NII PHONOLOGY

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1. INTRODUCTION

There are approximately 8,500 speakers of the Nii language known as Ek Nii. This language occupies an area of about 10 miles of the Wahgi Valley starting at Kudjip on the east, and going west to the Tuman river. It also covers the whole of the valley running north and south and perhaps over the ridges. This language is a small pocket between two large language groups - the Wahgi on the east and the Medelpa on the west. The Nii language is a member of the Hagen Language Family.

Our location is centrally located in the language area on the south side of the valley in the largest dialect of the language. Most of the Nii people live in small hamlets scattered through out the area wherever their land and gardens may be. We chose the village Kiam which was called together by the Lutheran Mission, for our place to work under the auspices of the Summer Institute of Linguistics.

Kusa, our informant, is about 25 years old and is from the Monga dialect. This dialect is centrally located in this language area on the south side of the Wahgi River. He is from the village of Kiam and speaks Pidgin English.

1.1. ACKNOWLEDGMENTS

Working under the auspicies of the Summer Institute of Linguistics, we have been in Kiam village approximately 29 months working on different aspects of the Nii language from 1967 to 1973.

Recognition is given to Ann Cochrane for her help on writing up this paper which is a revision of our 1969 paper.

1.2. SYMBOLIZATION

Parentheses () represents the phonetic writing.

Brackets / / represents the phonemic writing.

Underline (_) is used to symbolize dental position.

The dot (.) is used to symbolize velar position

The plus (+) symbolizes fricativeness.

The line through (-) is used to symbolize voicelessness.

2. INTERPRETATION

2.1. THE STATUS OF ITEMS WHICH MAY BE EITHER CONSONANT OR VOWEL:

Syllabic high front and back vocoids (i) and (u) are interpreted as vowels, as they occur as the nucleus of the syllable. The non-syllabic high front and back semi-vocoids (y) and (w) are interpreted as consonants as they occur in syllable onset slots.

2.2. THE STATUS OF ITEMS WHICH MAY BE EITHER SEQUENCE OR UNITS:

Non-suspect clusters of two consonants may occur word final, and medial across syllable boundries. The prenasalized obstruents have been interpreted as single units as they occur initially but there are no non-suspect initial or triple clusters.

/kalt/ (kalt
$$\hat{R}$$
) 'I cooked it'
/w ϵ lipi/ (w ϵ lipi) 'line of people'

/kispi/	(kispí)	'kind of bird'
/kandz(p/	(kandz (ph)	'star'
/monge/	(mongε)	'line of people'
/ηε <u>ndz</u> /	$(\eta \varepsilon \underline{nts})$	'skin'
/ndzu/	(<u>ndz</u> ü)	'man's name'
/ond/	(ont ^Ř)	'wood'
/kon/	(k ^w on)	'net bag'

Vocoid clusters (ei), (et), (ai), (oi), (ot) (ou) have been interpreted as complex syllable nuclei for the following reasons:

Each of the clusters forms the nucleus of a syllable of 1 mora timing, carrying one contrastive (either high or rising) pitch and stress occurs over the whole cluster. Wherever sequences of vocoids occur as the nuclei of two syllables there are two contrastive pitches, stress falls on only one nucleus and a semi-vowel is articulated between the vowel nuclei. Because neither vowels of the cluster is generally more dominant than the other, as either level or gliding tone may occur, and as new phonemes do not need to be set up, this interpretation has been followed rather than that of setting up glided phonemes.

/εi/	(ei)	'up'
/ει/	(ει)	'he/she/it'
/pounen/	(pounen)	'afternoon'
/kaimb/	(kaimp ^h)	'sorry'
/ałou/	(aļou)	'incorrect'
/piyo/	(piyo)	'you listen!'
/miyém/	(miyem)	'blood'
/owu/	(owu)	'dog'
/oiyo/	(oiyo)	'you come!'
/pɛiyo/	(peiyo)	'you all go!'

2.3. INTERPRETATION OF LABIALIZED CONSONANTS AS SEQUENCES OF CONSONANT PLUS VOWEL.

Lablialized consonants (bw, ngw, tw, kw, mw) preceding /i/ have been interpreted as sequences of consonant and vowel (bu, ngu, tu, ku, mu,) for the following reasons:

initially, where labialized consonants occur most frequently they could be interpreted as complex units. If so, five complex phonemes would then be added to the list of consonant phonemes, however they occur rarely in comparison with other consonant phonemes and then only preceding /i/.

(2) The consequent (ui) parallels the vowel sequences (ei), (ai), and (oi), which occur as syllable nuclei.

3. OUTLINE OF PHONEMES

3.1. CHART OF PHONEMES

	Bilabial	Dental	Alveolar	Velar
O B S T R U E N T	Non- prenasalized /p/	/ <u>s</u> /	/ř/	/k/
U E N T	Prenasalized/mb/	/ <u>ndz</u> /	/nd/	/ŋg/
N A S A L.	/m/	/ <u>n</u> /	/n/	/ŋ/
L A T E R A L		/≟/	^ ĭ /	/ <u>‡</u> /
SEMI VOWELS	/w/		/y/	15

	YAN	Front	Central	Back
		/i/		/u/
. V O	HIGH		:	, u,
W E		/(/		
L S	MID	/&/		/0/
	LOW		/a/	

3.2. DESCRIPTION OF CONTRASTIVE FEATURES

The main contrastive feature of the consonants of the Nii language is pre-nasalization versus non pre-nasalization. There is contrast between obstruents nasals, laterals, and semi vowels.

