

MELPA PHONOLOGY

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with

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July 24, 1990

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1. INTRODUCTION

There are approximately 120,000 speakers of the Melpa language. This language occupies an area of about 4000 kilometers square. The people live in the Wahgi valley of the Western Highlands Province of Papua New Guinea. They live all around Mt. Hagen to the Baiyer River in the north, to the Nebulyer in the south, to the mountains in the west and to the Tuman River in the east. The Melpa language is a member of the Hagen language family.

We are located in the center of the language area in the Central dialect. We allocated there after Al Stucky and Andy Woodland did a language survey in 1986. Since Melpa has about 5 different dialects, we calculated that the Central dialect around Hagen town area is the one that all the other dialects can understand. This has been confirmed to us by our checking Committee. We live in a little hamlet about 3 miles from Hagen where the Steering Committee from the 4 different churches arranged for us to live and work out from.

Most of the Melpa people live in small hamlets scattered through out the area, although the Lutheran church has encouraged the people to live in villages. There are several very large villages - one has approximately 1000 people.

We as facilitators of the Melpa translation are training translators to do the translation of the Scriptures. We also hope to train literacy workers and teachers to teach the people to read Melpa.

We have been seconded from SIL to the Melpa Translation Assoc. Our work is mainly to train, encourage the translators and work with the exegesis and checking of the Scriptures as well as editing and preparing the books for printing.

John Ruby, the Secretary of MTA from the village of Kingalrui, in the central dialect was our main assistant for this paper.

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

We are using Pike's Phonemic/Phonetic symbolization.

PHONEME CHART

CONSONANTS

		BILABIAL	DENTAL	ALVEOLAR	VELAR
T O P S	Oral	/p/	/t/	/t/	/k/
		[p]	[t]	[t]	[k]
	Prenasal	/mb/	/nd/	/nd/	/ŋg/
		[mp mp]	[nt nd]	[nt nd]	[ŋk ŋg]
Release /&/					
N A S A L S		/m/	/n/	/n/	/ŋ/
		[m]	[n]	[n]	[ŋ]
		/w/	Semi Vowels		/y/
L I Q U I D S		[w]			[y]
				/r/	
				[ř ř]	
			/l/	/ld/	/ɹ/
			[l l]	[ld lt lt]	[ɹ ɹ]
			+ +		+ +

VOWELS

		Front Unr. R	Central Unr. R	Back Unr. R
		/i/	/ə/	/u/
High	cl	[i]	[ɨ, ɪ]	[u]
	op	/ɛ/		/ʊ/
		[ɛ]		[ʊ]
Mid	cl	/e/		/o/
		[e, ɛ]		[ɔ, o]
Low	op		/a/	
			[a, ɶ, ʌ]	

2. INTERPRETATION

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

Syllabic high front and high 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.

/owa/	[owa]	'dog'
/wu/	[wu]	'man'
/ndu wu/	[ndu wu]	'stick'
/ya/	[ya]	'here'
/pwiyo/	[pwiyo]	'you all go!'
/yand/	[yand]	'come back'
/kiya/	[kiya]	'light'

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 boundaries. The voiced prenasalized obstruents /mb/, /nd/, /ng/ have been interpreted as single units occurring word initial and between vowels because:

1. They never occur as a oral sound.
2. They occur in the slot of a single consonant
3. They can't be divided by a syllable boundary.

These prenasalized obstruents occurring word finally are voiceless - [mp], [nt], and [ŋk]

There are some suspect consonant clusters word initial [pr] and [kr] but since there seems to be a very short transitional vowel between the two consonants, we are writing it to assist reading.

Consonant clusters of two consonants may occur between vowels but are divided by syllable breaks. There is also a class of verbs in certain aspects which have a consonant cluster finally, and there are also pre-nasalized stop clusters, all of which are considered as one phoneme.

/ul.ki/	[ul̥.ki]	'kind of kapule'
/on.mbuʔ/	[on. mbuʔ]	'we 2 are coming'
/mond. ru ŋgi l/	[mond. ru. ŋg(ɿ)]	'you 2 had it before'
/kʰi par. ka/	[kʰi paʔ. kʌ]	'Bird of Paradise'
/mol.k/	[mol̥kʰ]	'they stayed before'
/nond/	[nont̪̃]	'I am eating'
/krai.pa/	[kəʔai. pa]	'lightning'
/pruŋ/	[pə ʔuŋ]	'they went'
/krou/	[kəʔou]	'unoccupied/empty'
/pra pra/	[pəʔa pəʔa]	'wiggle'
/a. mbu .la/	[a. mbu. lʌ]	'girl'
/wu. lduŋ/	[wu. lduŋ]	'near by west'
/amb/	[amph]	'woman'
/aŋk/	[aŋkʰ]	'thankyou'
/a. ŋge/	[a. ŋge]	'thankyou'
/ki ʊld/	[ki ʔlt̪̃]	'finger nails'
/yand/	[yant̪̃]	'come back'
/kond/	[konth]	'new'

Vocoid Clusters (ei), (ai), (oi), (ui), (ou), and (ʊi) 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, either level or gliding tone may occur. So new phonemes do not need to be set up, as this interpretation has been followed rather than that of setting up glided phonemes.

/oi. enim/	[oi.ɛnim]	'to lough'
/goimba/	[goimbá]	'grasshopper'
/nde. ei/	[nde. ei]	'this wood'
/wɛiya/	[wííya]	'you all come'
/ui/	[ui]	'time'
/puigo/	[puíyo]	'all the people'
/uiyo/	[uíyo]	'you come'
/ɛi/	[íi]	'tail'
/pɛigo/	[pííyo]	'you all go'
/ai/	[ai]	'used in 'exclamation'
/kaimb/	[kaimbh]	'to be sorry for'
/ou/	[ou]	'big'
/pou/	[pou]	'wing'

3.2. DESCRIPTION OF CONTRASTIVE FEATURES

The main contrastive features of the consonants of the Melpa language are pre-nasalization versus non pre-nasalization and dental versus non-dental. There is contrast between obstruents, nasals, laterals, and semi vowels in these 2 main features.

/pin/	[pin]	'you sleep'
/mbin/	[mbin]	'beans'
/nɪm/	[nɪm]	'you'
/nam/	[nam]	'whose'
/en/	[ɛn]	'you are doing'
/end/	[ɛnth]	'I am doing'
/ond/	[ont̃]	'I am coming'
/on/	[on]	'You are coming'
/kaɬa/	[káɬa]	'You cook!'
/ngaɬ/	[ngaɬ]	'needle'
/nɪɪ /	[nɪɪ]	'where'
/pelo/	[péɪo]	'You two go!'
/pɛigo/	[pííyo]	'You all go!'

/nɔ̃la/	[nɪ̃ _ɪ la]	'You two eat!'
/nɔ̃iya/	[nɪ̃ _ɪ iya]	'You all eat!'

There is also contrast between bilabial and dental, alveolar and velar. Voicing versus non-voicing is also significant.

