

Mum phonology and grammar

John Mansfield
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Introduction

This document is a work-in-progress, documenting my understanding of the Mum language, Papua New Guinea (glottocode: kqa). I am making copies of this available, not because it represents polished language documentation, but since it may be better to share even rough notes since very little other documentation on this language is available.

Some typologically interesting features of Mum include:

- Mum has a seven tenses, which can express relatively specific temporal distinctions with respect to speech time (e.g. earlier same day, versus day before, versus a few days ago);
- Mum has some nominal classification structures, which have not been described in other Sogeram languages or in other Madang languages as far as I know.
- There appear to be many demonstratives, with some kind of compositional morphology, but this needs much more investigation.

This document is based on about 4 weeks of fieldwork. I made a preliminary visit in 2024 focusing mostly on a word list and sentence elicitation, then slightly longer visit in 2025 focusing more on narratives and eliciting some finer details. I have worked with 5 or so different speakers, generally 30 years old or older. In their everyday language use with their peers and younger kin, there is a lot of code-switching into Tok Pisin. Younger people in their teens and 20s also seem to know quite a lot of Mum, but they don't use it so much.

The name 'Mum' means 'what'. This is also the case for some nearby languages, such as Anamuxra (Ingram 2001).

The word *yasi* '(older) brother' has a special regional significance. People from the Mum area are known for addressing each other as *yasi*, and indeed soon after meeting Samuel we began addressing each other as *yasi*. It appears to be a kind of locality marker: people say things like 'he is a *yasi* man', meaning someone is from the Mum area. In the same way, people from Madang town area are known for addressing each other as *mam*, which I was told means 'father' in the Bel language of Madang. Some male staff at Binatang Research Centre, just outside of Madang, do indeed often address each other as *mam*, though neither speaker or addressee has Bel language heritage.

Relations to other languages and dialects

Mum has been identified as a member of the Sogeram language family by Daniels. His work on reconstructing Sogeram phonology includes some information on Mum, which has analyses as a sister of Sirva, a neighbouring language to the south.

The most systematic documentary material available on Mum is a list of almost 400 words recorded by Hans (John) Z'graggen, alongside several neighbouring languages in his South Adelbert wordlist collection. Note that Z'graggen identifies the Mum wordlist as 'Katiati', named after the village in which he recorded it. Z'graggen's typical practice seems to have been to use village names as language identifiers. The speakers I worked with from Kimbugor village were very clear about calling their language 'Mum', and they also identify this unambiguously as the language of Katiati village, and several other villages in the area.

There is evidently a certain amount of dialectal variation between Mum speaking villages. In wordlist elicitation, Speakers sometimes told me a few variants, mentioning villages where they might be used. They are particularly aware of differences between Kimbugor Mum and Katiati Mum, perhaps because the latter has been the target of previous missionary documentation. Here are some examples of dialectal differences:

‘road’	<i>knd</i>	Kimbugor
	<i>kumb</i>	Amjaivivu
‘knife’	<i>tuki</i>	Kimbugor
	<i>mai</i>	Amjaivivu
‘language’	<i>vana</i>	Kimbugor
	<i>kuyu</i>	Katiati
‘today’	<i>nmati</i>	Kimbugor
	<i>nmatira</i>	Amjaivivu
	<i>amuskira</i>	Usimbugor

Comparing words elicited from Samuel (Kimbugor village) against Z’graggen’s 1980 wordlist (Katiati village) also reveals substantial differences. I have compared about 100 words from these lists, most are either the same form, or related form with sound change. A smaller group consists of those where the forms are unrelated. In the related-form group, the phonological difference almost always involves vowel reduction or deletion in the Kimbugor forms, compared to the Katiati forms. Among the unrelated forms, some of these pairs may well not be dialectal variation at all, but merely different responses to an English prompt that allows more than one interpretation or translation. But this seems unlikely to account for all of them, especially when we consider very basic vocabulary such as ‘ear’. The three tables below illustrate examples of each group.

Same form in Kimbugor and Katiati (identical or almost-identical)

	Katiati	Kimbugor
woman	<i>nawundi</i>	<i>nawundi</i>
head	<i>miku</i>	<i>miku</i>
sugar cane	<i>aga</i>	<i>aga</i>
taro	<i>sis</i>	<i>sis</i>
yam	<i>nyambara</i>	<i>nyambara</i>
tobacco	<i>asara</i>	<i>asara</i>
sago	<i>maβa</i>	<i>maβa</i>
coconut.tree	<i>koima</i>	<i>kuima</i>

Related forms with sound changes

	Katiati	Kimbugor
2PL.NOM	<i>narɯ</i>	<i>nar</i>
3PL.NOM	<i>nurɯ</i>	<i>nur</i>
man	<i>kuru</i>	<i>kru</i>
mouth	<i>muka</i>	<i>mka</i> [<i>m^uka</i>]
tooth	<i>muka gurs</i>	<i>mka grs</i> [<i>m^ukagr^əs</i>]
child	<i>ningi</i>	<i>nyingi</i>
brain	<i>mekwi</i>	<i>nymik</i>
neck	<i>punggu</i>	<i>pungg</i>
hair	<i>mɯnɯ</i>	<i>mn</i>
left arm	<i>kakag</i>	<i>kakai</i>
navel	<i>sumbirp</i>	<i>smbirp</i>
liver	<i>mavunggrusu</i>	<i>mavnggrs</i>

sweat	<i>pumbʉ</i>	<i>pmb</i>
walk	<i>kund-</i>	<i>knd-</i>
sit down	<i>mʉnsʉ-</i>	<i>mnj-</i>
sleep	<i>kar-</i>	<i>karg-</i>

Unrelated forms

	Katiati	Kimbugor	Usimbugor	Amjaivuvu
face, forehead	<i>kpumka</i>	<i>mirmba</i>		
ear	<i>kʉngsigi</i>	<i>kuv</i>		
upper leg	<i>tanola</i>	<i>punggna</i>		
belly	<i>kʉpʉ</i>	<i>mav</i>		
heart	<i>kusingə</i>	<i>kutm</i>		
today	<i>nmati</i>	<i>musu</i>	<i>amuskira</i>	<i>nmatira</i>

Previous documentation of Mum

Daniels' work contains scattered notes on Mum, though he documents it less than other Sogeram languages. Sweeney (1994a, b) produced a phonological description and an anthropological sketch, which also includes some description of language use, and a substantial set of kinship terms.

Phonology

NOTE: in the phonology section I will use IPA, whereas in the other sections I will use a practical latin spelling system. The orthographic conventions are quite standard ways of avoiding special characters: ng = ŋ; v = β; g = ɣ; but also y = j. For details see separate document, 'Mum spelling conventions'.

Vowel inventory

i	(i, ʉ)	u
	a	

The central vowels are highly frequent, but as I will argue below, should be considered 'intrusive vowels', not part of the phonological structure of the word.