/pin/	(pin)	'you sleep'
/mbin/	(mbtn)	'we will go'
/εř/	(ER)	'you work!'
/εnd/	(εnt^{h})	'I work'
/kal/	(ka <u>ļ</u>)	'you cook!'
/nga <u>l</u> /	(nga <u>‡</u>)	'needle'
/ε <u>n</u> /	$(\underline{\epsilon}\underline{n})$	'you did it'
/on/	(on)	'you came'
/ond/	(ont ^Ř)	'tree'
/all/	(a½)	'east'
/owi/	(owi)	'big'
/pē‡o/	(pɛ́lo)	'you (2) go'
/pɛiyo/	(péiyo)	'you all go'

There is also contrast between bilabial and dental, alveolar and velar. Voicing versus voicelessness is not significant.

/kom/	(kom)	'ear'
/ko <u>n</u> /	(ko <u>n</u> /k ^w o <u>n</u>)	'face'
/pim/	(pim)	'he hears'
/pi <u>n</u> /	(pi <u>n</u>)	'you hear'

The vowels contrast in placement and position of the tongue. Fronted versus backed and high, mid, and low positioning.

/wi/	(wi)	'nothing'
/wu/	(wu)	'man'
/ <u>n</u> ı/	(<u>n</u> ı)	'you talk!'
/no/	(no)	'you eat!'
/em/	(εm)	'pandanas'
/am/	(am)	'milk'
/pi/	(pi)	'you hear!'
/pt/	(pt)	'you sleep!'
/pε/	(pε)	'now'
/kuŋ/	(kuŋ)	'pig'
/koŋ/	(koŋ/kɔŋ)	'wing of bird'
/kan/	(kaŋ)	'boy'

4. DESCRIPTION OF PHONEMES AND ALLOPHONES

4.1. CONSONANTS -

Phonemes	Alloph	ones		
/p/	(p)	Voiceless word init	bilabial s ial and med	stop occurs lial.
	(b)	Voiced bil	labial stop on with (p)	o occurs in
	(ph)	stop occur finally ar	bilabial ars word and is mutual with (p) (l utterance
	(p &)	voiced cer occurs in (p ^h) word	bilabial s ntral vocoi free varia finally as n between w	d release tion with
		/kupú/	(kupú)	'cloud'
		/p(n)/	(peŋ)	'black'
		/pimí/	(pim()	'bee'
			(ndup ^h)	
		/molap/	$(molap^h)$	'potato '
		/amb/	(amp ^h)	'woman'
		/ndup kal/	′(ndup³kal 'st	/ndup ^h kal) art fire!
		/moļáp řaļ	/(moļáp ^h t	aļ/moļáp [®] řaļ) o potatoes'

Phonemes Allophones

/mb/ (mb) Voiced prenasalized bilabial stop occurs word initially and medially.

Phonemes

Allophones

	*	
	(mp)	Voiceless prenasalized bilabial stop occurs word medially in fluctuation with (mb).
	(mp ^h)	Voiceless prenasalized bilabial aspirated stop occurs word finally.
	(mp3)	Voiceless prenasalized bilabial stop with vocoid release occurs in free fluctuation with (mph) utterance medial as a transition between words.
٠.,		/mben/ (mben) 'bean'
		/semb(]/ (temb(]/temp(]) 'shake'
		/amb/ (amp ^h) 'woman'
		/amb řal/ (amph tal/ampřal) two women.
		two women
Phonemes	Alloph	
Phonemes	Allopho	
		Voiceless dental grooved fricative occurs initially fluctuating with (t) and (ts); medially and finally fluctuating
	(<u>s</u>)	Voiceless dental grooved fricative occurs initially fluctuating with (t) and (ts); medially and finally fluctuating with (ts). Voiceless dental grooved affricate occurs word initial
	(<u>s</u>)	Voiceless dental grooved fricative occurs initially fluctuating with (t) and (ts); medially and finally fluctuating with (ts). Voiceless dental grooved affricate occurs word initial and final fluctuating with (s). Voiceless dental stop occurs word initial and medial in
	(<u>s</u>)	Voiceless dental grooved fricative occurs initially fluctuating with (t) and (ts); medially and finally fluctuating with (ts). Voiceless dental grooved affricate occurs word initial and final fluctuating with (s). Voiceless dental stop occurs word initial and medial in fluctuation with (s) and (ts).

/wusi/ (wusi/wuti)'cat'
/olsin/ (blt(n/bltsin)
'yesterday'

Phonemes

Allophones

/<u>ndz</u>/

- (ndz) Voiced prenasalized dental grooved affricate occurs word initially, medially, and finally.
- (<u>nts</u>) Voiceless prenasalized dental grooved affricate occurs word initially and medially in fluctuation with (<u>ndz</u>) and fluctuates with (<u>ns</u>) and (<u>ndz</u>) finally.
- (ns) Voiceless prenasalized dental grooved fricative occurs word finally in fluctuation with (nts) and (ndz).
- (ndz') Voiced prenasalized dental grooved affricate with slight high front vocoid release occurs freely fluctuating with (ndz) in consonant clusters preceding heterorganic stops and nasals.

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	Phonemes	Allopho	ones	
	/ř/	(ř)	Voiced alveolar flapped vibrant occurs utterance medial in fluctuation with (t)	
		(ĩ)	Voiced alveolar trilled vibrant occurs in free fluctuation with (\mathring{r}) .	
		(t ^Ř)	Voiceless alveolar stop with voiceless flapped vibrant release occurs following (1) word finally.	
		(th)	Voiceless alveolar aspirated stop occurs in free fluctuation with (\mathbf{t}^R)	
		(Ã)	Voiceless alveolar trilled vibrant occurs postvocalically word finally.	
		(t)	Voiceless alveolar stop occurs word initially following another word of an utterance in fluctuation with (ř).	
			/ařím/ (ařím/ařím) 'father'	
			/konu kumb řonúm/(konu kump ^h tonúm/konu kump ^h řonúm) 'It is raining'	
			/εř/ (ε̄႙̄) 'work'	
			/olř/ (oltŘ/olth) 'long'	
	Phonemes	Allopho	ones	
	/nd/	(nd)	Voiced prenasalized alveolar stop occurs word initially and medially.	
		(nt)	Voiceless prenasalized alveolar stop occurs in fluctuation with (nd).	