/kɔm/	[kɔm]	'ear'
/kɔ <u>n</u> /	[kɔ <u>n</u>]	'straight'
/pɔ/	[pɔ]	'sugar cane'
/mbo/	[mbo]	'seed'
/kan/	[kan]	'rope'
/ka <u>n</u> /	[ka <u>n</u>]	'you are seeing'
/rɔn/	[rɪ̃ŋ]	'food'
/kɔn/	[kɪ̃n]	'skin'
/tɔ <u>n</u> /	[tɪ̃ <u>n</u>]	'we'
/tɔn/	[tɪ̃n]	'I am getting'
/ɔl/	[ɔl]	'spit'
/ɔl̥/	[ɔl̥]	'stomach'
/enmɪn/	[ɛ̃nmɪn]	'they are doing'
/e <u>n</u> ɪm/	[ɛ̃ <u>n</u> ɪm]	'he is doing'
/oka/	[oká]	'sweet potato'
/ɔla/	[ɔl̥á]	'name of mountain'
/rɔnd/	[rɔnt̃ɛ]	'I am hitting'
/kɔ <u>n</u> d/	[kɔnt̃h]	'new'
/ur/	[ur̃]	'sleep'
/ukɛ/	[ukɪ̃]	'yesterday'
/me/	[me]	'taro'
/nde/	[nde]	'tree'
/ngu/	[ngu]	'teeth'
/ku/	[ku]	'stone'
/kun/	[kun]	'straight'

/ɲʊn/	[ɲʊn]	'you are giving'
/nɛnd/	[nɛ̃ntʰ]	'I am talking'
/nɛnd/	[nɛ̃ntʰ̃]	'I am giving'
/nɛnd/	[nɛ̃ntʰ̃̃]	'I was eating'

The vowels contrast in placement of the tongue in front, central and backed position with rounding and unrounding in central placement only.

Also they contrast in positioning. High, mid and low being either in open or close position.

/wi/	[wi]	'sing out'
/wʊ/	[wʊ]	'man'
/ni/	[ni]	'that one (emphasise)'
/no/	[no]	'you eat!'
/and/	[anʰ]	'sun'
/end/	[ɛ̃nʰ]	'I am doing'
/nde/	[ndɛ]	'firewood'
/nda/	[nda]	'I wonder'
/kaŋ/	[kaŋ]	'boy'
/kɛŋ/	[kɛ̃ŋ]	'skin'
/kʊn/	[kɪ̃n]	'purple'
/keŋ/	[kɛ̃ŋ]	'cheek'
/ku/	[ku]	'stone'
/ko/	[ko]	'I think-maybe'
/pɪn/	[pɪn]	'you heard'
/ʊr pin/	[ʊ̃r pin]	'you slept'
/ʊr pem/	[ʊ̃r pem]	'he slept'
/pɛn/	[pɛ̃n]	'you are hearing'
/pun/	[pʊ̃n]	'you are going'
/pon/	[pon]	'a name'
/pɛnd/	[pɛ̃ntʰ̃]	'I hear'

/p <u>u</u> nd/	[p <u>u</u> nt ^h]	'to go'
/p <u>i</u> nd/	[p <u>i</u> nt ^h]	'I was sleeping'
/ur p <u>e</u> nd/	[ʊf p <u>e</u> nt ^h]	'I am sleeping'
/p <u>a</u> t/	[p <u>a</u> t ^h]	'ass beans'
/k <u>u</u> mb/	[k <u>u</u> mp ^h]	'young'
/k <u>u</u> mb/	[k <u>i</u> mp ^h]	'foot'

4. DESCRIPTION OF PHONEMES AND ALLOPHONES

4.1. CONSONANTS

The stops that occur finally in Melpa are released in different ways. We would like to combine these facts into a single phoneme-like symbol which we will call Release, /&/. By combining the release from the stops, it simplifies the phonemic description for all the stops.

/&/ [Ṛ] A voiceless trilled alveolar liquid occurs word finally following an alveolar stop.

[h] Voiceless aspiration occurs word finally following a non-alveolar stop.

[ə] The transition mid-central vocoid occurs word finally in fluctuation with [h] and [Ṛ] in closely related word combinations.

/nd <u>i</u> p&/	[nd <u>i</u> p ^h]	'fire'
/pip& ro/	[pip ^h ʔo~pipə ʔo]	'put on lid'
/pamb&/	[pamp ^h]	'I want to go'
/amb& raɪ/	[amp ^h raɪ~amp ^ə ʔaɪ]	'two women'
/end <u>e</u> &/	[en <u>e</u> t ^h]	'I am doing'
/mend <u>e</u> & pa/	[ment ^h pa~ment ^ə pa]	'go/turn back to front'
/t <u>i</u> &/	[t <u>i</u> t ^h]	'cold'
/met <u>e</u> & pa/	[met ^h pa~met ^ə pa]	'go south'

/mondund&/	[móndunt̃]	'I'm feeling it'
/yand& pa/	[yant̃ pa]	'to go back'
/nond&/	[nont̃]	'I am eating'
/rok/	[řokh]	'tobacco'
/pek& ro/	[pɛkh řo ~ pɛkə řo]	'you peel!'
/aŋg&/	[aŋkh]	'thank you'
/maŋg&/	[maŋkh řom ~ maŋkə řom]	'insect eaten sweet potato'
/nde mbuld&/	[nde mbilt̃]	'target'
/mbeld& kən/	[mbɛltə kən ~ mbɛlt̃]	'to read'
/ambulk&/	[ámbr̃lkh]	'they are holding'

Note: For the rest of the paper the symbol /&/ will not be written in the phonemic form.

Phonemes	Allophones	
/p/	[p]	Voiceless bilabial stop occurs word initial and between vowels. and final
/ur piyo/	[uř piyo]	'you sleep!'
/peŋ/	[peŋ]	'head'
/púlma/	[púlma]	'bee'
/kupa/	[kupa]	'cloud'
/kanapa/	[kənapʌ]	'corn'
/ndɪp/	[ndɪph]	'fire'
/op/	[oph]	'yam'
/pip/	[piph]	'lid'
/pip ro/	[piph řo]	'put on lid'
/ndɪp kaʔa/	[ndɪph kaʔa]	'you light fire'

Phonemes	Allophones	
/mb/	[mb]	Voiced prenasalized bilabial stop occurs word initial and between vowels.
	[mp]	Voiceless prenasalized bilabial stop occurs word finally
	/mbo/	[mbo] 'seed'
	/mbu/	[mbʔ] 'some'
	/mbin/	[mbin] 'beans'
	/wimbu/	[wimbʔ] 'snake'
	/rimbɪl/	[řimbɪ ₊ l] 'we 2 will hit'
	/kuŋ kumba ro/	[kĩŋ kumbá řo] 'peelbark!'
	/pamb/	[pamph] 'I want to go'
	/kuimb/	[kuimph] 'nose'
	/amb rał/	[amph řał] '2 women'
	/kup ronum/	[kuph řónum] 'it's hailing'

Phonemes	Allophones	
/nd/	[nd]	Voiced prenasalized dental stop occurs word initially and intervocalically. It tends to sound like an <u>nt</u> .
	[nt]	Voiceless prenasalized dental stop occurs word finally.
	/ndi/	[ndi] 'hair'
	/ndɪp/	[ndɪph] 'fire'
	/nditɪŋ/	[nditɪ ₊ ŋ] 'drum'
	/nɪndɪŋ/	[nɪndɪ ₊ ŋ] 'they talked about him'
	/ɛndɪ tuŋ/	[ɛndɪ tu ₊ ŋ] 'they did it for him'