Consonant inventory

p	t		k	k ^w
β	s		ɣ	ɣ ^w
^m b	ⁿ d	^ɲ ʃ	ⁿ g	ⁿ g ^w
m	n	ɲ	ŋ	ŋ ^w
	r			
		j		

I generally have the impression of a single rhotic with flap/trill realisation. But worth checking the word *aru* ‘old (person)’, since the recordings I have of this seem to be glides.

Younger speakers often pronounce /β/ as [w], but I have not found any evidence of it as a distinct phoneme.

Voiced, prenasalised stops

Voiced stops appear to be prenasalised word-medially, and also word-initially in some cases. Thus there is evidence that [g ~ ŋg] etc are allophones, rather than distinct phonemes. I write these in a way that reflects their realisation, as a voiced stop word initially (e.g. *dambugu* ‘they’), but with the nasal written word-medially (e.g. *knd* ‘road’). Sometimes these voiced stops are prenasalised even word-initially, perhaps especially with the velar /ŋg/, as in [ŋgin] ‘see.1sg.curr’. I generally follow the allophony in writing these, thus *nggin*, though I have not yet been consistent about this in the transcriptions.

There is no problem distinguishing voiced stop ŋg from fricative ɣ in the practical orthography, since the fricative never occurs word-initially.

Minimal word

There are many monosyllabic words in Mum (including the name of the language). These mostly have a coda e.g. *taβ* ‘house’. There are fewer monosyllabic words with a single open syllable CV, but there are some, e.g. *su* ‘shit’, and personal pronouns e.g. *ji* ‘1SG’, *na* ‘2SG’. These are all pronounced with phonetically long vowels. Open syllables are more common in multisyllabic words, e.g. *tapa* ‘fence’.

There are also monosyllabic words with no onset, e.g. *uβ* ‘smoke’. The description below of intrusive vowels will further enrich the analysis of word minimality

Word edges

Word-initial: No /β, ɣ, ŋ, w/, and /r/ is rare or absent (only *rm* ‘?PURP’)

I’m not sure whether /w/ occurs in syllable onsets at all; there are various possible cases, but hard to distinguish here between /β, w/

Word-final: No /p/, and /ɣ/ is rare or absent (only *tuŋgiɣ* ‘waterhole’, which needs a better recording to confirm, CHECK)

Syllable structure

Maximal CCVCC, but complex codas and onsets are rare;

Phonetic offglides in [au], [ai] are more parsimoniously treated as consonantly glide codas, e.g. *tawsi* ‘he shot it’, *taw* ‘snake’, *kajyura* ‘wallaby’, *kakaj* ‘left’. The alternative would be to treat them as complex nuclei (e.g. *taʷsi*), but notably no examples have been identified of such a purported complex nucleus with an additional consonant in the coda. This absence is explained if we propose that offglides fill the coda position.

Complex codas are rare, and the non-final consonant is always /r/:

siʷbirp ‘belly button’, *-ma-rŋ* ‘DIST.PST-1PL’, *na-rŋ* ‘eat-1PL’.

Complex onsets are also rare, and the second consonant is /r/:

kru ‘man’, *ŋgris* ‘seed’, *sram* [sra:m] ‘many (children, dogs),

(*psa* ‘skin’ is almost cluster-like, but has a shortish intrusive vowel)

Resonant nuclei

Resonants quite frequently serve as syllable nuclei, though sometimes with slight accompanying vocalic excrescence.

The liquid /r/ is often the nucleus, e.g. *a^mbr̥ka* ‘flying fox’, *mukr̥* ‘possum’, *kṛ-ma-n* ‘stay-FUT-1SG’.

Also nasals, e.g. *sigm̥* ‘pig’, *mka* [m̥ka] ‘mouth’, *agutm̥* ‘small stick’, *nmati* [nm̥.a.ti] ‘today’ (Katiati dialect), *nmik* [n̥m̥.i:k] ‘brain’ *kna* [k̥n̥.a] ‘poison’, *k-n* [k̥n̥] ‘stay-1SG.CURR’, *k-na* [k̥n̥.a] ‘stay-2sg.curr’,

Also some prenasalised stop break across syllables, e.g. *kⁿdi* [k̥n̥.di] ‘road’, *t^mba* [t̥m̥.ba] ‘stone’, *s^mbirp* [s̥m̥.birp] ‘belly button’

And one with a fricative, *ms-ta* [m̥s̥.ta] ‘stay-ss’.

There is often brief (around 30ms) vocalic articulation in the transition between preceding obstruent and these resonant nuclei. But this is not always present.

Also sequences like [s^ə], e.g. in *sp* [s^əp^{hə}] ‘unripe’ and *sgm* [s^əɣm̥] ‘pig’. Kind of sesquisyllabic articulation, not clear if there is a distinct initial syllable. See example of two different articulations of *puknya spe* (2024-02-11_Samuel-Ambos_05).

One could instead consider this to be the syllable nucleus, though it would be a rather flimsy one.

Note that *gr̥is* ‘seed’ can be analysed as having a complex onset, as presented here, or as a resonant nucleus, i.e. *gr̥s*. The vowel-like portion is very brief. Since there are other words that have complex onsets (*kru* ‘man’, *psa* ‘skin’) and again others with resonant nuclei (*mukr̥* ‘possum’), either analysis seems reasonable for *gr̥(i)s* ‘seed’.

A word can lack any vowels, having only a nuclear /r/, e.g. *mr̥* ‘tree sap’.

There is also an unusual word, *prmr̥* ‘small brown and black bird sp.’, which has two syllables (intensity and pitch peaks), [pr̥.m̥r̥].

Syllable boundary clusters

These are rather rare

yvr̥agi ‘(s)he arrived’, *mir^mba* ‘face’, *tar-maⁿd* ‘(s)he will shoot’, and many others involving /r/ in either c1 or c2 position;

also *nim̥jik* ‘brain’, *tamⁿga* [tamga] ‘eye’, *kupsun̥* ‘morning’, *kptiti* ‘afternoon’, *sukta^mbu* ‘short’, *puk̥na* ‘mango’, *jiβ̥ni* ‘cane’

There are also several arising from non-final coda /j/, e.g. *kujma* ‘coconut tree’, *miṇajkru-* ‘push’. These may have slight intrusive vowels, perhaps only in careful speech; but I analyse the lexical phonology of these words as including sequences of consonant segments /jm, jk/, with variable phonetic articulation.

Also in some reduplicative words *piⁿdviⁿd* ‘bird sp.’, *mirmir* ‘lungs’, *manman* ‘?lack’

One example found of stop-nasal sequence that is not homorganic: *vin’gara* [β̥ingara] ‘mistaken belief’. Another example is the village name, Kinbugur.

aⁿda ‘a long time ago’ has a phonological sequence of two consonant segments, but this is realised phonetically with vowel epenthesis, i.e. [atinda].

Word-final consonant articulation

Word-final voiceless stops have an aspirated release, e.g. *sip* [sip^h] ‘mucus’, *kut* [kut^h] ‘back’, *sijat* ‘bird sp’, *muk* ‘egg’, *ɲmɲik* ‘brain’. In phrase medial positions this is also followed by an intrusive vowel, e.g. *kut kambu* [kut^hi kambu] ‘back down’.