(nt ^h)		Voiceless prenasalized alveolar aspirated stop occurs word final.
(nt ^Ř)		Voiceless prenasalized alveolar stop with voiceless flapped vibrant release occurs word finally in free fluctuation with (nth).
(nt ^a)		Voiceless prenasalized alveolar stop with vocoid release occurs in free fluctuation with (nth) utterance medial as a transition between words.
		/ndup/ (nduph/ntuph) 'fire'
		/kendal/ (kental/kendal) 'place name'
		/nond/ (nont ^h /nont ^Ř) 'I am eating'
		/ond kaipi/(onth kaipi/onth kaipi) 'kind of tree'
Phonemes	Allopho	nes
/k/	(k)	Voiceless velar stop occurs word initial and medial.
	(g)	Voiced velar stop occurs in fluctuation with (k).
	(k ^h)	Voiceless velar aspirated stop occurs word final.
•	(k³)	Voiceless velar stop with voiced central vocoid release occurs in free fluctuation with (k^h) utterance medial as a transition between words.
		Preceding /a/ and /o/ in some words /k/ and /ku/ occur in free variation.

		/ka/		
		/aka/		potato'
		/kombu/	(kombu)	'marita'
		/kon/, /ku	on/	'string bag'
		/kondúk/,	/kuondúk/	'shirt'
		/ndok/		_
		/niřík/	(niříkh)	'inside'
		/p&k řo/	(pekh to/	oek°řo) 'peel'
Phonemes	Allopho	nes		<u>.</u>
/ŋg/	(ŋg)	Voiced predocurs word medially.	nasalized v i initially	velar stop v and
	(ŋk)	Voiceless p stop occurs (ng).	orenasalize s in fluctu	ed velar uation with
	(ŋkh)	Voiceless r velar stop	orenasalize occurs wor	ed aspirated of finally.
	(ŋk ^ð)	Voiceless p stop occurs with (nkh) a transitio	in free f utterance	'luctuation medial as
		/ŋgoɨ̯/	(ŋgol/ŋkol) ong pit-pit'
		/ŋgupu/	(ŋgupú)	'mouth'
·		/monge/	(mongε)	'line of people'
		/ang/	(aŋk ^h)	they stood up:
		/ang punmun, ank pi	/ (aŋkʰ pu unmún) 'tho	nmun/ ey went'

Phonemes	Alloph	ones		
/m/	(m)	Voiced bilabial nasal occurs word initially, medially, and finally.		
		/mε/	(me)	'taro'
		/omu/	(omú)	'fish'
		/ <u>n</u> ım/	(<u>n</u> ım)	'you 'sing'
/ <u>n</u> /	(<u>n</u>)		ntal nasal ially, med	
		/ε <u>n</u> ί/	(ε <u>n</u> ί)	'sun'
		/ncm/	$(\underline{n}\iota m)$	'you'
		/ko <u>n</u> /	(ko <u>n</u>)	'face'
/n/	(n)	Voiced al word init	veolar nas	al occurs ially and
•		/kon/	(kon)	'belium'
		/no]/	(no <u></u> ‡)	'water'
		/Enim/	(Enim)	'they'
Phonemes	Alloph	ones		
/ŋ/	(ŋ)		lar nasal medial and	occurs word final.
		/ŋɛ <u>ndz</u> /	(ŋɛ <u>nts</u>)	'skin'
		/kan(1/	(kaŋ੯‡)	'boy'
		/kun/	(kuŋ)	'pig'
		/pεŋ/	(pen)	'head'

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/ <u>‡</u> /	(<u>1</u>)	Voiceless dental later fricative occurs word	ral final.
	$\left(\frac{1}{\tau}\right)$	Voiced dental lateral occurs intervocallica	fricative lly.
	(<u>1</u>)	Voiced alveodental la occurs intervocalicly a consonant.	
		/molal/ (molal) I'r	n not staying'
		$/\eta ga^{\frac{1}{2}}/$ $(\eta ga^{\frac{1}{2}})$ 'per	ncil'
		$/\epsilon \pm i p/$ $(\epsilon \pm i p^h)' jo$	ined together'
•		$/mu\frac{1}{t}$ $(mu\frac{1}{t})$ 'poi	spear'
		$o \frac{1}{2} in / (o \frac{1}{2} in)$ 'yes	sterday'
/ĭ/	(ĭ)	Voiced alveolar flappe occurs word intervocali	ed lateral cally.
	(1)	Voiced alveolar laters preceding $/\tilde{r}/.$	al occurs
			g before'
		/ngoľum/ (ngoľum)'pi	
		/palin/ (palin) 'pi	g fence'
		/kelip/ (keliph)'co	ugh of an d person'
		/kaľř/ (kalt ^Ř) 'I	cooked'
/ <u>‡</u> /	(<u>1</u>)	Voiceless velar latera fricative occurs word	l finally.
	(<u>ļ</u>)	Voiced velar lateral foccurs intervocalically.	ricative

(1)

Voiceless velar lateral fricative

with voiced central vocoid

4.2. VOWELS

Vowels differ in inherent basic length according to tongue position, the low vowel /a/ being the longest, $/\ell$ /, /i/, and /u/ the shortest. Vowels tend to be longer in stressed final position than elsewhere in words of the same number of syllables.