/t/	[t]	/t <u>enda</u> /	[tɛ <u>nda</u> ']	'one'
		/e <u>nd</u> /	[ɛ <u>nth</u>]	'I am doing'
		/n <u>end</u> /	[nɪ <u>nth</u>]	'I am saying'
		/a <u>nd</u> /	[a <u>nth</u>]	'sun'
		Voiceless dental stops occur word initial, and between vowels and final		
		/t <u>ɪ</u> n/	[tɪ <u>n</u>]	'you took it'
		/tɛ <u>tɪ</u> m/	[tɛ <u>tɪ</u> m]	'he is staying'
		/t <u>u</u> n/	[tɪ <u>n</u>]	'we'
		/kɛ <u>t</u> a/	[kɛ <u>t</u> a]	'mouth'
		/k <u>a</u> t/	[k <u>a</u> th]	'some'
/t/	[t]	/u <u>t</u> /	[i <u>th</u>]	'cold'
		/kɔ <u>n</u> ɪn ɛ <u>t</u> /	[kɔ <u>n</u> ɪn ɛ <u>th</u>]	'I do work'
		/kɔ <u>n</u> a k <u>u</u> t/	[kɔ <u>n</u> a k <u>u</u> th]	'hole'
		/p <u>i</u> t/	[p <u>i</u> th]	'I think I heard'
		/mɛ <u>t</u> pa/	[mɛ <u>th</u> pa]	'go south'
		Voiceless alveolar stop occurs word initial, and between vowels and final		
		/to <u>w</u> a/	[to <u>w</u> a']	'big emphasize'
		/pu <u>t</u> tɪ/	[pu <u>t</u> tɪ]	'plenty'
		/w <u>u</u> t <u>a</u> /	[w <u>u</u> t <u>a</u> ']	'father'
		/u <u>t</u> ma/	[u <u>t</u> ma']	'tomorrow'
		/rɔ <u>n</u> gɪt pɜ <u>r</u> u <u>m</u> /	[rɔ <u>n</u> gɪt̃ pɜ <u>r</u> u <u>m</u>]	'go to the other side'
		/ɛk <u>i</u> t ɔ <u>m</u> b <u>a</u> /	[ɛk <u>i</u> t̃ ɔ <u>m</u> b <u>a</u> ']	'he will come outside'

/nd/	[nd]	Voiced prenasalized alveolar stop occurs word initial and between vowels.
	[nt]	Voiceless prenasalized alveolar stop occurs only word final

/nduɪwʊ/	[ndu ^ˈ ɪwʊ]	'stick in men's nose'
/nde/	[ndɛ]	'tree'
/nda/	[nda]	'I wonder'
/Kendaɪ/	[Kenda ^ˈ ɪ]	'place name'
/nonda/	[nonda ^ˈ]	'mushroom'
/ind pa/	[int ^ˈ ɾ pa]	'go back'
/yand pa/	[yant ^ˈ ɾ pa]	'go back(long ways).'
/mondunt/	[móndunt ^ˈ ɾ]	'I'm feeling it'
/nond/	[nont ^ˈ ɾ]	'I am eating'
/pund/	[punt ^ˈ ɾ]	'I am going'
/mbuld/	[mbult ^ˈ ɾ]	'kind of tree'

Phonemes Allophones

/k/	[k]	Voiceless velar stop occurs word initial and between vowels. <small>and final</small>
/kʊpkʊ/	[kípkī]	'wind'
/kai/	[kai]	'good'
/ka/	[ka]	'to cry'
/oka/	[oka ^ˈ]	'sweet potato'
/mukʊr/	[muk ^ˈ ɾ]	'inside the house'
/rukʊr/	[řuk ^ˈ ɾ]	'inside'
/raɪdɪka/	[řaítɪka]	'three'
/rok/	[řokh]	'tobacco'
/murók/	[muř ^ˈ ʊkh]	'inside'
/por kak/	[poř kakh]	'bark belt'

		/kʷɛl mek/	lkʷɛl mekh]	Bird of Paradise'
		/pek ro/	[pekʰ ʔo]	'you peel'
Phonemes	Allophones			
/ŋg/	[ŋg]	Voiced prenasalized velar stop occurs word initial and medial following another /ŋ/.		
	[ŋk]	Voiceless prenasalized aspirated velar stop occurs word finally.		
		/ŋgoimba/	[ŋgoimbaʰ]	'grasshopper'
		/ŋgoʔ/	[ŋgoʔ]	'needle'
		/ŋgu/	[ŋgu]	'teeth'
		/nɪŋgu/	[nɪŋguʰ]	'they will talk'
		/mulɔŋga/	[mulɔŋgaʰ]	'he must stay'
		/aŋge/	[aŋge]	'thankyou'
		/aŋg/	[aŋkʰ]	'thankyou'
		/maŋg/	[maŋkʰ]	'worm eaten sweet potato'
		/aŋg nɪnɪm/	[aŋkʰ nɪnɪm]	'he said thankyou'
		/maŋg rom/	[maŋkʰ ʔom]	'insect eaten kaukau'

Phonemes	Allophones			
/m/	[m]	Voiced bilabial nasal occurs word initial, between vowels and finally.		
		/me/	[mɛ]	'taro'
		/mam/	[mam]	'his mother'
		/mem/	[mem]	'blood'
		/mema/	[meməʰ]	'blood'
		/koma/	[koməʰ]	'cool'
		/nema/	[neməʰ]	'louse'
		/nɪm/	[nɪm]	'you'
		/nam/	[nam]	'who'

/n/
medially and
between vowels

[n] Voiced dental nasal occurs word initially, finally.

/nɪl/	[nɪl~nʲil]	'where'
/nɪm/	[nɪm~nʲɪm]	'you'
/nanɪm/	[nánɪm]	'myself'
/enɪm/	[énɪm]	'they'
/pənɪmən/	[pɪ́nəmin]	'they are hearing'
/mun kan/	[mun kan]	'friendly'
/tən/	[tɪ́n]	'we'
/kən/	[kɪ́n]	'and'

Phonemes

Allophones

/n/

/n/

Voiced alveolar nasal occurs word initially, between vowels and finally.

/nuim/	[nuim]	'important person'
/nam/	[nam]	'whose'
/na/	[na]	'I'
/mana/	[mána]	'down'
/kanapa/	[kənápa]	'corn'
/nuim kan/	[nuim kan]	'throat'
/mun kɪnan/	[mun kɪnán]	'church songs'

Phonemes

Allophones

/ŋ/

/ŋ/

Voiced velar nasal occurs word initial, between vowels and final.

