-----------------|---|-----------------|-----------------------|
| /kakatru'wo'na/ | [kakatɾu'go'na] | ~ | [kakatɾu'wo'na] | |
| | | | | 'to open' <i>buka</i> |
- [w] Voiced bilabial semi-consonant occurs elsewhere.
- | | | | |
|-------------|-------------|------------|--------------|
| /wɛwɛ'runa/ | [wɛwɛ'ɾuna] | 'to marry' | <i>kawin</i> |
|-------------|-------------|------------|--------------|
- /y/ [g̊] Voiced palatal fricative fluctuates freely with [y].
- | | | | | |
|----------|----------|---|----------|--------------|
| /ɛ'riya/ | [ɛ'diga] | ~ | [ɛ'diya] | <i>buaya</i> |
| | | | | 'crocodile' |

[y] Voiced palatal semi-consonant occurs intervocalically..

/ʔbiye/ [ʔbiye] 'dislike, *tidak mau*
don't want'

Vowels:

/i/ [i] Voiced high close front unrounded vocoid occurs word initially, medially, and finally.

/i'nasi/ [i'nasi] 'day after *lusa*
tomorrow' or
'day before *kemarin dulu*
yesterday'

/a'titi/ [a'titi] 'arm' *lengan*

/ɛ/ [e] Voiced mid close front unrounded vocoid fluctuates with [ɪ] medially.

/ʔtɪra/ [ʔteʔa] ~ [ʔtɪʔa] *anak*
'child'

/wɪ'rara/ [we'ʔaʔa] ~ [wɪ'ʔaʔa] *macam serangga*
'insect type'

[ɪ] Voiced high open front unrounded vocoid occurs word initially, medially, and finally.

/ʔɪba/ [ʔɪba] 'lazy' *malas*

/o'ɪmɪta/ [o'ɪmɪta] 'star' *bintang*

/pe'sɛɪt/ [pe'sɛɪt] 'there is' *ada*

/ɛ/ [e] Voiced mid close front unrounded vocoid occurs word finally and fluctuates freely with [ɛ] in other positions.

/ʔtera/ [ʔteʔa] ~ [ʔteʔa] *sendok sagu*
'sago spoon'

/keke'rana/ [keke'ʔana] ~ [keke'ʔana] *mati*
'to die'

/ʔtofe/ [ʔtofe] 'near' *dekat*

[ɛ] Voiced mid open front unrounded vocoid occurs elsewhere.

/ʔneni/ [ʔneni] 'river' *sungai*

/ɛtɪ'trowa/ [ɛtɪ'trowa] 'elbow' *sikut*

/ʌ/ [ɛʔ] Voiced mid open backed front unrounded vocoid occurs contiguous to [i] and [ɛ].

/tʌ'trina/ [tʌ'trɛʔina] 'bake in *memanggang*
fire'

/ʔtoʔtai/ [ʔtoʔteʔi] 'butterfly' *kupu-kupu*

/sasi'čana/ [sasi'čɛʔna] 'mist' *kabut*

[ɛ] Voiced mid close back unrounded vocoid occurs contiguous to [w] and [u], fluctuating with [ʌ].

/wʌik/ [wɛiʔ] ~ [wʌiʔ] 'heart' or *hati*
'liver'

/toto'sʌuna/ [toto'sɛuna] 'to gnaw' *mengunyah*

[ʌ] Voiced mid open central unrounded vocoid occurs elsewhere.

/ʔsʌna/ [ʔsʌna] 'blister' *lecet*

/ʔpʌpu/ [ʔpʌpu] 'bird's *ekor burung*
tailfeathers'

/a/ [a] Voiced low open central unrounded vocoid occurs word initially, medially, and finally.

/ʔsana/ [ʔsana] 'open sore' *luka*

/ʔwana/ [ʔwana] 'teeth' *gigi*

/a'niba/ [a'niba] 'fire' *api*

/u/ [u] Voiced high close back rounded vocoid occurs word initially, medially, and finally.

/u/ [u] 'earth' *tanah / bumi*

/tu'fɪsa/ [tu'fɪsa] 'straight' *lurus*

/u'nunu/ [u'nunu] 'fly' *lalat*

/o/ [o] Voiced mid close back rounded vocoid occurs word initially, medially, and finally.

/o'meta/	[o'meta]	'robber'	<i>pencuri</i>
/'tofe/	['tofe]	'near'	<i>dekat</i>
/'ono/	['ono]	'sky'	<i>langit</i>

/o[˘]/ [o[˘]] Voiced mid close lowered back rounded vocoid occurs word initially, medially, and finally.

/o [˘] 'mita/	[o [˘] 'mita]	'star'	<i>bintang</i>
/'triso [˘] /	['tɾiso [˘]]	'middle'	<i>tengah-tengah</i>
/no [˘] 'prakɾi'manaɪ/	[no [˘] pɾakɾi'manaɪ]	'two people clap their hands'	<i>dua orang bertepuk tangan</i>

2.3 Phoneme Contrasts

Consonants:

Bilabial, alveolar, and velar stops contrast word initially and medially.