There is also a word *uk^w* ‘sore’ with an interesting citation form. Phrase-medially this has just a small intrusive vowel *uk^w* *nanga* [uk^unanga], but in citation form it has a much stronger intrusive vowel, like [uk^hu], with progressive rounding, longer and louder than a typical intrusive vowel. But I guess this is an effect of hyper-articulation in the citation form.

The prenasalised stops are like the voiceless ones in that they demand some kind of release. This results in a following short intrusive vowel when they are in word-final position, though these are shorter than other types of intrusive vowels (30-40ms; more on this below). For example *pɪ^mb* [pɪmb^ə] ‘sweat’, *kaⁿd* [kand^ə] ‘hand’, *tɪβɪ^ŋg* [tɪβɪŋg^ə] ‘shoulder’, *na^ŋg^w* [na^uŋg^u] ‘blood’, *na^ŋg^w* [na^uŋg^u] ‘back of neck’; or followed by another consonant, e.g. *pɪⁿdviⁿd* [pɪnd^əvind^ə] ‘bird sp.’

Plain nasals also end words with a flourish. They may either end with a slight stop articulation, e.g. *sram* [sram^b] ‘many’, or occasionally a slight intrusive vowel, e.g. *kɪ-n* [kinⁱ] ‘stay-1SG’, though this is less frequent than the prenasalised stop release.

Prenasalised stops

The nasal feature of prenasalised stops is generally articulated in any non-initial position; but in absolute initial position there tends to be little or no prenasal realisation, i.e. *ⁿda^mbuɣu* ‘they’ being realised as [ndambuɣu] phrase-medially versus [dambuɣu] phrase-initially. The palatal prenasalised stop is somewhat rare, so far only identified in the words *pu^ŋ* ‘bone’, *ka^ŋ* ‘??’, and in most forms of the verb ‘sit’, e.g. *mɪ^ŋje* ‘sit.3SG.C’

Rounded dorsals

As shown in examples above, the rounded dorsal obstruents /k^w, ŋ^w, ɲ^w, ɣ^w/ are distinguished by rounding they add to a following intrusive vowel, and an offglide on a preceding low vowel. Rounded dorsals seem fairly rare. A stop example is *tak^w* ‘moon’. A prenasalised example is *na^ŋg^w* ‘back of neck’; a nasal example is *kiŋ^w* ‘pandanus’. The only fricative example thus far only attested is *jaɣ^w-i* [jaɣwi] ‘go.up-3SG’.

Fricatives

The peripheral fricatives /β, ɣ/ tend to be articulated very lightly, but otherwise show no notable allophony. The coronal /s/ is more strongly and more variably articulated, showing degrees of palatalisation, and also occasionally some affrication, e.g. *suru* [tsuru] ‘leak’, *na^ŋg^w siki* [na^uŋɟiki] ‘blood rope = vein’.

The fricatives are the only obstruent type that does not demand final release, e.g. *maβ* ‘belly’, *kuβ* ‘ear’, *ŋgris* ‘seed’.

Contrasts between non-low vowels

The two peripheral non-low vowels, /i, u/, cannot be consistently explained as conditioned allophones of /i/. There are some instances where these occur without the relevant palatal or labial consonants, for /u/ including *nu* ‘3SG.NOM’, *nur*, ‘3PL.ACC’, *u-ta* ‘go-SS’, *kuyu* ‘language’, and for /i/ including *kitr* ‘black’, *mir* ‘tongue’, *ɲipu* ‘ash’, *ipu* ‘small’.

Nonetheless, it is worth noting that the majority of [u] vowels appear adjacent to a labial or dorsal (potentially rounded-dorsal) consonant, while many [i] vowels are adjacent to a palatal (especially if we consider /s/ to be phonologically a palatal, see Foley 2018). Perhaps there was vertical vowel system at some point in the history of the language.

But there are also words where something phonetically like [i, u] occurs, but it appears to have a more centralised articulation, or variable articulation, plus a relevant contextual consonant, suggesting that it should be treated as an allophone of /i/. For example:

mi^uga- [muŋga ~ minga] ‘go down’, *jiβ-* [jiv ~ jiβ ~ juβ] ‘hit’

Sometimes morphological alternations suggest that a round vowel is dependent on a rounded velar consonant. For example [EXAMPLES]

Intrusive central vowels

Mum has two quite different types of vowels. ‘Full’ vowels, /a, i, u/ are part of the lexical representation of a word. ‘Intrusive’ vowels (which we could also call epenthetic (Blevins & Pawley 2010)) are not contrastive or informative parts of a word’s phonology, but rather vocalic gestures that arise from prosodic patterns of articulation. Full vowels are more consistently produced (modulo morpho-phonological alternations), are phonetically longer, and usually more peripheral. Intrusive vowels are inconsistently produced, have brief duration, and are central unrounded unless a neighbouring consonant induces a distinctive colouring. I will generally annotate intrusive vowels as [i] (following other linguistic documentation from the region), though for strongly rounded examples I annotate [u], and I indicate particularly brief examples in a superscript position as [i^u]. However it should be kept in mind that these are phonetic details rather than phonological contrasts.

Mum epenthetic vowels are overall fairly similar to those found in nearby Anamuxra (Ingram 2001: 43–45). This is interesting because Mum is not closely related to Anamuxra; meanwhile the Sogeram languages most closely related to Mum, such as Sirva, have a fully phonemic central vowel, rather than epenthesis (Daniels 2015: 664).

[Summarise main principles]

Below I will describe the patterns of vowel epenthesis found in different word shapes, in with respect to different consonant types. I begin with the most phonologically minimal words and work up to those with two full vowels. The following should not be read as strict rules. Intrusive vowels by their nature are variable, for example noticeably distinct forms have been recorded for *p^mbⁿd* [pɪmbɪnd ~ pumbɪndi] ‘hot’. Nonetheless, some fairly clear patterns are discernable.

CV: There is no vowel intrusion in words that consist of a single open syllable with a lexical vowel. The lexical vowel is phonetically long, fulfilling the bimoraic minimum, e.g. *su* [su:] ‘shit’, *na* [na:] ‘you’. The same applies with a complex onset, *kru* [kru:] ‘man’.

VC: There are a couple of words that have a coda but no onset, and these do have brief final intrusive vowels in citation form: *uβ* [uβⁱ] ‘smoke’, *uk* [uk^{hu}] ‘sore’. This may be related to the general pattern of onsetless syllables lacking prosodic prominence (see §sect).

CC: There are quite a few words with two consonants and no lexical vowels, and these generally have one or two intrusive vowels. If the second consonant is nasal then a single intervening intrusion occurs: *mn* [mɪn] ‘hair’, *wn* [wun] ‘wind’, *km* [kim] ‘bow’. This suggests that the intrusive vowel and the coda nasal each contribute a mora. However the

dorsal nasal again shows an exception here, with an additional word-final intrusion: *ɲɲ* [ɲɲi] ‘dirty’.