Phonemes Allophones

/i/ (i) Voiced high closed front unrounded vocoid occurs word medially and finally.

preceded by front and central

// (') Voiced high open front backed unrounded vocoid occurs preceding lateral consonants and fluctuates freely with (+) following consonant clusters immediately

vocoids.

- Voiced high open central unrounded vocoid occurs following consonant clusters immediately preceded by front and central vocoids.
- Voiced high open front unrounded vocoid elsewhere.

```
/kuni/ (kuni) 'food'

/ɛpi/ (ɛpi) 'something'

/kis/ (kis) 'bad'

/ouni/ (ouni) 'together'

/olsin/ (oltin) 'yesterday'

/ɛndzinil/(ɛndzinil)'dl.worked'

/nil/ (nil/ 'mark on face'

/mulnēndzpin/(mulnēndzpin) "we didn't stay'

/kuřnářpīn/ (kuřnářpin) 'we didn't find it'
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Phonemes Allophones

- / ϵ / (a) Voiced mid close central unrounded vocoid occurs in unstressed second syllable in multi-syllable words following non-dental laterals following / ϵ / in initial syllable.
 - (e) Voiced mid close front unrounded voiced occurs as first member of complex nuclei.
 - (ε) Voiced mid open front unrounded vocoid occurs elsewhere.

/telenembi/(telenembi)'I will not plant'

/endeim/ (endeim) 'one'

/se/ (te) 'get it'

/ent/ (ent) 'sun'

/em/ (em) 'goroka nut'

/meř/ (meR) 'north'

/et/ (et) 'up'

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/belembil/(beləmbil) we two will
                      /wεiεpi/ (wεi ppi) 'clan name'
Phonemes
             Allophones
/a/
             (A)
                      Voiced mid open central unrounded
                      vocoid occurs word finally
                      following a lateral and in free
                      fluctuation with (\land) word finally
                      following /w/.
                      Voiced low close front unrounded
             (æ)
                      vocoid occurs word medially in
                      free fluctuation with (a)
                      preceding velar laterals.
             (\Lambda)
                      Voiced mid open central raised
                      unrounded vocoid occurs in free
                      fluctuation with (^) word finally
                      following /w/.
             (a)
                      Voiced low open central unrounded
                      vocoid occurs elsewhere.
                      /am/
                                 (am)
                                            'milk'
                     /aká/ (aká)
                                           'sweet potatoe'
                     /mam/
                                 (mam)
                                           'his mother'
                     \frac{\sqrt{salim}}{\sqrt{m}} (\frac{talim}{\sqrt{m}}) 'it is here'
                     /pali/ (pæli/paliph) 'male'
                     /p_{\frac{1}{4}}a/ (p_{\frac{1}{4}}a) 'girl's name;
                     /ařuwa/ (ařuw//ařuw/)'pumpkin'
/u/
            (u)
                     Voiced high close back round
                     vocoid, occurs only in CV
                     syllables medially and finally. It usually follows velar stops
                     and fluctuates with (0) when
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preceded by (k) and followed by nasal or a stop. (u) also occurs in the environment of liquids.

- Voiced high close front unrounded vocoid on-glide to voiced high open back rounded vocoid occurs between two dental consonants, and following dentals in open monosyllables.
- (t) Voiced high open central unrounded vocoid occurs following dental consonants following back vowels.
- Voiced high open back unrounded vocoid occurs in open final syllables following alveolar consonants following back vowels.
- (U) Voiced high open back rounded vocoid occurs elsewhere.

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/ndzu/ (ndz'u) 'man's name'

/kun/ (kun/kun) 'straight place'

/wu/ (wu) 'man'

/nomu/ (nɔmu) 'louse'

/kula/ (kula) 'grass'

/ndup/ (nduph) 'fire'

/kunula/ (kunula/kunula)'kind of greens'

/nundz/ (nonts) 'I ate'

/pundzun/ (pundztn) 'they went'

/opřu/ (opři) 'lizard'

/tonu/ (toni) 'up'
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Phonemes	Alloph	ones		
/0/	(0)	vocoid o	id, close baccurs word ind final.	ack, rounded initial,
	(၁)	vocoid od	ccurs word i	ack, rounded, initial, es with (o).
	(&)	vocoid od second sy words fol nasals ar	ccurs in uns yllable in m llowing non- nd prenasali	nulti-syllable -dental
		/omb/	$^{\mathrm{d}}\mathrm{qm}\mathbf{c}\backslash^{\mathrm{d}}\mathrm{qmo}$	') 'sugar'
		/no/	(no)	'eat!'
			(dqc/dqc)	•
		/řoku/	(tokú/togú) 'tobacco'
		/pop/	(pop ^h /pop ^h	'wind'
				'they will eat'
		/kongonum	/(kongənum)	'they are biting'

5. CONTRASTS OF PHONEMES

5.1. CONSONANTS:

OONSONANTS:		
/p/ and $/mb/$	/pin/	(p(n) 'you sleep'
	/mbin/	(mbin) 'we will go'
	/k t p/	(kiph) 'burned food'
	/kimb/	(kimph/kimbh) 'name'
	/p ε p/	$(p\epsilon p^h)$ 'I am sleeping'
	/pemb/	(pembh/pemph)'I want to sleep'
	/ <u>s</u> tp/	$(tip^h/tsip^h)$ 'getting it'
	/ <u>s</u> tmb/	$(\underline{t} \cdot mp^h / \underline{ts} \cdot mp^h)$ 'leg' 20
/r/ and $/nd/$	/eř/	(ε̃R̃) 'you work!'
	$/\epsilon$ nd $/$	(εnt) 'I am working'
	/eřím/	(Eřím) 'he worked'
	/endim/	(εndim) 'cooked'
•	/ <u>n</u> uř/	(<u>n</u> uR̃) 'I ate before'
	/nundz/	(<u>n</u> u <u>nts</u>) 'I ate'
	/εř iŋ/	(εř(η) 'other side'
	/Endzen/	(Endzin)'they work'
/r/ and $/s/$		(ຮັເຫ) 'he works'
	/8 <u>s</u> (m/	$(\varepsilon \underline{s}(m))$ 'he worked'
	/k(ř/	$(k \iota \widetilde{R})$ 'to tie bundle'
	/k(<u>s</u> /	(kt <u>s</u>) 'a name'
	/řu/	(tu) 'bring it!'
	/ <u>s</u> u/	$(\underline{tu/tsu})$ 'mark it!'

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/εřικί]/ (εřικί])'dl.do it'
                               /\varepsilon \underline{\underline{s}}\underline{k}(\underline{\underline{l}}) (\varepsilon \underline{\underline{s}}\underline{k}(\underline{\underline{l}}) 'smoke'
/nd/ and /ndz/
                              /ndu/ (ndu) 'kind of bird'
                               /ndzu/ (ndzu) 'a name'
                               /kand/ (kanth) 'I am looking'
                               /kandzip/ (kandsiph)'star'
                              /\varepsilon nd/ (\varepsilon nd^h/\varepsilon nt^h) 'I work'
                              /\varepsilon_{\rm ndz}/ (ents) 'I worked'
                              /pund/ (punth) 'I am going'
                              /pundzun/ (pundz+n)'they go'
                              /e\underline{s}(\frac{1}{2}) (\underline{\epsilon}\underline{s}(\frac{1}{2}) 'grass'
/s/ and /nd/
                              /εnd(½/ (εnd(½)) 'put something'
                              /\varepsilon \underline{s}(m) (\varepsilon \underline{s}(m) 'worked'