Initial		Medial	
/p/	/'posu/ 'go' <i>pergilah</i>	/pa'paru/	'to joke' <i>melucu</i>
/t/	/'tona/ 'stomach' <i>perut</i>	/ta'tafa/	'to play' <i>bermain</i>
/k/	/'komara/ 'vine type' <i>macam tali</i>	/ka'kana/	'child' <i>anak</i>

Bilabial and alveolar nasals contrast word initially and medially.

/m/	/mu'mura/ 'itch' <i>gatal</i>	/'no [˘] ma/	'hot' <i>panas</i>
/n/	/nu'suma/ 'thigh' <i>paha</i>	/'mo [˘] na/	'want' <i>mau</i>

Bilabial, labiodental, alveolar, alveopalatal, and glottal fricatives contrast word initially while all but the glottal fricative contrast word medially.

/f/	/'fo'foki/ 'egg plant' <i>teran</i>	/o'nafa/	'medicinal plant' <i>tanaman bahan obat</i>
/s/	/so'powa/ 'mouse' <i>tikus</i>	/ma'rasa/	'goosebumps' <i>berdiri bulu roma</i>

/č/	/čočoka'krina/ 'to pull' <i>tarik</i>	/wa'rača/	'tree kangaroo' <i>lau-lau</i>
/h/	/horan'tiya/ 'plant type' <i>macam tanaman</i>		
/b/	/boboro'rɪna/ 'to make a roof' <i>bikin atap</i>	/ba'baba/	'wide' <i>lebar</i>

Labial stop, fricative, nasal, and semi-consonant contrast word initially and medially.

/p/	/pa'raufa/ 'sago type' <i>macam sago</i>	/pipi'sɛina/	'to hit (several) times' <i>pukul (banyak kali)</i>
/f/	/fa'tiya/ 'drum' <i>tifa</i>	/'ifiya/	'wind' <i>angin</i>
/b/	/ba'baba/ 'wide' <i>lebar</i>	/bibiri'sina/	'to lose' <i>hilang</i>
/m/	/ma'rasa/ 'goosebumps' <i>berdiri bulu roma</i>	/mimir's'nɪba/	'to run (pl.)' <i>lari</i>
/w/	/wa'rača/ 'tree kangaroo' <i>lau-lau</i>	/wiwi'krina/	'to hit (once)' <i>pukul (satu kali)</i>

Alveolar and alveopalatal stop, nasal, fricative, affricate, semi-consonant and flap contrast word medially, while all but the semi-consonant contrast word initially.

/t/	/'tari/ 'water dipper' <i>gayung</i>	/i'sita/	'thatch' <i>atap</i>
/n/	/'nani/ 'dog' <i>anjing</i>	/si'sina/	'afraid' <i>takut</i>
/s/	/'saka/ 'sound of waves' <i>bunyi ombak</i>	/o'misa/	'tree type' <i>macam pohon</i>
/č/	/'čara/ 'Cassowary tree' <i>pohon Kasuwari</i>	/mɔmra'siča/	'knife' <i>pisau</i>
/y/		/toa'biya/	'bird type' <i>macam burung</i>

/r/	/'rara/	'path' <i>jalan</i>	/ra'rira/	'shadow' <i>bayang</i>
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The velar stop and glottal fricative contrast word initially.

/k/	/'kao'ra/	'tree type' <i>macam pohon</i>
/h/	/ha/	'yes' <i>ya</i>

Vowels:

All vowels contrast word medially, while all but /ʌ/ contrast word initially and finally.

Medial

/i/	/titi'bɪsa/	'to feed (a male)'	<i>kasih makanan (kepada laki-laki)</i>
/ɪ/	/tɪtɪtɛ'krɪna/	'to open'	<i>buka</i>
/ɛ/	/tɛtɛ'bɪsa/	'to fan'	<i>mengipas</i>
/ʌ/	/tʌtʌni'paba/	'to get down'	<i>turun</i>
/a/	/tatabra'nɪba/	'to fly'	<i>terbang</i>
/oʊ/	/toʊtoʊ'tɛsa/	'to cut hair'	<i>potong rambut</i>
/o/	/toto'auna/	'to put into'	<i>mengisi</i>
/u/	/tutu'wena/	'string bag'	<i>noken</i>

Initial

Final

/i/	/'ina/	'afraid' <i>takut</i>	/i'tami/	'bag for sago' <i>noken sagu</i>
/ɪ/	/'ɪna/	'mosquito' <i>nyamuk</i>	/pɛ'sɛmɪ/	'there is' <i>ada</i>
/ɛ/	/'ɛna/	'doorway' <i>pintu masuk</i>	/'some/	'sago' <i>sagu</i>
/a/	/'ana/	'rotten' <i>busuk</i>	/nu'suma/	'thigh' <i>paha</i>
/oʊ/	/'oʊna/	'sago grubs' <i>ulat sagu</i>	/wa'namoʊ/	'bat or flying fox' <i>kalong</i>
/o/	/'onia/	'totem' ?	/'raraumo/	'talked yesterday' <i>bicara kemarin</i>
/u/	/'una/	'date' <i>tanggal</i>	/'memu/	'tongue' <i>lidih</i>

2.4 Phoneme Distribution Within the Syllable

Consonants:

Any consonant may fill the syllable single onset, however /y/ never occurs word initially.