If the second consonant is a rhotic, we find a long trilled rhotic filling the syllable rhyme, *mr* [mr:] ‘swallow.3SG.CU’, *mr* [mr:] ‘sap’. This fits the pattern noted above of rhotics as syllable nuclei.

If the second consonant is an obstruent, we get a distinct pattern with two intrusive vowels: *mk* [miki] ‘leaf’, *yt* [yuti] ‘top’, *sp* [sipu] ‘unripe’, *p^mb* [pimbi] ‘sweat’, *kⁿd* [kindi] ‘last born male child’, *m^yj* [mɲɲi] ‘sit.IMP’, *s^yg* [siŋgi] ‘cooking pot’, *kβ* [kɤβi] ‘night’, *ty* [tɤyɤ] ‘bottom part’. This could be interpreted to suggest that intrusive vowels contribute at maximum a single mora; they do not permit the bimoraic lengthening of full vowels. Thus in the absence of a moraic coda, two intrusive vowels are required.

There is also one closed monosyllabic word with a complex onset, and it has a single intrusive vowel: *krs* [kris:] ‘seed’. The lack of a final intrusive vowel is likely because of the final /s/, which tends to be long and is never followed by an intrusive vowel.

CVC: Like CV words, these have no intrusive vowels. A second consideration is whether these words have phonetic vowel lengthening, which could indicate whether the coda consonant contributes a mora or not. My inspection of spectrograms is inconclusive on this point, and if anything there may be a gradient of vowel lengths depending on coda type. With the most sonorant codas nasal and rhotic codas the vowel seems to be of standard length: *man* [man] ‘banana’, *kiŋ^w* [kiŋ^w] ‘pandanus’, *mir* [mir] ‘tongue’. This is also the case with a complex onset, *sram* [sram] ‘many (children, dogs)’. The vowel is also of standard length with a sibilant coda, which itself is notably long: *kas* [kas:] ‘sand’, *βis* [βis:] ‘unripe (banana)’, *sis* [sis:] ‘taro’.

With a dorsal fricative or stop in the coda, the single vowel appears to be of intermediate length and I cannot easily assign it to the type of lengthened vowel described above for CV words, and the standard length of other word types: *taβ* [ta:β] ‘house’, *maβ* [ma:β] ‘belly’, *kuβ* [ku:β] ‘ear’, *kut* [ku:tʰ] ‘back’. But a couple of words with sibilant onsets appear to have standard length vowels: *sip* [sipʰ] ‘mucus’, *sik* [sikʰ] ‘fire’. Where the coda is a voiceless stop, citation form has a strongly aspirated final release, though this does not show any voicing. Where the coda is a prenasalised stop, the pattern is similar to other obstruent codas, except that there is also a slight release, which here is voiced and therefore resembles a very weak, brief vowel. However these are shorter and weaker than standard intrusive vowels: *kaⁿd* [ka:ndi] ‘right (hand)’, *pu^yj* [pu:ɲɲi] ‘bone’, *pu^yg* [pu:ɲgi] ‘neck’, *ja^yg* [ja:ɲgi] ‘second born female child’, *na^yg^w* [na:ɲg^{wu}] ‘back of neck’. These form an interesting contrast with the equivalent CC words that lack a lexical vowel (see above), which instead form two clear syllables with a standard intrusive vowel in each, e.g. *p^mb* [pimbi] ‘sweat’, versus *pu^yj* [pu:ɲɲi] ‘bone’. Like the trade-off between coda consonant types and nucleus vowel length, these suggest a balancing of phonological weight: if the first vowel is intrusive then a second one is favoured to

Finally, one outlier has also been observed in the CVC category: *paɲ* [paɲi] ‘net bag’, was pronounced unexpectedly with a final intrusive vowel. This may be an unusual property of the dorsal nasal (see also below).

C.CV: While we saw above that a complex onset is possible in *kru* ‘man’, other consonant sequences induce an intrusive vowel to produce a disyllabic word: *kβa* [kiβa] ‘garden’, *kpa* [kipa] ‘chest’, *psa* [pisa] ‘skin’, *mka* [mka] ‘mouth’. The lexical vowel here is not lengthened, suggesting that the intrusive vowel contributes a mora, and indeed forms a syllable. Some words have a brief rounded vowel following a dorsal onset in the first syllable, which I interpret as a rounded dorsal consonant with coarticulation on the intrusive

vowel: *kʷra* [kʷra] ‘forest’, *kʷran* [kʷran] ‘body’, *kʷsi* [kʷsi] ‘spear’. These contrast with the greater duration of a full lexical vowel, as in *kuku* ‘water’.

The initial syllable of this word type can also be filled by a resonant nucleus, as in *tʰba* [tʰba] ‘stone’.

VCC: There is just two identified word of this type, and both have a resonant to fill the second syllable: *akʰd* [a.kʰdʰi] ‘salty food’, *u-rŋ* [u.rŋ] ‘go.1PL.CURR’.

CCC: Triple-consonant words, as expected, are interpolated by two intrusive vowels: *sym* [siyim] ‘pig’, *kpt* [kʰpʰitʰ] ‘full (belly)’; or can have a resonant nucleus in the first syllable: *kŋr* [kŋri] ‘clean’, *pʰbʰd* [pʰmbʰindʰ ~ pʰmbʰindʰ] ‘hot’.

CVCC: An intrusive vowel interpolates the last two consonants: *muyβ* [muyiβ] ‘the next day’, *kutm* [kutim] ‘liver’, *kink* [kinik] ‘star’, *mukr* [mukri] ‘white’

CCVC : An intrusive vowel interpolates the first two consonants: *mtup* [mutup] ‘wet’, *jka* [jik:] ‘loincloth’; or there is a resonant nucleus *sʰbirp* [sʰmbi:rp] ‘belly button’.

Longer words have no need for intrusive vowels to contribute mora, though in some instances they may still have intrusive vowels to enable syllabification of certain sequences. There follow some examples without any intrusive vowels:

VCCC: *u-s-rŋ* [us.rŋ] ‘go.1PL.YEST’

CVCV: *tapa* [tapa] ‘fence’, *maŋa* [maŋa] ‘dirt’, *ama* [ama] ‘woman’s breast’, *kuku* [kuku] ‘water’, *siki* [siki] ‘rope’, *kiβa* [kiβa] ‘claw’, *kuma* [kuma] ‘hand’, *tuki* ‘knife’, *ina* [ina] ‘sun’.

VCVCC: *u-ma-rŋ* [umariŋ] ‘go.1PL.CURR’

CVCCVCV: *kajyura* [kajyura] ‘wallaby’

And here are examples of longer word with intrusive vowels to syllabify the consonants. As shown in the third example, there is no restriction against having several consecutive intrusive vowels in a word

CCCV: *pkŋa* [pʰ.kʰi.na] ‘mango’

CVCCV: *puʷgna* [puŋ.gi.na] ‘thigh’

CCCCV: *mkʰbsa* [mikʰmbʰisa] ‘lip’

CVCCVC: *nuʰbwum* [numbʰwum] ‘left’

Comparison to Sirva

As mentioned above Mum’s sister language Sirva is analysed as having a fully phonemic central vowel, rather than epenthesis (Daniels 2015: 664). Daniels provides two types of evidence for this, but I do not believe that either applies in the case of Mum.