/ŋa/	[ŋa]	'possessive marker'
/ŋa/	[ŋa]	'give 'Imp.'
/koŋun/	[kóŋun]	'work'
/teŋin/	[téŋin]	'ground pidgin'
/peŋ/	[peŋ]	'head'
/kaŋ/	[kaŋ]	'boy'

/r/	[ř]	Voiced alveolar flapped liquid occurs word initially and between vowels.
	[ř̃]	Voiced alveolar trilled liquid occurs word final only.
	/ruŋ/	[řiŋ] 'food'
	/rui/	[řui] 'axe'
	/romba/	[řombá] 'he will hit'
	/rurum/	[řuřum] 'he hit FP'
	/takra/	[t(ɬ)řá] 'quickly'
	/rur/	[řuř] 'I hit FP'
	/pur/	[puř] 'I went FP'

/l/	[l]₊	Voiced dental lateral fricative occurs initial, intervocalically and in fluctuation with [l̥]₊ finally.
	[l̥]₊	Voiceless dental lateral fricative occurs finally. This however fluctuates with the voiced [l]₊
	/lk lal/	[lk l ₊ al] 'nonsense talk'
	/ka lala/	[ka l ₊ al ₊ a] 'someone who cries easily'
	/kal(ɬmb/	[ka ₊ l(ɬmph] 'moon'
	/k(ɬlɬp/	[k(ɬ ₊ lɬph] 'peanut'
	/mel/	[mɛ ₊ l̥/mɛ ₊ l̥] 'like'
	/kel/	[kɛ ₊ l̥/kɛ ₊ l̥] 'small'
	/pipɬl/	[pipɬ ₊ l̥] 'shame'

Phonemes

Allophones

/ld/	[ld]	Voiced alveolar flapped vibrant non-vocoid cluster occurs initially and intervocalically.
	[lt]	Voiceless alveolar flapped vibrant non vocoid cluster occurs word final .
	[lt̥]	Voiceless dental non-vocoid cluster occurs intervocalically word final and word initial in only one word fluctuating with /ld/

/ldapa/	[ldápa]~[ltápa]	'banana leaf tears'
/mbvlduŋ/	[mbúlduŋ]	'back'
/wvlduŋ/	[wúlduŋ]	'west close to'
/ald(ŋ/	[áld(ŋ]	'east close to'
/mbeld kuŋ/	[mbɛlt̃ kuŋ]	'to divide'
/ombvld kuŋ/	[ómbvlt̃ kuŋ]	'to break it'
/raldɪka/	[řáldɪka]	'three'
/ald/	[alth]	'east'
/walduk/	[wáldukh]	'all ask'
/aldpa/	[áldəpa]	'again'
/kɪld/	[kɪlt̃h]	'kind of tree'
/ki.vld/	[ki.vlt̃]	'finger nail'
/mbvld/	[mbvlt̃]	'kind of tree'
/mbeld/	[mbɛlt̃]	'to read'

*Even though [ld] and [lt] occur in similar environments, there is no real contrast between them and we will analyze them under the same phoneme.

Phonemes	Allophones
/ɭ/	[ɭ] + Voiced velar lateral fricative occur initially and intervocalically.
	[ɭ̥] + Voiceless velar lateral fricative occurs word finally.

/ɭawa/	[ɭáwa]	'wrong'
/ɭɪmb/	[ɭɪmph]	'pig rope'
/ɭumɛi/	[ɭumíi]	'to wash'
/mutɛiyo/	[mutɛíyo]	'you all stay'
/ambvɭa/	[ámbvɭa]	'girl'
/roɭvɭ/	[řóvɭ]	'long way'

/mut/	[mut]	'egg'
/mbut/	[mbut]	'backbone'
/rondut/	[rɔndut]	'strong'

Phonemes	Allophones
/w/	/w/ Voiced bilabial high closed rounded semi vocoid occurs word initially and between vowels.

/wamp/	[wamph]	'people'
/wu/	[wu]	'man'
/wi/	[wi]	'to call'
/ruwa/	[ruwá]	'banana'
/owa/	[owá]	'dog'

/y/	[y] Voiced high close front unrounded semi vocoid occurs initial and between vowels.
-----	--

/ya/	[ya]	'here'
/yand/	[yantɛ]	'to come back'
/uiyo/	[uiyo]	'you come!'
/puiyo/	[piio]	'you all go!'
/piyamb/	[piyamph]	'let me sleep'

4.2. Vowels

Vowels differ in inherent basic length according to tongue position. The low central vowel /a/ and high front vowel /i/ tend to be the longest, while the high vowels /u/, /ɔ/ and /ɛ/ tend to be the shortest. Vowels in stressed position seem to be longer than elsewhere in words of the same number of syllables.

Phonemes	Allophones
/i/	[i] Voiced high closed front unrounded vocoid occurs word initially, between consonants and finally.

/ip/	[iph]	'salt'
------	-------	--------

/ik/	[ikʰ]	'talk'
/namba iti/	[námba íti]	'how much'
/kit/	[kith]	'bad'
/rimp/	[řimph]	'soft'
/kitum/	[kítum]	'intestine'
/ki/	[ki]	'hand'
/wi/	[wi]	'to call'

Phonemes **Allophones**
 /ɪ/ [ɪ] Voiced high open front unrounded vocoid occurs between consonants only.

/kɪnan/	[kɪnán]	'song'
/kɪm/	[kɪm]	'greens'
/enɪmb/	[ɛ́nɪmph]	'lazy'
/ndɪp/	[ndɪph]	'fire'
/pipɪ/	[pípɪ]	'shame'
/pɪlma/	[pɪ́lma]	'bees'

Phonemes **Allophones**
 /e/ [e] Voiced mid close front unrounded vocoid occurs as first member of complex nuclei.
 [ɛ] Voiced mid open front unrounded vocoid occurs in every other position.

/wei/	[weí]	'very'
/ei/	[eí]	'this'
/elɪm/	[ɛ́lɪm]	'he/she'
/elpa/	[ɛ́lpa]	'different'
/el/	[ɛ]	'arrows'
/epɪndama/	[ɛpɪndámɔ]	'afternoon'
/peŋ/	[pɛŋ]	'head'
/petum/	[pɛ́tum]	'it's staying'

/tɛnda/ [tɛɛnda] 'this'

Phonemes

/a/

Allophones

- [a] Voiced low open central unrounded vocoid occurs in stressed syllables
- [A] Voiced mid open central unrounded vocoid occurs word finally in unstressed syllables.
- [ə] Voiced mid close central unrounded vocoid occurs in unstressed syllables in multi-syllable words. It also occurs fluctuating with aspiration between words that are closely associated semantically - and [ʔ]

/ənd/ [ənth] 'sun'

/əmb/ [əmph] 'woman'

/əpəra/ [əpəʔɾʌ] 'to forget/pick it'

/rət/ [ɾət] 'two'

/kənəpa/ [kənəpʌ] 'corn'

/nəmbə/ [nəmbə] 'what?'

/əiyə/ [əiyə] 'sister/brother'

/kəimb/ [kəimph] 'sorry'

/nənmun/ [nənəmún] 'we are eating'

/mərmun/ [moʔəmún] 'we are staying'

/pənmun/ [pənəmún] 'we 2 are going'

/mɛ pa/ [mɛ th pa] 'Go south!'

/ə d pa/ [ə t th pa] 'Go east!'

/pɛk ro/ [pɛ kh ʔo] 'You pee!'

/ɪnd pa/ [ɪn t ʔ pa] 'You go back!'

/u/

- [u] Voiced high close back round vocoid, occurs initially, between consonants and finally.

/ʊ/

[ʊ]

Voiced high open back rounded vocoid occurs initially and between consonants.