/p/, /t/, /k/, /m/, /f/, /s/, and /b/ may fill the first part of a complex onset.

Only /r/ may fill the second part of a complex onset.

/p/, /k/, /m/, /n/, /r/, /f/, /s/, and /b/ may fill the syllable coda slot.

Vowels:

Any vowel may fill the simple nucleus of an open syllable, however /ʌ/ never occurs as a V syllable.

/i/, /ɪ/, /ɛ/, /ʌ/, /a/, and /o/ may fill the simple nucleus of a closed syllable.

/ai/, /oi/, /ɛi/, /ʌi/, /ui/, /au/, /ɛu/, /ʌu/, /ao/, /oa/, /ia/, /ua/, /oɛ/, /uɛ/, /iʌi/, /oai/, /oʊʌu/ may fill the complex nucleus of an open syllable.

/ai/, /ɛi/, /ʌi/, /au/, /ʌu/, /ɛu/, /iʌi/, and /oʊʌu/ may fill the complex nucleus of a closed syllable.

3 THE SYLLABLE

A syllable of a single mora of timing consists of a nucleus of one, two, or three vowels preceded by an optional one or two consonant onset, and followed by an optional consonant coda.

4.1 Syllable Types

There are 13 syllable types: V, VV, VC, CV, CVV, CVVV, CVC, CVVC, CVVVC, CCV, CCVV, CCVC, CCVVC.

4.2 Syllable Distribution

CV, CVV, CVC, CCV, and CCVV can occur word initially, medially, and finally.

CVVC occurs in one syllable words, and medially and finally in words of more than one syllable.

V, VV, and VC occur only word initially.

CCVC occurs only word initially or finally.

CVVV never occurs word initially.

CCVVC and CVVVC occur only word finally.

The most common syllable type is CV.

4 THE PHONOLOGICAL WORD

The phonological word consists of a segment of one to seven syllables with one primary stress and is bounded by a short pause. There is usually only one complex onset, complex nucleus, or closed syllable within a word. Words of more than five syllables in length have an open syllable word initially.

4.1 Stress

There are three places in which stress may occur: ultimate, penultimate, or antipenultimate. Even though some words are differentiated by stress only:

/t'opa/	'tree roots'	<i>akar kayu</i>
/to'pa/	'bow'	<i>anak mai</i>
/t're/	'tree type'	<i>macam pohon</i>
/to're/	'name of a river'	<i>nama sungai</i>

almost all non-verbal words and all the long form of verbs have penultimate stress. The few words with non-penultimate stress are names of places, kinship words, adopted words, and words that are possible historical compound words. In words of more than three syllables stress seldom occurs non-penultimately.

Verbs usually occur clause final. If the short form of the verb is used, it carries phonological phrase or sentence primary stress. Its secondary stress pattern is unpredictable.

Stress usually becomes very weak and almost disappears in rapid speech. Non-phonemic vowel length which often occurs with stress also decreases or disappears.

4.2 Word Tone

Tone in Isirawa is predictable. In non-verbs, the stressed syllable always has the high tone. If the first syllable in a word is not stressed, it has a mid tone. If there are two or more syllables before the stressed one, the second and any others between also have high tone along with the stressed one.

/i'pi.ta.'wa'ne/	'ant type'	<i>macam semut</i>
~		
/i'pi.ta.'wa'ne/		

The high tones preceding stressed high tone may be mid with some speakers. In rapid speech mid tone perturbs to high.

The long form of the verb, always three or more syllables, is characterized by a high to low tone glide on the stressed syllable and follows the same tone pattern as non-verbs on the syllables preceding the stressed one. In other forms of the verb the stressed syllable also has high tone which falls to mid and low on the following syllables.