Firstly, Daniels analyses Sirva as having diphthongs. This includes some beginning with the central vowel, /ii, iu/, which he points out can not be motivated as epenthetic in this environment. But as mentioned above, for Mum I analyse diphthong-like sounds as simple vowels combining with glide consonants. In the case of [ii], for Mum I instead represent this as [ij], which is already assumed structures of Mum phonology, as in: *kj* [kij] ‘stay.CUR.3SG’.

Daniels also mentions some Sirva minimal pairs showing central vowels. Some of these would in Mum instead be analysed as a minimal contrast between a phonemic vowel and the lack of any phonemic vowel. For example:

Sirva

kadi ‘tree sp.’

kidi ‘platform’ (Daniels 2015: 664)

Mum

kiβa [kiβa] ‘claw’

kβa [kiβa] ‘claw’

Finally, Daniels also provides a Sirva minimal pair that contrast a central vowel with the lack of any vowel. This certainly does appear to constitute good evidence for the phonemic status of /i/ in Sirva. But I have not observed any contrasts of this type in Mum. Indeed, in this post-voiced-stop environment, Mum words appear to have free variation between presence or absence of a short intrusive vowel.

Sirva

kid ‘rheum’

kidi ‘knife’ (Daniels 2015: 664)

Mum

kaⁿd [kandⁱ ~ kand] ‘right (hand)’,

It would be interesting to know what the Mum reflexes might be for the Sirva minimal pair *kid*, *kidi*. However I have not recorded any Mum word for ‘rheum’, and for ‘knife’, Samuel gave two words, neither related to the Sirva: *tuki* (Kimbugor dial.), *maj* (Amjaivivu dial.).

One of the historical developments that has been identified for Mum is the weakening of some full vowels to the central vowel, e.g. Proto North-Central Sogeram (PNCS) **manka* ‘egg’ > [mɪŋga] (Katiati dial.) (Daniels 2015: 95). This may have overall increased the prevalence of phonetic central vowels in Mum, which may perhaps have contributed to them becoming lexically uninformative and thus epenthetic. The cited form is also interesting because the Kimbugor dialect has undergone a different pattern of vowel weakening compared to the Katiati dialect, with the final vowel deleted altogether, as well as rounding of the first vowel and obstruent devoicing: *muk* [muk^h] ‘egg’. Another Mum innovation is the word-final loss of the central vowel from PNCS (Daniels 2010: 179), after an earlier loss of final resonants. Daniels describes this as ‘sporadic’, for example the loss in *manɪŋ* > *mani* > *man* ‘banana’, versus the retention in *kintir* > *kindi* ‘root’ (Katiati dial.). But note that this variation follows one of the patterns I presented above for central vowel intrusion, where final nasals do not induce a following intrusive vowel, e.g. *man* [man] ‘banana’, *mn* [mɪn] ‘hair’; but final voiced obstruents do induce vowel intrusion, e.g. *kⁿd* [kindi] ‘last born male child’.

Stress

Here

Morpho-phonological alternations

Sweeney 1994 has already described this for the Katiati dialect. My observations for Kimbugor dialect are largely the same.

Initial voiceless stops often become prenasalised (voiced) stops in the second position of a noun compound. E.g. *kuku* ‘water’, *kujma* ^ŋ*guku* ‘coconut water’, *anak* ^ŋ*guku* ‘salt water’, *iyu* ^ŋ*guku* ‘rain water’;

kurɲa ‘dry’, *kujma* ^ŋ*gurɲa* ‘dry coconut’.

It can also occur with /s/, where there is also palatalisation (for reasons unknown), e.g. in *siki* ‘rope’, *jiβni* ^ɲ*yiki* ‘cane rope’.

Sometimes the alternation is to a fricative: *psa* ‘skin’, *ayu βsa* ‘tree skin = bark’.

The noun *krs* ‘seed’ occurs in several compounds, showing alternation to both prenasalised and fricative manners:

maβ ʷgrs ‘stomach seed = heart’, *tanda ʷgrs* ‘leg seed = ankle’

puj yrs ‘breadfruit seed’, *majⁿda yrs* ‘betelnut seed’ *ukama yrs* ‘daka vine seed’.

Nominals

Here are some basics, but I will give classifiers their own section below.

Personal pronouns

	Nominative	Accusative	Genitive
1sg	yi	yang	yand
2sg	na	nang	nand
3sg	nu	nung	
1pl	ara	arang	
2pl	nar	narng	
3pl	nur, dambugu	nurng, nurung, dambugung	

Not clear whether *dambugu* etc should be treated as personal pronoun or a kind of demonstrative.

Demonstratives

There are various complex forms:

(base) MODF	-ma PRO.?TRUNK	-m nding PRO.?INAN	-ngnng ?PL	-ny LOC	-mbu PLACE
<i>n</i> PROX	<i>nma</i>	<i>nm nding</i>	<i>n-ngnng</i>	<i>niny</i>	<i>nmbu ~ numbu</i>
<i>ka</i> ?MED	<i>kama</i>			<i>kany</i>	<i>kambu</i>
<i>nda</i> DIST	<i>ndama</i>	<i>ndam nding</i>	<i>nda-ngnng</i>	<i>ndany</i>	<i>ndambu</i>
<i>ka-nda</i>				<i>kandany</i>	
<i>ka-nda-ga</i>				<i>kandagany</i>	

See also combinations with classifiers, e.g. *n-grs*, *n-gas*, *nda-gas* etc

-ma forms seem to be applicable to persons, but also trees:

Kru nda-ma.

‘That (dist.) man.’ (2025-07-01_AnKu_04 ... and see several other examples therein)

Nyingi nda-ma.

‘That (dist.) child.’ (2025-07-01_AnKu_04)

Agu nda-ma anggumk siru.

‘that (dist) tree has many leaves’ (2025-07-01_AnKu_04)

Nyingi nda-ngnng.

‘those (dist.) children’ (2025-07-01_AnKu_04)

Kru n-ngnng.

‘These (prox.) men.’ (2025-07-01_AnKu_04)

An initial guess at how these work. The base forms in the first column combine with nouns as deictic modifiers; the second column, whereas the suffixed *-ma* forms stand alone as demonstrative pronouns. But this NEEDS CHECKING. And the difference between the *-ny* and *-mbu* forms is not yet clear at all, though the former seem more common.

Also: ? *kanda-gamding*

ka

Daniels (2015, p.278) lists it as medial distance. The distance involved seems very flexible. It occurs a lot in a story about a road trip, where the events occurred at a great distance from where Samuel was telling me the story. Sometimes looks anaphoric more than anything, but that doesn’t account for all examples.