/upʊʔ/ [upʊʔ] 'digging stick'

/utuma/ [utuma] 'tomorrow'

/kumb/ [kumph] 'young'

/puʔi/ [puʔi] 'plenty'

/ku/ [ku] 'stones'

/oundpa/ [oundəpa] 'plenty'

/und/ [unh] 'before'

/wuta/ [wuta] 'father'

/tumbaʔ/ [tumbaʔ] 'Jew's harp'

/muʔmɪn/ [muʔmɪn] 'We will stay'

/kuʔmɪn/ [kuʔmɪn] 'We'll cook'

Phonemes

/ɐ/

Allophones

[ɐ] Voiced high, close back unrounded vocoid- occurs word initial, between consonants and final

[ɪ] Voiced, high, open, front, unrounded vocoid - occurs in fluctuation with /ɐ/ between consonants.

/ɐrɪma/ [ɐrɪma] 'soot'

/ɐt enim/ [ɐtɪnɪm] 'it's cold'

/ɐm/ [ɪm] 'koroka nuts'

/tɐn/ [tɪn/tɪn] 'we'

/kɐn/ [kɪn] 'and'

/mɐra/ [mɪrɐ] 'good smell'

/kɐi/ [kɪi] 'bird'

/pɐiya/ [pɪiya] 'you all go!'

/kɐpku/ [kɪpkɪ] 'wind'

/mbɐ/ [mbɪ] 'plural'

/kɐŋ/ [kɪn/kɪŋ] 'skin'

/kumb/ [kɪmph] 'count'

/tə/ [t̪̥]/[t̪̥̥] 'we 2'

Phonemes

Allophones

/0/

[o] Voiced mid, close back, rounded vocoid occurs word initial, medial and final and the first member of a complex nuclei - /ou/ and /oi/.

[ɔ] Voiced, mid, open back, rounded vocoid occurs between consonants

/ok/	[okʰ]	'they came'
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/oka/ [oká] 'sweet potato'

/owa/ [owá] 'dog'

/mon/ [mon] 'fruit'

/rok/ [rokʰ] 'tobacco'

/mon/ [mon] 'no'

/no/ [no] 'you eat!'

/mbo/ [mbo] 'seed'

/koŋun/ [kɔ́ŋun] 'work'

/konund/ [kɔ́nuth] 'to bite'

/kond/ [kɒntʰ] 'new'

/ou/	[ou]	'big'
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/pou/ [pou] 'wing'

/oi enʌm/[oi éʌm] 'to laugh'

/boi nɛnɛm/[boi nɛ́nɛm] 'something falls down'

5. CONTRASTS OF PHONEMES

5.1. CONSONANTS

/p/ /mb/ /m/ /w/ /pa/ [pa] 'you go!'

/mba/ [mba] 'he will go'

/ma/ [ma] 'mother'

/wa/ [wa] 'come!'

/puʔ/	[puʔ]	'trunk'
/mbuʔ/	[mbuʔ]	'back'
/muʔ/	[muʔ]	'sky'
/wɔl/	[wɔl]	'west'

/opa/	[opá]	'name'
/omba/	[ombá]	'he will come'
/oma/	[omá]	'fish'
/owa/	[owá]	'yes'

/kupa/	[kupá]	'cloud'
/kumba/	[kumbá]	'door'
/koma/	[komá]	'cool'
/kowa ngena/	[kowá ngená]	'kind of bamboo'

/op/	[oph]	'yam'
/omb/	[omph]	'sugar cane'
/om/	[om]	'he is coming'
/ap/	[aph]	'name'
/amb/	[amph]	'woman'
/ʊm/	[ĩm]	'Koroka nuts'

/t/	/nd/	/n/	/r/	/tʌk/	[tʰkʰ]	'they got'
				/nduk/	[ndukʰ]	'finishing'
				/nʌk/	[nʰkʰ]	'they talked'
				/ruk/	[ʀukʰ]	'inside'
				/ndi/	[ndi]	'hair'
				/ti/	[ti]	'one'
				/ni/	[ni]	'and'

/rui/ [řui] 'axe'

/mata/ [máta] 'banana'

/manda/ [mánda] 'close to'

/mana/ [mána] 'down'

/mara/ [mára] 'name of tree'

/etɪm/ [éɪɪm] 'he is doing'

/endɪm/ [éndaɪm] 'it's cooked'

/enɪm/ [énaɪm] 'they'

/kəŋ kut/ [kĩŋ kuth] 'tattoo'

/ik kund/ [ik.kunth] 'persuade'

/kən/ [kĩn] 'and'

/kur/ [kũr] 'spirit'

/ut/ [ĩth] 'cold'

/und/ [unth] 'before'

/un/ [un] 'you are coming'

/ur petim/ [uř pétim] 'he's sleeping'

/t/ /nd/ /n/ /r/ /y/

/tamb/ [tamph] 'let me get it'

/ndamb/ [ndamph] 'finishing'

/namb/ [namph] 'let me eat it'

/ramb/ [řamph] 'let me hit it'

/yand/ [yantř] 'come back'

/ta/ [ta] 'father'

/na/	[na]	'I'
/nda/	[nda]	'I wonder'
/ya/	[ya]	'here'
/wuta/	[wutá]	'father'
/anda/	[ándá]	'old'
/ana/	[ána]	'brother'
/ara/	[áŕa]	'name'
/wuiya/	[wííya]	'you all come'

/ekɪt omba/[ekɪth ombá] 'he will come outside'

/end/	[ɛnt̃]	'I did'
/en/	[ɛn]	'you are doing'

/k/ /n/ /ng/

/kaŋ/	[kaŋ]	'boy'
/ŋgu/	[ŋgu]	'teeth'
/ŋun/	[ŋun]	'gave'

/kaɬa/	[kaɬá]	'you cook'
/ŋgaɬa/	[ŋgaɬá]	'pain in the hips'
/naɬa/	[naɬá]	'name of bananas'

/paka/	[páka]	'posts'
/paŋga/	[paŋga]	'inside of pandanus'
/mana/	[mána]	'house'

/rukur/	[řúkuř]	'inside'
/ruŋur/	[řúŋuř]	'I cut the pig'

/kɿ mak/	[kɿ makʰ]	'pig with big ears'
/ maŋ/	[maŋ]	'house'
/ maŋg/	[maŋkʰ]	'insect ruined sweet potatoe'

/ak/	[əkʰ]	'person's name'
/aŋ/	[aŋ]	'to stand'
/aŋg/	[aŋkʰ]	'thank you'

/m/ /n/ /n/ /n/

/mun maŋa/[mun máŋa] 'worship house'

/nund/	[n̥nt̚]	'I talked'
/nun/	[nun]	'you ate'
/ɲun/	[ɲun]	'you gave'

/maŋ(m)/	[máŋ(m)]	'my mother'
/nəm(n)/	[n̥m̥(n)]	'we will talk'
/nəm(n)	[n̥m̥(n)]	'we will eat'
/ɲəm(n)/	[ɲ̥m̥(n)]	'we will give'

/naŋ(n)/	[náŋ(n)]	'my'
/kaŋ(m)/	[káŋ(m)]	'he is seeing'
/kaŋ(m)/	[káŋ(m)]	'he is cooking'
/kaŋ(m)/	[káŋum]	'son'

/numund/	[n̥m̥nt̚]	'I did not stay'
/nund/	[n̥nt̚]	'I did not talk'
/nund/	[n̥nt̚]	'I did not eat'

/ŋənənd/ [ŋɪ́ntɪnt̪ĩ] 'I did not give'