/mo'mo.sa.kri.'ma'na/	'to wash'	<i>cuci</i>
/'po'te-ran/	'go home'	<i>pulanglah</i>

4.3 Syllable Combinations

One Syllable Words:

V	/t/	'man'	<i>orang</i>
VV	/au/	'I'	<i>saya</i>
CV	/pu/	'water'	<i>air</i>

CVV	/pai/	'no'	<i>tidak</i>
CCV	/tri/	'thunder'	<i>guntur</i>
CVC	/mam/	'enough'	<i>cukup</i>
CVVC	/kauk/	'until'	<i>sampai</i>

Two Syllable Words:

V.CV	/t.na/	'mosquito'	<i>nyamuk</i>
V.CVV	/a.'mo'a/	'seedling'	<i>tanaman untuk bibit</i>
V.CCV	/a.pre/	'bird'	<i>burung</i>
VV.CV	/ai.sa/	'shrimp'	<i>udang</i>
CV.CV	/bi.sa/	'all'	<i>semua</i>
CV.CVV	/so.ra/	'snake type'	<i>macam ular</i>
CV.CCV	/so.kra/	'mouse'	<i>tikus</i>
CV.CVC	/wa.nap/	'five'	<i>lima</i>
CV.CVVC	/pi.'tein/	'can hear'	<i>bisa dengar</i>
CVV.CV	/tai.ya/	'short'	<i>pendek</i>
CVV.CVV	/si'.ra/	'mist'	<i>kabut</i>
CVV.CCV	/to'.kra/	'width'	<i>lebarnya</i>
CVV.CVC	/pui.'kes/	'to sweep'	<i>menjapu</i>
CCV.CV	/tri.so/	'middle'	<i>tengah</i>
CCVV.CCVV	/krai.'krai/	'bird type'	<i>macam burung</i>
CVC.CV	/nap.ni/	'two'	<i>dua</i>
CVC.CCV	/nab.sra/	'three'	<i>tiga</i>
CCVC.CV	/pran.'ka/	'cooking pot'	<i>periuk</i>

Three Syllable Words:

V.CV.CV	/i.'ro'.ro'/	'animal type'	<i>macam binatang</i>
V.CV.CVVV	/a.si.'moa/	'friend'	<i>kawan</i>
V.CVV.CV	/i.'kau.ba/	'door'	<i>pintu</i>
V.CCV.CV	/a.'pre.sa/	'lower arm'	<i>lengan bawah</i>
V.CCVV.CV	/a.'srau.na/	'to swim'	<i>berenang</i>
VC.CV.CV	/er.'we.te/	'snake type'	<i>macam ular</i>
VC.CV.CCV	/en.'to.fra/	'ring finger'	<i>cincin</i>
CV.CV.CV	/pu.'mu.ta/	'flood'	<i>banjir</i>

CV.CV.CVV	/wa.nu.ra/	'fish type'	<i>macam ikan</i>
CV.CV.CCV	/fi.ta.'mra/	'corpse'	<i>mayat</i>
CV.CV.CVC	/we.werap/	'enter'	<i>masuklah</i>
CV.CV.CVVC	/po.mo.sais/	'wash'	<i>cucilah</i>
CV.CV.CVVVC	/po.'wi.ri'in/	'write'	<i>tulislah</i>
CV.CV.CCVVC	/pa.ta.krab/	'disintegrate'	<i>memecahkan</i>
CV.CV.CCVVC	/po.'ma.braun/	'bring it'	<i>membawa itu</i>
CV.CVV.CV	/pa.'rau.fa/	'sago type'	<i>macam sagu</i>
CV.CVV.CVC	/po.moi.tes/	'buy it'	<i>beli itu</i>
CV.CVV.CVVC	/po.moi.tein/	'buy them'	<i>beli itu (banyak)</i>
CV.CVVV.CV	/ro.ro'.au.na/	'pluck (fruit)'	<i>memetik</i>
CV.CVVV.CVV	/we.'ti.ai.mai/	'we sing'	<i>kami menyanyi</i>
CV.CCV.CV	/ta.'tri.na/	'to eat vegetables'	<i>makan sayur-sayuran</i>
CV.CCVV.CV	/ta.'tra.na/	'to cook in fire'	<i>masak dalam api</i>
CVV.CV.CV	/pia.'ni.ba/	'4 days from now' or '4 days ago'	<i>4 hari yg akan datang atau 4 hari yg lalu</i>
CVV.CVC.CV	/poε.'kam.ma/	'untasty, tasteless'	<i>tidak rasa</i>
CVC.CV.CV	/tan.'ta.ne/	'job's tears'	<i>manik-manik</i>
CVC.CVV.CV	/tin.'fo'.ni/	'part of roof'	<i>bagian atap</i>

Four Syllable Words:

V.CV.CV.CV	/i.si.'sa.na/	'water falls'	<i>air terjun</i>
V.CCV.CV.CV	/a.sra.'ni.ba/	'to swim'	<i>berenang</i>
CV.CV.CV.CV	/ko'.ko'.ta.ya/	'insect type'	<i>macam serangga</i>
CV.CV.CV.CCV	/po.ti.te.kru/	'open'	<i>bukalah</i>
CV.CV.CVV.CV	/si.ri.si'a.wa/	'lazy'	<i>malas</i>
CV.CV.CVVV.CV	/wi.wi.ri'ei.na/	'write'	<i>tulis</i>
CV.CV.CCV.CV	/wi.wi.'kri.na/	'to hit'	<i>pukul</i>
CV.CV.CCVV.CV	/wa.wa.fri'a.na/	'to wear'	<i>pakai</i>
CV.CVV.CV.CV	/ne.nei.'sa.na/	'to drink'	<i>minum</i>
CV.CCV.CV.CV	/ka.kra.ra.'ro/	'crab type'	<i>macam ketam</i>

CV.CVC.CV.CV	/si.yar.'ko.re/	'name of village'	<i>nama kampung</i>
CV.CVV.CCV.CV	/ma.ma'u.'kri.na/	'to sharpen a pencil'	<i>menajamkan pensil</i>
CVV.CV.CV.CV	/we.i.ne.'bi.ya/	'ant type'	<i>macam semut</i>
CVV.CV.CV.CVV	/po'a.'ru.bi.nai/	'let's go'	<i>marilah</i>
CVC.CV.CVC.CV	/san.kə.'kəm.ma/	'medicinal plant'	<i>tanaman bahan obat</i>

Five Syllable Words:

V.CV.CV.CV.CV	/ε.re.ru.'wa.ri/	'crooked'	<i>bengkok</i>
CV.CV.CV.CV.CV	/ka.ne.si.sa.'ni/	'yellow'	<i>kuning</i>
CV.CV.CV.CV.CVC	/ma.se.ne.'te.ran/	'we left'	<i>kami berangkat</i>
CV.CV.CV.CCV.CV	/ti.ti.te.'kru.na/	'to open'	<i>buka</i>
CV.CV.CVV.CV.CV	/we.we.rei.'ni.ba/	'to give away a boy'	<i>menyerahkan anak laki-laki</i>
CV.CV.CCV.CV.CV	/ta.ta.bra.'ni.ba/	'to fly'	<i>terbang</i>
CV.CV.CVC.CV.CV	/mi.mi.ris.'ni.ba/	'we run'	<i>kami lari</i>
CVV.CV.CV.CV.CV	/po'a.'ru.bi.na.ne/	'let's return'	<i>mari kembali</i>
CVV.CV.CV.CCV.CVV	/poε.mo.'sa.kri.mai/	'let's wash'	<i>mari cuci</i>

Six Syllable Words:

V.CV.CV.CV.CV.CVV	/i.ri.mε.'ne.ni.yau/	'we brought'	<i>kami bawa</i>
V.CVV.CV.CV.CV.CV	/a.riε.'te.ra.pa.pi/	'we returned'	<i>kami kembali</i>
CV.CV.CV.CCV.CV.CV	/mo'.mo'.sa.kri.'ma.na/	'to wash'	<i>cuci</i>
CV.CV.CVV.CCV.CV.CV	/fa.fa.nia.kri.'ma.na/	'to cut'	<i>potong</i>

CVV.CV.CV.CV.CV.CV	/pi.ɬ.nɬ.'mi.ra.na.ni/	'we (2) ran'	<i>kami (2) lari</i>
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Seven Syllable Words:

V.CV.CV.CV.CCVV.CV.CV	/i.ri.'ma.na.brou.na.pa/	'walk together'	<i>jalan bersama</i>
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5 THE PHONOLOGICAL PHRASE

The phonological phrase consists of one or more phonological words bounded by pauses. The initial syllable of the final word carries the primary phrase stress while secondary phrase stress is on the penultimate syllable. If a non-verb is last, its last two syllables have mid tone while those preceding carry high tone. If a verb is the last word, the prefixes have high tone while the stem and the suffixes have mid tone.

6 THE PHONOLOGICAL SENTENCE

The phonological sentence consists of one or more phonological phrases bounded by pauses. Declarative, interrogative, and imperative sentences have heavy stress on the nucleus which occurs in the final phonological phrase with tone falling from high on the stressed syllable to mid to low. This stress and intonation pattern also occurs on emphasized words, phrases, and lists of words spoken in isolation.

7 TENTATIVE ORTHOGRAPHY

7.1 The Isirawa phonemes, their allophones, and a proposed orthography are listed below.

PHONEME	ALLOPHONES	ORTHOGRAPHIC SYMBOL
/p/	[^p], [p], [b]	p
/t/	[t]	t
/k/	[^k], [ʔ], [k]	k
/m/	[m]	m
/n/	[ñ], [ŋ], [n]	n
/f/	[f]	f
/s/	[s]	s
/ç/	[ç]	c
/h/	[h]	h
/r/	[ḍ], [ṛ], [ṛ]	r
/b/	[b]	v
/w/	[g], [w]	w
/y/	[g], [y]	y
/i/	[i]	i
/ɪ/	[e], [ɪ]	ë
/ε/	[e], [ε]	e
/ʌ/	[ε̃], [ë], [ʌ]	ä
/a/	[a]	a
/u/	[u]	u
/o/	[o]	o
/õ/	[õ]	ö

7.2 Comments on Orthography

Although stress is not completely predictable, most words do have penultimate stress, therefore it will probably not be necessary to mark stress.