(x) *Mai kaigura kiva ka-nda gi!*
?intj wallaby paw med-dist state
‘There’s a wallaby paw print!’

(y) *Agu nyambas ...*
tree ?bad
‘A ?difficult tree (blocking path).’

[...2 lines ...]

Nyingi ka-nda nggati.
child med-dist ?place
‘The boys from that place.’

Agu kanda-ga ...
tree med-dist-TOP
‘That tree...’

Tagara-ta ki-mu ptrama-ta ki-mu.
cut-med stay-3pl.dist chop.up-med stay-3pl.dist
‘They were cutting it, chopping it into pieces.’

nda

Maybe distal, and is listed as such by Daniels

Samuel-ndu kiva nda ngg-in.
name-gen footprint ?dist see-1sg.curr
‘I saw Samuel’s footprint over there.’

Strange form here, needs checking:

Anta ka-nda-ny-nda / k-ta angga pay-marng.
moment ?? stop-ss return go-1pl.dist
‘At that point, we stopped there, and we came back’

Kuga-nda pay-min.
long.time.ago-dist come-1sg.dist
‘I came a long time ago.’

Mugv mugv nda-ny sgm tar-man.
 other.day other.day dist-loc pig shoot-1sg.fut
 ‘In the future I will shoot a pig.’

anda, andi

According to one of Samuel’s explanations, it could be ‘at that moment’, and the two forms seem to have similar meaning:

Anda kakai nmbu pai-marng.
 moment left direction come-1pl.dist
 ‘At that time we come to the left.’

Kand kuku nangga andi.
 dem waterCOM moment
 ‘This is the rainy season.’

Numbers

Tok Pisin numbers can be used:

Ismael, Trinity, Torot ara popla.
 name name name we four
 ‘Ismael, Trinity, Torot, us four people.’

Complex nouns and noun phrases

Combinations of Adj and N have some flexibility of ordering; for example both *kuku pmb* ‘water hot’ and *pmb kuku* ‘hot water’ were judged acceptable. Note however that there is also a closely related verbalised structure, which then has a fixed order, *kuku pmb-nd* ‘water hot-VBLZ’.

N-Adj is attested more frequently, e.g. *mangg ipu* ‘valley little’, *puknya sepe* ‘mango unripe’, *agu kitr* ‘tree black’.

But the opposite is also found e.g. Adj-N in *kurnya meke* ‘dry leaf’.

Seemingly more lexicalised combinations appear to take the N-Adj order, e.g. *kuyma nggurnya* ‘coconut dry’ (note that this example also has a morpho-phonological voicing process at the boundary).

There are also many nominal compounds like *agu mav* ‘tree belly (tree trunk)’, *keva tapa* ‘garden fence’ and *kaigura kiva* ‘wallaby paw’. The right element names the type of object, and the left element expresses more specific properties or associations.

When combined with an adjective, the compounding elements remain contiguous, as in *agu mav kitr* ‘tree belly black (black tree-trunk)’.

Complex nominal expressions are rare in the small amount of spontaneous speech collected so far. Both demonstratives and adjectives are attested spontaneously combining with nouns, but this occurs in only a minority of nominal expressions. Most spontaneous complex expressions have a noun and one modifier, either adjective or demonstrative. The only more

complex expression attested so far is the double-adjectival *kuku meni ipu* ‘water cold few = a few cold drinks’ (2024-02-08_Samuel-Ambos_02). But most nominal expressions are either a simple noun, or simple demonstrative.

Elicitation of more complex nominal expressions produces the following orderings:

N-Adj

agu kitr ‘tree black’

N-Dem

agu nemdi ‘tree this’

N-Dem-Adj

agu nemdi kitr ‘tree this black’

N-Num

asa arkita ‘fish two’

N-Adj-Num

agu kitr arkita ‘tree black two’

Modification with both number and demonstrative caused some consternation, which may indicate that this construction is marginal or absent in the language. Eventually my consultant decided that either order is possible:

N-Num-Dem

~

N-Dem-Num

agu arkita nembegu

agu nembegu arkita

I also requested a translation for a four-word complex expression, which caused further consternation. He eventually came up with the following order, but it did not appear to come naturally to him, and I note that it is not fully consistent with the N-Adj-Num expression above:

N-Num-Dem-Adj

agu arkita nembegu kitr ‘tree two this black’

Genitive expressions

Peter Muni-ndu pugu.

[name] -GEN village

‘Peter Muni’s village’ (2024-02-08_Samuel-Ambos_02)

Samuel-ndu kiva ngg-in.

name-gen footprint see-1sg.curr

‘I saw Samuel’s footprint.’

Agutmba Binatang-ndu.

vehicle name-gen

‘A vehicle belonging to Binatang.’

(y) *Draiva amba-min, “Kand numbu Areyanggon-ndu knd.”*

driversay-1sg.dist right direction name-gen road

‘I told the driver, “The right side is the Areyanggon road”.’

Case markers

Nangga comitative

Can involve people accompanying people, and non-human associations:

Nur nangga u-marng.

3pl com go-dist.1pl

‘We went with them.’

Yuta draiva nangga kasirama vu kasirama vu mnj-m-in.

‘I went with the driver in front and sat.’

Kand kuku nangga anti.

dem waterCOM moment

‘This is the rainy season.’

-rm approximate, purposive

Close to, approximate:

Apu ipu-i skul-rm yaga yaga.

mountain small-all school-approx climb climb

‘Up a little mountain, climbing to the school area.’

And a couple that look purposive, one (z) is in the section for *-i* allative below. I would guess this is cognate with the FUT tense marker in finite verbs like *ta-rm-dang* ‘shoot-fut-1sg’.

Notice also in the example with allative below, that it can be used after a non-finite verb to express an event that is the purpose of some other action.

Tmbags-rm amba-gu.

money-purp say-ds

‘They asked us for some money.’

-y allative

Could also be a more general locative. Appears several times, with *pugu-y* ‘to the village’ and *apu ipu-y* ‘up the small mountain’. Can also be a syllabic vowel after a consonant:

(z)*Navundi marasin mng rm tawun-i u-i.*

woman medicine get purp town-all go-3sg.curr

‘The woman went to town for medicine.’

-ny locative

Daniels (2015: 299) attests both *-i* and *-ny* locatives in (Katiati) Mum, and we find evidence for both. E.g.

Kimbul kunya samba-ny. [njamba]

name kunai close-loc

‘Close to the Kimbul kunai grass’

Questionable things

Unexplained *-ga*, following Daniels, this may be a topic marker...

Knd-ga mumdu-gu pgrgu mnggumarng.

road-?? clear-ds ?? descend-1pl.dist

‘They cleared the road and we went down.’

U-ta Holy Spirit apu-ga yagu-ta.

go.ss name mountain-?loc climb-ss.

‘Going to the Holy Spirit mountain we climbed.’

Unexplained *nu* here, could be speech error:

Nyanggru nu kuma-ny yv-in.
 mosquito ?? hand-instr squash-1sg.curr
 ‘I squashed a mosquito with my hand.’