/kum/ /kum/ 'name of river'

/kʊn/ /kɪ́n/ 'and'

/kun/ /kun/ 'straight'

/kʊŋ/ /kĩŋ/ 'skin'

/kɛm/ [kɛm] 'greens'

/kin/ [kin] 'stare'

/kɛn/ [kɛn] 'dog scratches'

/keŋ/ [keŋ] 'cheek'

/ɹ/ /l/ /ld/ /r/

/ɹawa/ [ɹáwa] 'wrong'

/ɹala/ [ɹála] 'to sob'

/ɹdapa/ [ɹdapa] 'torn'

/rapa/ [řapa] 'men's house'

/paɹa/ [paɹa] 'fence'

/paɹa/ [piɹa] 'you 2 go'

/ɹldɹ/ [ɹldɹ] 'other side'

/ora/ [ora] 'to show'

/waɹum/ [waɹum] 'him only'

/waɹɹa/ [waɹɹa] 'to swing hands'

/waɹdɹp/ [waɹdɹph] 'to ask'

/wɹurp/ [wɹúɹuph] 'name of place'

/muɹ/ [muɹ] 'egg'

/mɿ/	[mɿ̥]	'trap'
/maɪd/	[mɿ̥t̃]	'to singsing dance'
/mur/	[mʊ̃]	'cave'

5.2. CONTRASTS OF VOWELS

/a/ /e/ /i/ /o/ /u/ /ɐ/ /ɿ/ /ʊ/

/kand/	[kənt̃]	'I'm cooking'
/kend/	[kənt̃]	'spring/well'
/kond/	[kɒ̃t̃]	'new/alive'
/kɿnd/	[kɿ̥nt̃]	'bow'
/kund/	[kunt̃]	'red'
/kɯ̃nd/	[kɯ̃nt̃]	'cicada'

/ma/	[ma]	'mother'
/me/	[mɛ]	'taro'
/mo/	[mo]	'hide'
/mi/	[mi]	'promise'
/mu/	[mu]	'gather food'
/mbɐ/	[mbɿ]	'some'
/mba/	[mba]	'he will go'
/mbo/	[mbo]	'seed'
/mbi/	[mbi]	'name'
/mbe/	[mbɛ]	'kind of banana'
/mbɐ/	[mbɿ]	'some'
/mbu/	[mbu]	'some'

/kan/	[kan]	'he saw'
/ken/	[kən]	'kina shell'

/kin/	[kin]	'dog scratches'
/kɪn/	[kɪn]	'to stare'
/kon kon/	[kon kon]	'thunder clap'
/kun/	[kun]	'straight'
/kʊn/	[kʊn]	'and'

/kaʔa/	[kaʔa]	'you cook!'
/keɪ/	[keɪ]	'small'
/koʔ/	[koʔ]	'flat place'
/kɪʔ/	[kɪʔ]	'little pig path'
/uʔ/	[uʔ]	'fashion'
/kʊʔ/	[kʊʔ]	'some'

/nand/	[nandʰ]	'where'
/end/	[ɛnt̃]	'I'm doing'
/ɲ ɛnt/	[ɲ ɛnt̃]	'I talked'
/nond/	[nont̃]	'I'm eating'
/nund/	[nunt̃]	'I ate'
/nʊnd/	[nʊnt̃]	'I'm talking'

/aɪ/	[aɪ]	'exclamation'
/eɪ/	[eɪ]	'this'
/oi/	[oi]	'to laugh'
/ui/	[ui]	'time'
/ʉi/	[ʉi]	'tail'

6. DISTRIBUTION OF PHONEMES

6.1. CONSONANTS

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

a. The dental lateral /l/ and the velar lateral /ɭ/ occur in all positions of the word, however they both occur infrequently word initial.

b. The flapped alveolar vibrant /ɫ/ occurs only between vowels in words.

c. Both semi-vowels /w/ and /y/ occur word initial and between vowels - never word final.

d. All pre-nasalized stops, /mb/, /nd/, /ŋg/; and laterals - dental /l/ and velar /ɭ/ occur word initial and between vowels with voicing, however these all occur word final with out voicing as [mp], [nt], [ŋk], [l], and [ɭ].

6.2. VOWELS

All vowels may occur in all vowel positions except /ɛ/ only occurs between consonants.

/and/	[əntʰ]	'sun'
/kan/	[kan]	'rope'
/oka/	[oka]	'sweet potato'
/nond/	[nontʰ]	'I am eating'
/po/	[po]	'sugar cane'
/em/	[ɛm]	'taro'
/pem/	[pɛm]	'he slept'
/nde/	[ndɛ]	'wood'
/ik/	[ikʰ]	'talk'
/pin/	[pin]	'you will sleep'
/ki/	[ki]	'hands'
/upɯɭ/	[upɯɭ]	'digging stick'
/kupa/	[kupa]	'cloud'
/ku/	[ku]	'stone'
/nd/	[ntʰ]	'before'
/purɯŋ/	[puɾɯŋ]	'they went'

/wʊ/	[wʊ]	'man'
/ʊtʰenɪm/	[tʰɛnim]	'it's cold'
/tʌn/	[tʌn]	'we all'
/mbʊ/	[mbʊ]	'plural'
/mʌn/	[mʌn]	'soul'
/nʌm/	[nʌm]	'you'

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

/oi.e.nʌm/	[oi.ɛnʌm]	'to laugh'
/koi.ya/	[koi.ya]	'knife'
/ai/	[ai]	'exclamation'
/aim/	[aim]	'milk'
/kaɪmp/	[kaɪmpʰ]	'to be sorry'
/ei/	[ei]	'this'
/wei/	[wei]	'very'
/ui/	[ui]	'season'
/ui.yo/	[ui.yo]	'Good day to you!'
/kui/	[kui]	'rat'
/ɛi/	[ɛi]	'tail'
/kɛi/	[kɛi]	'bird'
/ou/	[ou]	'big'
/pou/	[pou]	'wing'

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. Vowel clusters /ai/, /ei/, /oi/, /ou/, /ɛi/, /ui/, comprise the complex nucleus of the syllable having one stress.

Mono-syllable Patterns

VV	/ei/	[ei]	'this'
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VVC	/aim/	[aim]	'milk'
CVV	/kai/	[kai]	'good'
CVVC	/koip/	[koiph]	'obedient'
CV	/ku/	[ku]	'stone'
VC	/op/	[oph]	'yam'
CVC	/kun/	[kʌn]	'straight'
V	/i/	[i]	'like this'
CC	/kŋ/	[kŋ]	'pig' *

*It is one of a kind-most important cultural word- No vowel. Probably a mid vowel which has dropped out.