/b/ could have been symbolized as 'b', but since the national language has a voiced bilabial stop symbolized as such, and since 'v' is also a voiced labial fricative and is used in loan words in the national language, the voiced bilabial fricative has been symbolized as v.

The vowels /ɪ/, /ʌ/, and /õ/ could have been symbolized by doubling one of the other vowels; however, with di- and tri-clusters of vowels this would have been difficult. The symbols ë for /ɪ/, ä for /ʌ/, and ö for /õ/ seem to be quite acceptable to Isirawa men who were our language teachers.

k will not be written for [ʔ] as those literate in Bahasa Indonesia prefer to omit it, and as most nouns end in a vowel rather than a consonant.

8 INFLUENCE OF OTHER LANGUAGES

Isirawa speakers have had close contact with the Air Mati and Sobei languages and many of the men speak and understand Bahasa Indonesia, the national language.

Words borrowed from Bahasa Indonesia tend to be adapted into the Isirawa stress and CV pattern. Nouns never end in a consonant, therefore an extra vowel is added and the stress changed.

/a'yama/	' <i>ayam</i>	'chicken'
/o'bata/	' <i>obat</i>	'medicine'

Verbs are also given the appropriate affixes.

/tutukara'sina/	<i>tukar</i>	'to change'
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Words borrowed from Sobei tend to retain their original stress.

/ma'ro/	'wind'	<i>angin</i>
/ansa'mo/	'tree type'	<i>macam pohon</i>

9 TAPE TEXT

Stress in the phonemic text will be symbolized as follows: word stress ', phrase primary stress "", and sentence stress °. Where word and higher level stress occur in the same place, the word stress marker is dropped. One slash / follows a phonological phrase and two slashes // follow a phonological sentence.

Piter Rarara

Phonemic:	ne	peho°cānaniapi	fa'tima°wai//
Orthographic:	Ne	pehocānaniapi	fatimawai.
English, literal:	we	two.came	drum.for
Bahasa Indonesia, literal:	kami	dua.datang	tifa.utuk
P:	fa'tima°wai//	anmira'pau	'maso/ fa'time tibo°'kemui iri°mabr//
O:	Fatimawai.	Anmirapau	maso, fatime Tivökemui irimävrë.
E:	drum.for	we.ran	here drum Tivöke.for we.took
B:	tifa.utuk	kami.lari	disini tifa Tivöke.utuk kami.ambil
P:	tibo°'kemui	iri°mabr//	fa'tiye 'nabsra/ 'pewabe çe'čebaso
O:	Tivökemui	irimävrë,	fatiye navsra. Pewave cecevaso
E:	Tivöke.for	we.took	drum three then ?
B:	Tivöke.utuk	kami.ambil	tifa tiga lalu ?
P:	piñan'miranami	°enosamai//	an'mrau mor°raso// 'nafa
O:	piñämiranami	Enosamai.	Anmërau Moräraso. Näfa
E:	we.two.ran	Enos.this	we.two.ran Morära sago
B:	kami.dua.lari	Enos.ini	kami.dua.lari Morära sagu
P:	'afrn/ 'peni	peso'nife	sap'para iri°marire// an'mrab
O:	afrën,	peni pesonife	sappara irimärire. Anmërav
E:	ate	then from.there	arrow we.two.took we.two.ran
B:	makan	lalu darisitu	panah kami.dua.ambil kami.dua.lari
P:	o	se°riani//	o°'maro ai s'wiya 'maiya anini°napiye//
O:	o	Seriani.	Ömaro ai Säwiya maiya anëninapiye?
E:	until	Seriani	how ? Säwiya this we.two.took
B:	sampai	Seriani	bagaimana ? Säwiya ini kami.dua.ambil
P:	ne	'pini mabe'ritapai	ba°raf// pini'o°fase 'taka maso'nife
O:	Ne	pini maveritapai	varaf. Piniöfase taka masonife
E:	we	night slept	dawn morning ? from.here
B:	kami	malam tidur	siang pagi ? darisini