Nominal classification and quantification

Reference to objects involves a classification system, based on shape, substance and function. It is evident in the extensive use of compound nouns (e.g. *man-mnd* ‘ripe banana fruit’, *man-mk* ‘banana leaf’), and in quantifiers and demonstratives (e.g. *kru mngga* ‘one man’, *navundi ngamb* ‘one woman’).

The following potential nominal classifiers have been identified so far. I have yet to establish clear criteria for what counts as a classifier, as opposed to a nominal involved in several compounds. For some of these the usage in quantification constructions remains to be checked, and there may also be some evidence from demonstratives.

Form	Gloss	Attested Constructions	Objects
<i>gas</i>	cloth	<i>arki-nggas</i> , <i>n-gas</i> , <i>nda-gas</i>	limbum bark mat, net bag (bilum), clothing, loincloth, woven basket
<i>tmba</i>	rigid	<i>mnggiya-tmba</i> , <i>arki-tmba</i>	plank, metal sheet, dinner plate, spinning top, finger, toe, small bamboo species, vehicle
<i>krv</i>	log	<i>arki-nggrv</i>	cut log, chopped sugar cane, cylindrical sago block
<i>pungg</i>	hollow	<i>arki-vungg</i>	neck, bamboo tube, kundu drum, acoustic guitar, radio, telephone, plastic water container
<i>nggrs</i>	seed	<i>arki-nggrs</i> , <i>n-grs</i>	seed, small stone, betelnut, coin, ball of clay, eye, tooth, combi fruit, marble, mustard bean, cacao bean, ankle, breadfruit seed, liver
<i>psa</i>	skin		skin, estate, tree bark, shoe

<i>mnd</i>	ripe		ripe fruit, fallen limbum bark
<i>mungg</i>	ball		human head, coconut, pumpkin, papaya
<i>tm</i>	stick	<i>arki-ndm</i>	stick, arrow, a hundred kina
<i>vat</i>	?body	<i>arki-mbat, ?X-vat</i> 'person from X tribe'	fallen tree / uncut log, dead body
<i>muk</i>	?egg		egg, knee, sago ball, heart, tree trunk rounded hollow
<i>samb</i>	pulp	?homophonous word used for many people, many vehicles	sago pulp, rotten wood pulp
<i>siki</i>	long		vine, rope, vein, throat, shoreline, little finger
<i>mr</i>	apex		apex of house, midday sun, God, tree tips, river source, plant sap

Kin terms

Sweeney 1994b provides information about kin terms. I have collected only a few and not systematically. There are also birth order names, recorded in notes by Don Daniels and myself.

Siblings

	Kin: M, Older	Kin: M, Younger	Kin: F, Older	Kin: F, Younger
Speaker: M	ya-si	ya-ra	ya-rma nungu-rma	ya-rma-ndak
Speaker: F	ya-si	ya-ra-tak	ya-si-gat nugu-si-gat	ya-ra-gat

Verbs

The verbs are cool.

Tense suffixes

There are quite a lot of different tense/aspect (mostly tense) categories distinguished by suffixes following the verb stem. Many of these distinguish the distance of past events from speech time, as described in the sections on future and past tense distinctions.

Tense distinctions are made only at the end of a clause chain, as non-final clauses instead have a same-subject or different-subject suffix directly following the verb stem, and no tense suffix. This is further described in the section on clause chains.

States

ky ~ gi is in general related to states. It may also be used for presentational constructions.

May kaygura kiva kanda gy.

intj wallaby foot dem state

‘There’s a wallaby paw print!’ (2024-02-08_SaAm_01)

Pluractional and habitual

ndV is used for habitual actions, at least in the past but perhaps in other times too. It may also be used for pluractional events with subevents. To be sure of this, we still need to find well-contextualised examples that indicate whether the subevents must be spread out over a long period of someone’s life, or whether they can occur within a single episode.

The *-ndV* suffix appears to be in complementary distribution with tense markers like *-m* dist.

Tugu sgm tar-i.

now pig spear-curr.3sg

‘He just speared a pig.’

Tara-ndi.

spear-plct.3sg

‘He speared some (pigs).’ (2024-02-09_SaAm_03)

Tara-marng.

spear-dist.1pl

‘We speared it (long ago).’

Ara tar-ndarng.

spear-plct.1pl

‘We speared some.’

One example could potentially show two pluractional markers together in one verb, but this needs checking:

Yand yamaka Mum kuyu-y kuy-nda-ndi.

my mother NAME language-LOC speak-?PLRCT-PLRCT.3SG

‘My mother speaks Mum language.’

Collective actions

-*rama* seems to make verbs with collective participants of various types:

tva-rama-ta

‘run together’

tanggra-rama-min

hang-coll-1sg.dist

‘I hung them up’

isgu-rama-gi-n

show-coll-ds-1sg.curr

‘I showed them (three pigs)’

... But there seems to be another verbal marker for distributivity, or ‘little pieces’, -*mbra*:

Yuvuraga-mi

chop-3sg.dist

‘he chopped it’

Yuvuraga-mbra-mi

chop-distr-3sg.dist

‘he chopped it into pieces’

Yuvuraga-mbra-mu

chop-distr-3pl.dist

‘They chopped it into pieces.’

Demonstrative incorporation or diminutive marker?

I have so far come across several instances of what seems like the demonstrative -*ganda* being ‘incorporated’ into verbs, that is to say occurring between a verb stem and its suffix. Some of the examples appear to have a diminutive meaning, in which case the -*ganda* marker may not have a demonstrative function, but this needs further investigation:

Mnga-ganda-ta apu-ga.

‘we went down the (little) mountain’ (2024-02-08_SaAm_02)

Nung mnga-ganda-gin irg-i.

‘I started to grab him and he cried out.’ (2024-02-11_SaAm_02)

Karga-ganda-min.

‘I slept (?a little).’ (2024-02-11_SaAm_06)

Verb suffix paradigms

Here are some of the more complete paradigms elicited
Underscore indicates notable irregularities