                              /Endim/ (Endim) 'cooked'
                              /k \cdot s / (k \cdot s) 'bad'
                              /kind/ (kindh/kinth)'put it! '
                              /\underline{s}up/ (\underline{t}up^h/\underline{s}up^h)'bringing it'
                              /ndup/ (nduph) 'fire'
                             /as(p)/(as(p^h)) 'a name'
/s/ and /ndz/
                              /andzip/ (andziph)'a name'
                              /kisap/ (kisaph) 'a name'
                              /kindzip/ (kindziph)'kind of tree'
                             /\varepsilon\underline{s}(\frac{1}{2}) (\varepsilon\underline{s}(\frac{1}{2}) 'grass'
                             /\varepsilon_{ndz}, (\varepsilon_{ndz}, (\varepsilon_{ndz})'dl. worked'
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/k\iota\underline{s}/ (k\iota\underline{s}) 'bad'
                             /kindz/ (kints) 'I put'
/\check{r}/ and /\underline{ndz}/ /\varepsilon\check{r}/ (\varepsilon\widetilde{R}) 'you work!'
                             /\varepsilon \underline{\text{ndz}}/ (\varepsilon \underline{\text{nts}}) 'I worked'
                            /εř(η/ (εř(η) 'behind'
                             /\epsilon \underline{ndz}(\eta) (\epsilon \underline{ndz}(\eta))'we all work'
                             /nur/ (n \cup \widetilde{R}) 'I ate before'
                             /nundz/ (nundz) 'I ate'
                             /pu\check{r}/ (pu\widetilde{R}) 'I went before'
                             /pundz/ (pundz) 'I went'
\frac{1}{1} and \frac{1}{1} and \frac{1}{1} MEDIAL POSITION
                            /\epsilon_{\downarrow}^{\downarrow}(p) (\epsilon_{\downarrow}^{\downarrow}(p^{h}) 'you two'
/ku_{\downarrow}^{\downarrow}a/ (ku_{\downarrow}^{\downarrow}a) 'name of greens'
                             /kulu/ (kulu) 'chicken'
                            /kula/ (kula) 'dry'
/palmi/ (palmi) 'a name'
                            /palin/ (palin) 'pig fence'
                             /pali/ (pali) 'bamboo rope'
\frac{1}{2} and \frac{1}{2}
                                   FINAL POSITION
                             /nga\frac{1}{2} · (nga\frac{1}{2}) 'pencil'
```

```
/ngal/ (ngal) 'scratch
                                                 oneself'
                      /\text{mu} \frac{1}{4} (mu\frac{1}{4}) 'spear point'
                      /mull/ (mull) 'egg'
                      /\eta go \frac{1}{+} (\eta go \frac{1}{+}) 'red leaf of
                                                       tree'
                      /\eta go^{\frac{1}{2}}/ (\eta go^{\frac{1}{2}}) 'a name'
                      /n\iota \frac{1}{4} (n\iota \frac{1}{4}) 'mark face'
                      /n:1/
                                   (nt½)
                                             'talked'
/i/ and /r/
                      MEDIAL POSITION
                      /\underline{t}u\check{l}um/ (\underline{t}v\check{l}vm) 'sew up mat'
                      /\underline{t}urum/ (\underline{t}urum) 'he fought
                                                      before'
                      /kelip/ (keliph)'cough of old
                      /\epsilon \tilde{r} i p / (\epsilon \tilde{r} i p^h) 'I make'
                      /kulum/ (kulum) 'fill up'
                      /kurum/ (kurum) 'he found'
                      /mulum/ (mulum) 'he stayed'
                                   (muřú) 'good smell'
                      /muřú/
/\frac{1}{4} and /k/
                      /all/
                                   (al) 'east'
                                   (akh) 'dig!'
                      /ak/
                                   (nol) 'water'
                      /nol/
                      /nok/
                                   (nokh) 'they ate'
                      /řaļ/
                                   (tal) 'two'
                                    (takh) 'you build'
                      /řak/
```

```
/ngul/
                                  (ngui ) 'take off'
                     /ŋguk/
                                   (ngukh) 'tanget'
/\eta/ and /\underline{n}/
                     /pen/
                                  (pen)
                                            'head'
                     /pε<u>n</u>/
                                  (p\varepsilon \underline{n})
                                            'straight place'
                     /ŋum/
                                  (num)
                                            'he gave'
                     /nim/
                                  (<u>n</u>ım)
                                            'you'
                     /kuŋ/
                                  (kuŋ)
                                            'pig'
                     /kun/
                                  (ku<u>n</u>)
                                            'straight'
                     /koŋ/
                                  (kon)
                                            'to bite'
                     /kon/
                                            'face (cheek)'
                                  (ko<u>n</u>)
/n/ and /n/
                     /kon/
                                  (kon)
                                            'string bag'
                                  (kwon)
                     /ko<u>n</u>/
                                            'face'
                     /ron/
                                  (ton)
                                            'you fight'
                     /řun/
                                            'you fought
                                  (tu<u>n</u>)
                                                  before'
/n/ and /n/
                     /kon/
                                  (kon)
                                            'string bag'
                     /koŋ/
                                  (kon)
                                           'to bite'
                     /na/
                                  (na)
                                            'I'
                     /ŋa/
                                  (ŋa)
                                           'later'
                     /nendz/
                                  (nents)
                                           'where'
                     /ŋɛndz/
                                  (\eta \epsilon nts) 'skin'
                     /nonúm/
                                  (nonum)
                                           'he is eating'
                     /nonum/
                                  (nonum)
                                           'he gave it'
```