Two Syllable Patterns

VC.CV	/ul.ki/	[^u l.ki]	'kind of kapule'
V.CV	/i.ti/	[i.ti]	'you do it'
CV.CVV	/mu.tai/	[mu.] ⁱ ti]	'you all stay'
CV.CV	/ka.nda/	[k ^a .nda]	'all right/o.k.'
CVC.CV	/kʌp.kʌ/	[k ⁱ p.ki]	'wind'
CVV.CV	/pʌi.yo/	[p ⁱ i.yo]	'you all go'
CV.CVC	/nʌ.kʌ/	[ni.ki]	'they 2 said'
CV.CVVC	/rʌ.taip/	[^r i.tai ^{ph}]	'line of people'
V.CVV	/e.tʌi/	[e.t ⁱ i]	'you all do it'

More than two Syllable Patterns

V. CV. CVC	/e.ndʌ.tʌŋ/	[e.ndʌ.t ⁱ ŋ]	'they did it for me'
CV. CV. CV	/mu.tʌ.ŋga/	[mu.] ^a .ŋga]	'let him stay'
CV. CVC. CVC	/ko.ŋgʌl.mʌn/	[kʌ.ŋgʌl.] ⁱ mʌn]	'we will bite'
V. CV. CV	/a.ŋgʌ.la/	[^a .ŋgʌ.] ^a]	'stand up'
V. CV. CV. CV	/o.tʌ.ŋge.na/	[o.] ^ʌ .ŋg .na]	'they came and I will not stay'

CV. CV. CVC	/nə. mbu. ɬmb/	[nī. mbu. ɬ́m̥ph]	'I will not stay'
CV. CVV. CV	/mu. ɬei. yo/	[mu. ɬi. yo]	'You all stay'
CV. CV. CV. CV.	/nə. pə. ɬə. ŋə/	[nī. pi. ɬ́ə. ŋə]	'don't let him hear it'
V. CV. CV. CV. CV	/ə. ndi. ɬə. ŋə. ná/	[ə. ndi. ɬə. ŋə. ná]	'they did it for me'

8. The Phonological Word

The phonological word in Melpa consists of one to five syllables with one primary stress (a composite of higher pitch and intensity which tends to be longer than normal).

In the verbs, the stress falls on the final syllable of words of two or more syllables in the future tenses and the Dual and Plural person number of the Present, Past and Far Past Tenses.

[akɪmbá]	'he will dig'	[onɪmbú]	'we 2 are coming'
[kɪnámph]	'let me see'	[pɪɬɪmbú]	'they 2 heard'
[kanɪmbú]	'they 2 are seeing'		
[itamín]	'we will do it'	[ɛnɪmín]	'were doing it'
[nɪmbú]	'we 2 will talk'	[moɬín]	'they stayed'
[ɾiɬú]	'they will plant'	[ɬiɬín]	'they put it FP'
[kuɾmún]	'they died'		

The stress falls on the first /ə/ or first syllable of singular person number of the Present, Past and Far Past tense verbs.

[ákɪnɪm]	'he is digging'	[pɪɬɪm]	'he heard'
[ákunth]	'I'm digging'	[ɪkunth]	'he dug'
[pɪn̥th]	'I heard'	[káɪum]	'he cooked'
[tɛkɪɾunth]	'I'm running'	[ápaɾum]	'he picked up'
[moɾum]	'he's staying'	[ɾimúnt̪]	'I sewed'
[ítɪm]	'he did FP'	[púɾum]	'he went FP'

[múʔum]	'he stayed FP'	[íŋgíth]	'I stood FP'
[ʔíkíʔ]	'I built FP'	[muʔáŋgʌ]	'let him stay'

The Stress falls on the 1st vowel of the Singular person of the Imperative Aspect, and on the 1st vowel of the Dual person affix [-íʔa], and on the diphthong of plural person affixes [-íiya].

[ɛtá]	'do it'	[kíʔíʔa]	'you 2 cook'
[aká]	'dig it'	[muʔíʔa]	'you 2 stay'
[tíkíʔá]	'run'	[píʔa]	'you 2 go'
[itíiya]	'you all do it'	[píʔíiya]	'you all hear'
[wíiya]	'you all come'		

When the verb includes the negative prefix /na/ or /ni/, then a secondary stress /-/ occurs. When the final syllable is a future suffix, then the primary stress /' / falls on it, and the secondary stress /-/ falls on the negative prefix. In all other cases the negative prefix receives the primary stress /' /.

[íti níʔunth]	'I didn't do it'	[ni námbuʔ]	'we 2 aren't talking'
[íti níʔímpʰ]	'I will not do it'	[rui náʔnmun]	'we aren't hitting'
[uʔ pi níʔímpʰ]	'I will not sleep'	[ti náʔnmbuʔ]	'we 2 aren't getting'
[pi náʔunt̪]	'I'm not going'	[pi náʔnmun]	'we aren't going'
[kíni náʔínth]	'I'm not seeing'	[nui náʔnmun]	'we aren't eating'
[ui níʔwumba]	'he will not come'		

In the Imperative tense, the diphthongs /ai/, /ou/, /oi/, /ui/, /ei/, /ai/, or the /a/ when present, takes the stress.

When the verbs are negated, the negative /na-/ or /ni-/ prefix usually takes the stress.

In all other words, the stress falls on the 1st /a/ or diphthongs or 1st syllable in that preferential order. We are only writing stress when it is unpredictable.

[ama]	'very'	[aiya]	'sister'
[ambuʔ]	'girl'	[ríʔaiph]	'line of people'

[ma'ŋa] 'house'
 [ɛpɪndáma] 'afternoon'
 [ápaɾʌ] 'to forget'
 [námbʌ] 'what'
 [ndʊ́wʊ] 'stick'

[ɬumíi] 'wash'
 [kɪnán] 'song'
 [kaípa] 'cassarina'
 [énɪmph] 'lazy'
 [kumbá] 'door'

MONO-SYLLABLES

/kui/	[kuí]	'rat'
/kui/	[kuí]	'sick'
/kʷi/	[kʷí]	'bird'
/uimb/	[uímph]	'Let me come'
/wimb/	[wímph]	'name'
/mut/	[múʔ]	'egg'
/mut/	[múʔ]	'sky'

TWO-SYLLABLES

/a.ɪdɪŋ/	[a.ɪdɪŋ]	'east-close by'
/pi.pɪl/	[pi.ɪpɪʔ]	'shame'
/tu.mbaʔ/	[tu.mbaʔ]	'Jews Harp'
/ka.ɪmb/	[ka.ɪɪmph]	'moon'
/koi.ya/	[koi.ya]	'knife'
/te.nda/	[te.nda]	'one'
/ndi.ɪɪŋ/	[ndi.ɪɪŋ]	'drum'
/pɪl.ma/	[pɪʔ.mʌ]	'bee'
/ku.ɪi/	[ku.ɪi]	'to die'
/ku.ɪi/	[ku.ɪi]	'to draw water'

THREE AND MORE SYLLABLES

/ku. pə. ndə/	[ku. pá. ndə]	'spear'
/ko. kɛ. ɭə/	[ko. kɛ. ɭá]	'not yet ready'
/koi. pu. kə/	[koi. pu. ká]	'Clan name'
/ki. yə. pu. ɭə/	[ki. yá. pu. ɭə]	'kind of mushroom'
/mo. ŋɛ. ndamp/	[mo. ŋɛ. ndámph]	'caterpillar'
/a. nd . ŋgil/	[á. nd . ŋgɛ ɭ]	h'they 2 are walking'
/kɛ. ra. pɛ ɭ/	[kɛ. řá. pɛ ɭ]	'ant'

9. INTONATION

When making a statement, a falling intonation pattern occurs over the later part of the statement. It is noted that when asking a question, the question words or markers and time words have a sharp raise in intonation. The following intonation patterns have been observed. Later on, a paper on intonation and stress may be written.