P:	'porim°poekrause//	°tire	so°wek maso°nifa//	'yane/
O:	porimpoekräuse.	Tëre	sowek masonifa:	Yane,
E:	many.arrived	children	all from.here	Yane
B:	banyak.tiba	anak	semua darisini	Yane
P:	'ra'meka/	'a'musa/	'mar'tena/	pini'abe pini'abe 'neramai
O:	Rameka,	Amusa,	Martena.	Piniave, piniave Neramai
E:	Rameka	Amusa	Martena	night night Nera.this
B:	Rameka	Amusa	Martena	malam malam Nera.ini
P:	'pinio°	'wetan'nipa/	'pinio°	'wetan'nipa/ ne 'pini mabe'rimi
O:	piniö	wetan'nipa,	piniö	wetan'nipa, ne pini maverimi
E:	tomorrow	she.comes	tomorrow	she.comes we night slept
B:	besok	dia.datang	besok	diadatang kami malam tidur
P:	ba°raf//	pini'o°fase	'neromai	ari'etanipapi mra°rimanapi//
O:	varaf.	Piniöfase	Neromai	arietanipapi mrarimanapi.
E:	dawn	morning	Nero.this	she.came bathed
B:	siang	pagi	Nero.ini	dia.datang mandi
P:	'taka ai	po°a°ribinai//	ne	'čewase fati'mai irime'neniyau
O:	Taka ai	pöarëvinai.	Ne	cewase fatimai irimeneniyäü:
E:	?	?	we.many.went	we ? drum.this we.brought
B:	?	?	kami.banjak.pergi	kami ? tifa.ini kami.ambil
P:	sau°nefi//	°sau°k//	ra°račo//	
O:	säunefë,	säu,	raraco,	
E:	leaf.type	armband	leaf.type	
B:	dawn-dawn.macam	gelang.tangan	dawn-dawn.macam	
P:	so°tipapu//	wa°merafo°//	ta'ki	waro°°metarän//
O:	sotipäpu,	wamerafö.	Taki	Warömetarän.
E:	Cassowary.feathers	Hornbill.feathers	father	Waröme.walked.along
B:	bulu.Kasowari	bulu.burung.tahun	bapak	Warome.jalang.langgar

P: ga'rame 'pewaso °metiaiwe// ga'rame o'ma'rufa wetiäimai//
 O: Garam pewaso metiaiwe. Garam ömarëfa wetiäimai?
 E: Garam then we.sang Garam how we.sing
 B: *Garam lalu kami.menyani Garam bagaimana kami.menyani*

P: pesa'ware 'pisa'nuru/ pesa'ware 'pisa'nuru/ ne 'pewabe o
 O: Pesaware pësanuru, pesaware pësanuru. Ne pewave o
 E: ? ? ? ? we then until
 B: ? ? ? ? *kami lalu sampai*

P: o'na'ritirer// o'na'riye si°sreao'faniya// 'pese
 O: Önaritirer, Önariye Sësreaöfaniya. Pese
 E: Önari.we.came.out Önari Sësreaöfaniya then
 B: *Önari.kami.keluar Önari Sësreaöfaniya lalu*

P: irime'tiaruse 'pese'tiaumi/ e siyar'koremai
 O: irimetiaruse pesetiaumi e Siyarkoremai.
 E: we.began.dance we.continued.dance ? Siyarkore.this
 B: *kami.mulai.dansa terus.kami.dansa ? Siyarkore.ini*

P: irima'nabrunapa 'yu'supa/ 'čewase o 'potä'baso/ ne
 O: Irimanavrunapa Yusupa. Cewase o Potävaso ne
 E: we.already.saw Yusup ? until Potäva we
 B: *kami.sudah.lihat Yusup ? sampai Potäva kami*

P: 'pese'tiaumi/ siwa'no'rosao °mase// a'mare 'napni/
 O: pesetiaumi Sëwanörosao mase. Amare napni,
 E: then.danced Sëwanöro.village until rest two
 B: *lalu.dansa Sëwanöro.kampung sampai istirahat dua*

P: a'mare 'napni e 'nabsra 'baufa 'mase 'ne'teran/ pië'binapau
 O: amare napni e navsra vaufa mase neterän, pievinapau
 E: rest two ? three ? until we.left we.went
 B: *istirahat dua ? tiga ? sampai kami.pulang kami.pergi*

P: se°riani// to'krima °česo//
 O: Seriani. Tokrima ceso.
 E: Seriani until there
 B: *Seriani sampai disitu*

Free Translation

Peter's Story

'We came to get the drum. We hiked here in order to get the drum. We took the Tivoke drum. We took three Tivoke drums. Then Enos and I hiked with the drums. We hiked to Morara. We ate sago pudding, then we took some arrows and hiked to Seriani. How did we do it? We took the drums. We slept from sunset to dawn. In the morning the local villagers arrived. All the young people came: Yane, Rameka, Amusa, and Martena. That evening we heard that Nero was coming in the morning. Since she was coming in the morning, we slept until dawn. Nero arrived in the morning. After she bathed, we all went. We brought the drums, various kinds of leaves, armbands, Cassowary and Hornbill feathers. Father then came across the Warome river. We sang Garam. How do we sing Garam? "Pesaware pësanuru, pesaware pësanuru," which means 'Why don't you want to wake me up?' We then came to a place on the Önari river where the Sësreöfaniya river joins it. We began to dance and continued dancing with the people of Siyarkore. We noticed that Yusup had come. We danced to the Potäva river, and continued dancing to Sëwanöro. We rested two days and the third day too. After that we left and returned home to Seriani. That's all.'