/n/ and /ng/	/nojum/	(nolum)	'he gave'
	/ngol/	(ngol)	'pit pit'
	/monge/	(monge)	'line of people'
	/moné/	(moné)	'come to get something'
$/k/$ and $/\eta g/$	/kupu/	(kupú)	'cloud'
	/ngupu/	(ngupú)	'mouth'
			'you cook:'
	/ngal/	(ngal)	'scratch skin'
	/koľum/	(kolum)	'scratch skin' 'he died'
	/ngoľum/	(ngoľum)	'pit pit'
	/kuk/	(kuk ^h)	'fur of kapule'
	/ŋguk/	(ŋguk ^h)	'tanget'
/w/ and $/p/$	/wei/	(wei)	'all come!'
	/pεi/	(pεi)	'all go!'
	/wi/	(wi)	'nothing'
	/pi/	(pi)	'hear'
	/¥3W/	(wɛɨ̯)	'come (dl)!'
	/pε]/	-	
	/owu/		
	/opu/	(ορύ)	'fight'

5.2 CONTRASTS OF VOWELS:

/i/ and /t/, and / ε /

```
/kip/
                                 (kiph)
                                          'a name'
                                 (k \epsilon p^h)
                     /kip/
                                          'something
                                                burned '
                                 (kεp<sup>h</sup>)
                     /kep/
                                          'dry'
                     /pindz/
                                 (pints) 'I heard'
                    /pindz/
                                 (pints) 'I slept'
                    /pendz/
                                 (pents) 'dirty'
                    /pi/
                                 (pi)
                                          'hear'
                    /pi/
                                 (pt)
                                          'sleep'
                    /pe/
                                 (p\varepsilon)
                                          'now'
                    /pip/
                                 (piph)
                                          'I hearing'
                    /pip/
                                 (peph)
                                          'top on bottle'
                    /pep/
                                 (p\epsilon p^h) 'I want to
                                                   sleep'
/u/and /o/and /a/
                    /kuŋ/
                                 (kuŋ)
                                          'pig'
                    /kon/
                                 (kon)
                                          'bite'
                    /kaŋ/
                                 (kan)
                                          'boy'
                                 (kumph) 'nose'
                    /kumb/
                    /komb/
                                 (kymph/komph) 'name'
```

/kamb/

/tuk/

/tok/

(kamph) 'worm'

(tukh) 'break'

(tokh/tokh) 'they hit'

	/tak/	(tak ^h)'build'
/a/ and $/arepsilon/$	/kem/	(kem)	'kind of tree'
	/kam/	(kam)	'mouth full of food'
	/em/	(em)	'pandanus'
	/am/	(am)	'milk'
	/pε/	(pg)	'now'
	/pa/	(pa)	'you go quick!'

6. DISTRIBUTION OF PHONEMES

6.1. CONSONANTS

All single consonants may occur in all consonant positions of the word, with the following limitations.

Neither $\frac{1}{4}$, $\frac{1}{4}$ or 1 occur word initial.

Neither w, y, ng, or 1 occur word final.

There are no consonant clusters word initial. Consonant clusters of two consonants may occur word medial but are divided by the syllable break. There is also a class of verbs in certain aspects which has a consonant cluster finally.

/ke
$$\check{l}$$
s/ (ke \underline{l} ts) 'I cooked' /mbe \check{l} ř/ (mbe \underline{l} th) 'I am reading'

6.2. VOWELS

All vowels may occur in all vowel positions of the word with the following limitations.

Neither /i/, /(/, or /u/ occur word initial.