- Na ŋə man kona punt.

I my house place am going.
'I'm going to my house.'
- Rəŋ nop puləŋ kundup kən. əkup man kona mbi ent.

food eating stomach putting and now house place go/1st fut.
I am doing.
I having eaten food, now I'm going home'
- Na Melpa ik rulaip rop kənmp.

I Melpa talk village hitting let me see
'I want to learn to talk Melpa'

10. MORPHOPHONEMICS

There are 3 different verb classes which are shown according to the morphophonemic changes in the verb stems. Present tense stem vowel stays the same in all person numbers.

Completive, Near Completive and Near Future stem vowel changes as follows:

Class I - HIGH BACK VOWELS

VERBS

Class I basic stem vowel /o/ /u/ in Completive, Near Completive and Future.

no--nt

eat-1st Pres.

'I'm eating'

nu--r

eat-1st N. Comp.

'I ate a week ago'

ro--nt

hit-1st Pres.

'I am hitting'

ru--nt

hit-1st Comp.

'I hit (it).'

Basic stem /o/ constitutes the complete stem. It is replaced by /w/ when followed by initial /a/ in the Immed. Future and Non Final Different Subject aspects.

o--amp

come-1st I.Fut.

w--amp

'Let me come'

The Basic Stem final vowel /o/ is lost preceding the suffix initial /a/ in the Immediate Future aspect.

no-amp

eat- 1st I Fut.

n--amp

'Let me eat (it)'

ro--amp

hit-1st I.Fut.

r--amp

'Let me hit (it).

Class II - FRONT VOWEL CLASS

The Class II stem vowel /e/ /i/ in the Near Completive, Future and Completive Aspects.

e--nt

do-1st Pres.

'I'm doing it'

i--nt

do-1st Comp.

'I did it'

ur pe--nt
sleep-1st Pres.
'I am sleeping'

ur pi--nt
sleep-1st Comp.
'I slept'

me--nt
carry-1st Pres.
'I am carrying'

mi--nt
carry-1st Comp.
'I carried'

Class III - CENTRAL VOWEL CLASS

The first stem vowel /a/ /u/ in the Completive, Future and N. Completive aspects of the verb.

aku--nt
dig-1st Pres.
'I am digging'

uku--nt
dig- 1st Comp.
'I dug (it)'

Proposed Orthography

PHONEME	LUTHERAN	PREVIOUS	PROPOSED
/i/	ee	i	i
/ɪ/	i	i	i
/e/	e	e	e
/u/	u	u	u
/ʊ/	u	u	u
/ʌ/	ä	ʌ	ʌ
/o/	o	o	o
/a/	a	a	a
/p/	p	p	p
/mb/	b-mp-mp	b-mb-mb	mb-mb-mp
/t/	t	t	t
/t̥/	t	t	t
/nd/	nt-nt-nt	d-nd-nd	nd-nd-nt
/nd̥/	nd	nd	nd
/k/	k	k	k
/ng/	nk	g-ngg-ngk	g-ngg-ngk
/nt̥/	nt	nj	nt
/m/	m	m	m
/n̥/	n	n	n
/n/	m	n	n
/n̄/	n	n	n
/r/	r	r	r
/l/	l	l	l
/ɹ/	gl	ɹ	ɹ
/ld/	rl	ld-ld-lt	ld-ld-lt
/w/	w	w	w
/y/	y	y	y

***Note** - The Lutheran Orthography has been used for many years and has the New Testament in it.

The previous Orthography, is the one we suggested when we came. The 4 fellows we had in for NTC, wrote stories in this orthography and we published the Easter and Christmas story in it. The Committee didn't like our symbols for pre-nasalized stops so they decided on how they wanted us to write them. They said they wanted to see it in print before finally deciding on the Orthography, so so we have published a number of books. We have asked the committee about having a meeting on deciding the orthography and they said they don't need one as they are happy with it and it doesn't take long for people to learn to read it.

11. Orthography Issues

1. Word Divisions -

Word divisions are determined by the following:

- a. There is only one composite primary stress with intensity and length in a word.
- b. Any word ending in a prenasalized stop becomes voiceless whereas initially or medially it is voiced.
- c. Certain combinations don't come together so therefore, one knows where the word breaks.

2. Treatment of Loanwords by the language -

Since Tok Pisin and English are widely used in Melpa, we are using the letters /j/ and /s/ in loan words. Many Melpa people have names using these letters such as Joseph, Jacop, Jon, Simon and etc. In the olden days, the people in at least the Catholic and Lutheran churches used the terms **Yesu** or **Jesus** for Jesus but now the Committee decided to just use the term **Jisas**. If these churches want to still use these terms, that's fine but for the New Testament, they want to use **Jisas**.

We have included these two symbols in the Transfer Primers as well as the Alphabet book. In transliterating other words, we use /r/ or /t/ instead of /nd/, /p/ instead of /mb/ and etc. making the word as close as possible to the Tok Pisin or English using the Melpa symbols.

3. Dialect Situation -

There are 5 dialects in Melpa. The Central dialect is said to be understood by all others. There are some vocabulary differences such as in the Central Dialect the one ending of the verb is the affix /k/ whereas the Dei Kaunsel area or far east dialect has /ngk/. So you have /ok/ instead of /ongk/ and /nuk/ instead of

/nɛŋgk/. The translators recognize these and just make adjustments when they are committee checking.

In the far dialects to the east and west, both use many more of the 6th vowel /a/, have a different word for the subject marker and have some differences in vocabulary. In the Central dialect - /ndi/ is used and /ent/ is used in the east and west dialects. In the other dialects it is mainly the vowels that change and they seem to fluctuate freely.

Ama unt kor nga kang wu kat amp kinan ning pilik purung. Puk amp kinan manga ila morung. Puk molk kən amp kinan nətəŋ. Kinan nək, moŕina al kona ei ya nondpa rangmba pilpa itim. I elinga kən, kang wu mbə enimp roŕunga kən, mana manga rukina mbila elpa elpa ur petəŋ.

Kang wu mat amp kinan nək morung I elingina Roŕim Pundi ni wamp ei ya, omba ambuŕa ti nga wur ila moŕpa, amp ei ya kinan nitim. I elinga elim mbo kang wu mel raŕpa kən, kinan nimba murum. Kang wu ti ndi kur ei ya kandpa mbi Ndupa kən nimba mel, "Nim ila nambuŕ itin un?" nitim. Kur ei ya nimba mel, "Na amp kinan nimp nəmp unt, ei kal" Wote mbo kang wu ei ya ndi nimba mel, "Nim manda kel kən pi," nitim. Roŕim Pundi ni wamp ei ya omba mba etpa mel ambuŕa ti ropə kondpa tepa purum. Ei ya mel manda.

Long time ago some men from my village went in order to turn head with some girls. They turning head until midnight kept staying. Keeping on staying and the women turning head sang. Singing, some men were still half asleep on the floor. But some of them kept on turning head with some girls. Right at that time, a devil named Pundi was there sitting near a girl and started to turn head with her. They did not know it was a devil because he pretended to be a real man and stayed. There was one man who watching him realized who he was, and said to him, "Why did you come here?" The spirit then said, "I came to turn head with those girls." So the real man told Roŕim Pundi that he could leave now. So he got up and came outside and he killed one girl and then went away. Thats the story.