Terjemahan Bebas

Ceritera Piter

'Kami datang kesini dengan maksud untuk mengambil tifa. Kami ambil tiga buah tifa yang bernama Tivoke. Sesudah itu saya dan Enos berjalan menuju ke Marara dengan membawa ketiga tifa itu. Sampai disitu kami makan pepeda, kemudian kami mengambil beberapa anak-panah dan meneruskan perjalanan ke Seriani. Bagaimana kita bisa begini? Kemu-

dian kami ambil Ketiga tifa itu dan kami tidur sampai fajar pagi. Pada keesokan harinya orang-orang kampung datang. Begitu juga anak-anak mudanya datang semua, mereka adalah Yane, Rameka, Amusa dan Mar-tena. Petang itu kami mendengar bahwa Nero akan datang besok pagi, maka kami tidur sampai fajar. Pada keesokan harinya Nero datang dan sesudah dia mandi kami semua berangkat. Kami membawa ketiga tifa itu, bermacam-macam daun-daunan, gelang tangan, bulu-bulu Kaswari dan bulu-bulu Burung Tahon. Kemudian bapak datang menyeberangi sungai Warome dan kami menyanyi Garame. Bagaimana kami menyanyi Garame? "Pesaware pësanuru, pesaware pësanuru," yang artinya "Mengapa engkau tidak mau membangunkan saya?" Selanjutnya kami sampai pada suatu tempat dimana sungai Önari bersambung dengan sungai Sësreöfaniya. Kami mulai menari dan menari terus dengan orang Siyarkore. Kami lihat bahwa Yusuf sudah datang. Kami meneruskan menari sampai di sungai Potäva dan terus ke kampung Sëwanöro. Disitu kami istirahat dua hari, juga hari yang ketiga. Sesudah itu kami berangkat dan pulang kembali ke Seriani. Sekian.'

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Professor Dr. M. T. Walker of Southern Illinois University, U.S.A., who came to the Institute for Anthropology, Cenderawasih University, in June 1971, returned to S.I.U. in July 1974.

The Director and Staff of the Institute wish, although late but with no less sincerity, to express their gratitude to Dr. Walker for all he has done for the Institute.

It was Dr. Walker, who initiated the publication of the IRIAN, and thus made the Institute better known outside Indonesia. Dr. Walker was responsible for the research experiences acquired by the young staff members of the Institute, and he also gave encouragement to them to publish their work in English. In June 1972, Dr. Walker was directly involved in the planning and execution of the Symposium in Education, in which participants from Jakarta, Jayapura, and Papua New Guinea read their papers.

NEWS AND NOTES

New Rector for Cenderawasih University

Cenderawasih University has had a new Rector. Dr. Rubini Atmawidjaja, a Forest Engineering graduate of the State University of New York at Syracuse, U.S.A., is now at the helm of the Indonesian easternmost university.

New Director for the Institute for Anthropology

As of April the directorship of the Institute for Anthropology, which has been vacant for the past year, is held by Dr. Ignatius Suharno. Dr. Suharno is a linguist and earned his doctorate at Georgetown University, Washington, D. C., U.S.A.

New Editorship for the IRIAN

As of this issue, the editorship of the IRIAN is as shown on the inner front cover. New members are Dr. Ignatius Suharno of the Institute as Editor and Robert Sterner of the Summer Institute of Linguistics as Associate Editor.

UNCEN-SIL Workshop in Linguistics

From January 28 to March 22 a workshop in Linguistics was held in Danau (Lake) Bira, in the jungles about 175 miles from Jayapura, the province capital on the north coast of Irian Jaya. The workshop was a joint project of Cenderawasih University (UNCEN) and the Summer Institute of Linguistics. Consultants of the workshop were Dr. Kenneth L. Pike of the University of Michigan at Ann Arbor, Mrs. Evelyn G. Pike, and Anne Cochran of the PNG Branch of SIL. Representing Cenderawasih University was Dr. Ignatius Suharno. A mono-

graph of 15 papers reporting on the workshop, with Drs. Pike and Suharno as editors, is going to print.

New Publications

Out of print but subject to availability for a sufficient number of requests against a remittance of US\$1.50 or Rp.500,- are:

A Socio-Economic Survey of Asmat Region of Irian Jaya, Jayapura: In Institute for Anthropology, Research Report No.4, May 1974, Mimeo, 75 pp.

Asmat Papers Part I, Jayapura: Institute for Anthropology, Research Report No.5, June 1974, Mimeo, 92 pp.

Asmat Papers Part II, Jayapura: Institute for Anthropology, Research Report No.6, July 1974, Mimeo, 75 pp.

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