/90/	(op ^h)	'yam'
/am/	(am)	'milk'
/em/	(Em)	'pandanas nut'
/wi/	(wi)	'nothing'
/ <u>n</u> c/	(<u>n</u> ()	'you talk!'
/ <u>s</u> u/	(<u>t</u> u)	'bring!'
/pin/	(pin)	'you hear!'
/s(n)	$(\underline{t}(n)$	'we all'
/řun/	(<u>t</u> un)	'name place'

Vowel clusters of two vowels may occur in all CVV or VVC syllables of the word.

$/\epsilon$ im/	(eim)	'he/she'
/aim/	(aim)	'his sister'
/řoi/	(toi)	'light'
/kei/	(kei)	'bird'
/řui/	(tui)	'ax'
/kou/	(kou)	'you carry!'
/koip/	(koiph)	'a name'
/wéipt/	(wéipc)	'flying fox'

7. THE SYLLABLE

The syllable comprises a nucleus of one or two vowels which may be preceded or followed by a consonant. Each syllable nucleus is a unit of potential stress placement. Diverse vowel clusters /ai/, /ɛi/, /ɛu/, /oi/, /ou/, /ui/, and /ou/ comprise the complex nucleus of the syllable, having only one stress.

Mono- Syllable patterns are:

AAC AA	/oi/ /εim/	(oi) (eim)	'moon' 'him'
CAA	/mei/	(mei)	ground !
CAAC	/koip/	(koip ^h)	'kind of tree'
CA	/ku/	(ku)	'stone'
CAC	/noll/	(no <u>l</u>)	'water'
ΛG	/am/	(am)	'milk'

Syllable patterns combine to make up two syllable words.

V.CV	/ε. <u>‡</u> ú/	$(\underline{\epsilon}\underline{\underline{1}}\underline{u})$	'kind of tree'
V.CVV	/e.řei/	(εřei)	'you all make it!'
AC.CAC	/ Es. k(]/	(ε <u>s</u> k()	'smoke'
VV.CVC	/εi.m(]/	(eim()	'left-over food'
CV.CV	/kupu/	(kupú)	'cloud'
CA*CAC	/ki.řap/	(k(řáp ^h)	'kind of tree'
CVC.CV	/kis.pi/	(k(spí)	'kind of bird'
CVV.CV	/wei.ki/	(weik()	'greens'

Syllable patterns further combine to make up words of from 3 to 5 syllables.

VC.VC.CVC /and.in.min/ (andinmin)'they are walking'

VC.CVC.CVC /end.nenj.pin/(endnenjpin)'we didn't walk'

CVC.CVC.VC /tek.na.nim/ (teknanim)'he didn't build'

CVC.CVC.CV /pur.nen.mba/(puřnenmba) 'it won't rot'

CV.CVC.CVC /no.nenj.pin/(nonenjpin) 'we didn't eat'

CVC.VC.CVC /mol.ul.mun/ (molulmun) 'we are always staying'

CVC.VC.CVC /pend.li.li.min/ (pendililmin) 'We are always putting'

CVC.CVC.CVC.CVC /mol.nal.ul.min/ (molnal.ulmin) 'we are not always staying'

CVC.CVC.VC.CVC /ke.na.li.li.min/ (kenalilimin) 'We are not always seeing'

/psnd.ná.li.li.min/ (psndnálilimin)'We are not always in the habit of putting'

8. THE PHONOLOGICAL WORD

The phonological word in Nii consists of one to five syllables with one primary stress (a composite of higher pitch and intensity) which is unpredicable except in the following cases.

In verbs, stress falls on the final syllable of words with two or more syllables. When the verb includes a negative affix a secondary stress—occurs. When the final syllable is a future suffix the primary stress falls on it and the secondary stress falls on the negative affix; in all other

cases the primary stress falls on the negative affix and the secondary stress falls on the final syllable.

/nonálmīn/	(nonálmīn) 'we didn't eat'
/punenmb1/	(punēnmbí) 'I will not go'
/niné <u>ndz</u> (p i n/	(ninéndzipīn)'we didn't talk'
/pinálīm/	(pinálīm) 'he doesn't know'

MONOSYLLABLES

/oi/	(ói)	*moon *
/01/	(όι)	*mud *
/εi/	(éi)	'3rd person'
/ε ι/	(ẽl)	'tail of bird'

TWO-SYLLABLES

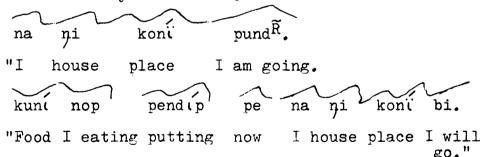
/rombu/	(tómbu)	'sweet potato'
/ndamb(/	(ndambí)	'green's'
/éndi/	$(\acute{\epsilon}ndl)$	one •
/εndέ/	$(\epsilon nd \acute{\epsilon})$	the same!
/muini/	(muini)	'lizzard'
/tiřa/	(tiř/)	'banana'
/k(\p/	(kíluph)	'duck'

THREE SYLLABLES

9. INTONATION

When making a statement, a falling intonation pattern occurs over the later part of the statement.

During a narration or statement followed by a time indicator a sharp rise is noted. The following patterns have been observed, but later on a paper on intonation may be written.



10.1. RECOMMENDATIONS

Phoneme	Previo	vious Orthog.		Proposed	Orthography
/i/		ii		ii	
/(/		i		i	
/٤/		е		е	
/u/		u	• • • • • • • • •	u	
/o/	• • • • •	o ,	• • • • • • • • •	O	
/a/	• • • • •	a	• • • • • • • • •	a	
/p/	• • • • •	q	• • • • • • • • • •	p	
/mb/		ъ	• • • • • • • • •	bmb-	-mb
/ř/	• • • • •	r	•••••	tr-	-r
/nd/	• • • • •	d	•••••	dnd-	-nd
/k/	· • • • •	k	•••••	k	
/ŋg/	• • • • •	g	• • • • • • • • • •	g	
/ <u>s</u> /	• • • • •	s	•••••	s	
$/\underline{\text{nd}}z/$	• • • • •	j	• • • • • • • • • • • • • • • • • • • •	jnj-	-nj
/m/	•••••	m	•••••	m	
/ <u>n</u> /	• • • • •	ny		<u>n</u>	
/n/	• • • • •	n	•••••	n	
/ŋ/		ng	•••••	ng	
/ <u>‡</u> /	• • • • •	l	• • • • • • • • • • • • • • • • • • • •	1	
/ <u>‡</u> /	• • • • • •	11		1	
/ĭ/	• • • • •	rr	• • • • • • • • • •	lt	
			• • • • • • • • • •		
// (stres	s)	15 1	unmarked	is unma	rkea

4.

10.2 MORPHOPHONEMICS

Class II verbs are those whose stem final consonant is a lateral. There are two basic stems for Class II verbs (1) CVY occurs with present tense (singular dual indic. and interrog. and plural affixation) and with distant past tense (singular only) indic. and interr. affixation. (2) CV1 occurs with all other persons, tenses and moods.

Each of these basic stems has allomorphs that are phonologically defined (1) where CVĬ is followed by a nasal as in all negatives $/1/\longrightarrow /1/$ (2) where CV½ is followed by any consonant $/1/\longrightarrow /1/$

Even when the nasal of the negative suffix is omitted in fast speech the stem final dental lateral is retained. An alternate analysis would be to set up 3 stems the above 2 for verbs in the positive $\langle \text{CV}\underline{1}\rangle$ as the negative stem.

Change of tense is marked by stem vowel change as well as by suffixation.

present/N.Pst. stem vowel $o \rightarrow u$ with all other tenses

Positive stem vowel $a \rightarrow i$ in negative in all tenses

Medial Same Subject stem vowel / a/remains /a/ in the positive.

Examples:

```
/kaĺř/'Icook', /kɛl̞ɛmbí/'I will cook', /kilnánd/'I do not cook'
/koĺř/'I die', /kul̞umbí/'I will die', /kul̞nɛmbi/'I will not die'
```

10.3. LIST OF PIDGIN WORDS

English	Pidgin
go	ingo
come	ikum
stop	i <u>s</u> tap ^h
today	nau
yesterday	a <u>s</u> d e i
tomorrow	tumjřa
man	man
woman	meři
boy	manki
girl	pikinini m eř i
baby	pıkınıni
red	řet ^h
black	mb₁‡æk ^h
ground	ŋgřaun
sky	skai
cloud	$k_{\frac{1}{4}}$ aut ^h
sun	<u>s</u> un
water	wařa
food	kai kai
tree	diwai

wood paiya wut^h

grass kunai

house aus

dog ndok

pig pik^h

tree kangaroo kapu

later mbiain

one w∧n pε<u>l</u>a

two $\underline{t}u p \underline{\epsilon} \underline{l} \underline{a}$

three $\underline{t}\check{r}i$ $p\underline{\varepsilon}\underline{1}a$

four po pela

five $paip^h pela$

seven $\underline{s} \in p \in n$ $p \in \underline{l}_{\underline{t}}$

ten \underline{t} £n p $\underline{\epsilon}$ \underline{t} a

tracter nd^řukh

flower plauwa

plane mbalus

10.4. SAMPLE TEXT

Phonetic Script - $p\epsilon$ mbalus ϵ toni wamph turum. Orthography - pe balus e tonu wamp turum Morphemes - now airplane it on top came brought

English Trans. - I got inside the airplane and it brought me.

Phonetic Script - tu wan koni tuřum. koni tan na nı piR.

Orthography - tu wang konu turum. konu tang na ni piir.

Morphemes - We came rain brought me. rain hitting I thought.

English Trans. We came and it rained. I thought the rain was coming.

Phonetic Script - mbalus mbokh tumba enim ni piR. mbokh Orthography - balus bok tumba enim ni piir. bok Morphemes - airplane fall it will make it I think fall English Trans.-I thought the airplane would fall down.

Phonetic Script - tunerirm. na ka piR. pe o pul ya
Orthography - tunerirm. na ka piir. pe o pul ya
I good think.Now coming
Morphemes - But it didn't fall. we 2 here

English Trans.- It didn't fall down. I think this is good. Now we came here.

Phonetic Script-mbalus pení maní o pul. wambíl kar

Orthography - balus pení maní o pul. wambíl kar

Morphemes - airplane place down we 2 coming. Coming kar

English Trans -to the air strip and came down. We 2 coming

Phonetic Script $-\epsilon$ ndí o pířím.

Orthography - endi o pirim.

Morphemes - one coming it stayed.

English Trans. - one car was there.

Phonetic Script - o pen na kon to menoph kar el Orthography - o peng na kon si mengip kar el Morphemes - it stayed my travel bag I carring my bag English Trans. - The car was here and I carried by bag.

Phonetic Script - toni tu $w u \tilde{R}$. tu $w amp^h$ ya o pun. Orthography - tonu tu wur. tu wamb ya o pun.

Morphemes - on top I bringing I bringing here we came.

coming. coming

English Trans. - and we came on top. I brought my bag and we came here. -

Phonetic Script - ya op keniR <u>ni nim mulun</u>.

Orthography - ya op kenir <u>ni nim multun</u>.

Morphemes - here I coming I saw here you stayed.

English Trans. - I came and I saw you were here.