	CURRENT	YESTERDAY	DISTANT PAST	MID PAST
1SG	<i>u-n</i>	<i>u-s-n</i>	<i>u-m-in</i>	<i>u-s-m-in</i>
2SG	<i>u-na</i>	<i>u-s-na</i>	<i>u-ma-na</i>	
3SG	<i>u-y</i>	<i>u-s-r</i>	<i>u-m-i</i>	
1PL	<i>u-rng</i>	<i>u-s-rng</i>	<i>u-ma-rng</i>	
2PL	<i>u-ra</i>	<i>u-s-ra</i>	<i>u-ma-ra</i>	
3PL	<i>u-yu</i>	<i>u-s-yu</i>	<i>u-m-u</i>	
	FUTURE	HABITUAL	IMPERATIVE	
1SG	<i>u-rma-n</i>	<i>u-nd-in</i>	-	
2SG	<i>u-rma-na</i>	<i>u-nda-na</i>	<i>ugu</i>	
3SG	<i>u-rmand</i>	<i>u-nd-i</i>	<i>u-m</i>	
1PL	<i>u-m-dang</i>	<i>u-nda-rng</i>	<i>u-m</i>	
2PL	<i>u-rmand-ra</i>	<i>u-nda-ra</i>	<i>u-ma-ra</i>	
3PL	<i>u-rmand-yu</i>	<i>u-nd-u</i>	<i>u-m-u</i>	
	DIFFERENT SUBJ	FUTURE PROX	PRECURSOR	
1SG	<i>-gin</i>	<i>u-t-n</i>	<i>u-t-tn</i>	
2SG	<i>u-ga-na</i>	<i>u-na</i>	<i>u-na-na</i>	
3SG	<i>-gi</i>	<i>u-t-i</i>	<i>u-ti-ti</i>	
1PL	<i>-garng</i>	<i>u-t-rng</i>	<i>u-tr-trng</i>	
2PL		<i>u-t-ra</i>	<i>u-tra-tra</i>	
3PL	<i>-gu</i>	<i>u-t-u</i>	<i>u-tu-tu</i>	
SS: <i>u-ta</i>				

Table. Verb paradigm, *u-* ‘go’.

	CURRENT	YESTERDAY	DISTANT PAST
1SG	<i>tar-in</i>	<i>tara-s-n</i>	<i>tara-m-in</i>
2SG	<i>tara-na</i>	<i>tara-s-na</i>	<i>tara-ma-na</i>
3SG	<i>tar-i</i>	<i>tara-s-r</i>	<i>tara-m-i</i>
1PL	<i>tara-rng</i>	<i>tara-s-rng</i>	<i>tara-ma-rng</i>
2PL	<i>tara-ra</i>	<i>tara-s-ra</i>	<i>tara-ma-ra</i>
3PL	<i>tara-yu</i>	<i>tara-s-yu</i>	<i>tara-m-u</i>
	FUTURE	HABITUAL	MID PAST
1SG	<i>ta-rma-n</i>	<i>tara-nd-in</i>	<i>tara-s-m-in</i>
2SG	<i>ta-rma-na</i>	<i>tara-nda-na</i>	<i>tara-s-ma-na</i>
3SG	<i>ta-rmand</i>	<i>tara-nd-i</i>	<i>tara-s-m-i</i>
1PL	<i>ta-rm-dang</i>	<i>tara-nda-rng</i>	<i>tara-s-ma-rng</i>
2PL	<i>ta-rmand-ra</i>	<i>tara-nda-ra</i>	<i>tara-s-ma-ra</i>
3PL	<i>ta-rmand-yu</i>	<i>tara-nd-u</i>	<i>tara-s-m-u</i>

Table. Verb paradigm, *tara-* ‘shoot, spear’.

	CURRENT	YESTERDAY	DISTANT PAST
1SG	<i>yvrág-in</i>	<i>yvrága-s-n</i>	<i>yvrága-m-in</i>
2SG	<i>yvrága-na</i>	<i>yvrága-s-na</i>	<i>yvrága-ma-na</i>
3SG	<i>yvrág-i</i>	<i>yvrága-s-r</i>	<i>yvrága-m-i</i>
1PL	<i>yvrága-rng</i>	<i>yvrága-s-rng</i>	<i>yvrága-ma-rng</i>
2PL	<i>yvrága-ra</i>	<i>yvrága-s-ra</i>	<i>yvrága-ma-ra</i>
3PL	<i>yvrága-yu</i>	<i>yvrága-s-yu</i>	<i>yvrága-m-u</i>
	FUTURE	HABITUAL	
1SG	<i>yvrág-rma-n</i>		
2SG	<i>yvrág-rma-na</i>		
3SG	<i>yvrág-rmand</i>		
1PL	<i>yvrág-rm-dang</i>		
2PL	<i>yvrág-rmand-ra</i>		
3PL	<i>yvrág-rmand-yu</i>		

Table. Verb paradigm, *yvrága-* ‘arrive, come’.

	CURRENT	FUTURE	DISTANT PAST	YESTERDAY
1SG	<i><u>k-n</u></i>	<i>k-rma-n</i>		<i>k-s-n</i>
2SG	<i>k-na</i>	<i>k-rma-na</i>		<i>k-s-na</i>
3SG	<i><u>k-y</u></i>	<i>k-rmand</i>	<i>ki-m-i</i>	<i>k-sr</i>
1PL	<i>k-rng</i>	<i>ky-m</i>		<i>k-s-rn</i>
2PL				<i>k-s-ra</i>
3PL			<i>ki-m-u</i>	<i>k-si-yu</i>
	IMPERATIVE	MEDIAL DS	HABITUAL	
1SG		<i><u>ki-gi-n</u></i>	<i>k-ndi-n</i>	
2SG	<i><u>knyi</u></i>			
3SG		<i><u>ki-gi</u></i>	<i>k-ndi</i>	
1PL			<i>k-nda-rng</i>	

Table. Partial paradigm, *ky-* ‘stay’.

Note that *gi*, a kind of imperfective marker after verbs, appears to be related to *k-y* ‘stay-3sg.curr’. There is phonetic variation *k-y* [kij ~ kiji ~ kiji].
Habitual form is used to express where someone resides.

Verbs can be borrowed, at least in the ss medial form, e.g. *stop-ta* ‘we stopped...’

Time and tense

Here are some lexical time expressions:

kuga	long ago
kuga-nda	long ago
k’kaingrng	day before yesterday
ayang	yesterday
?tgu	current, recent
tgura	just now, very short time ago
musi	today
kupsung	morning
kuptiti	afternoon

amu	tomorrow
mugv	next day
mugv mugv	future
kv	night

Tense distinctions for future events

There are two different future tenses, shown here for the verb *u-* ‘go’ (see also Verb suffix paradigms for the full selection of tense suffixes). The future proximate also has a reduplicated form, to be discussed below. I also include the imperative tense here, since it also expresses events that are yet to happen, though with a stronger modal colouring.

	FUTURE	FUTURE PROXIMATE	IMPERATIVE
1SG	<i>u-rman</i>	<i>u-tn</i>	-
2SG	<i>u-rma-na</i>	<i>u-na</i>	<i>ugu</i>
3SG	<i>u-rmand</i>	<i>u-ti</i>	<i>u-m</i>
1PL	<i>u-mdang</i>	<i>u-trng</i>	<i>u-m</i>
2PL	<i>u-rmand-ra</i>	<i>u-tra</i>	<i>u-ma-ra</i>
3PL	<i>u-rmand-yu</i>	<i>u-tu</i>	<i>u-m-u</i>

Table. Future forms of the verb *u-* ‘go’.

The (general) **future tense**, *-rmand* FUT, is used for an event that is yet to happen, and has not started yet. It is the most frequently used future tense, and does not have any restrictions on how far away the projected future time is from speech time. The 1pl future suffix is morphologically aberrant, and likely derives from a first-person dual form in North Central Sogeram, based on evidence from Sirva (Daniels 2015: 708).

[ADD more examples of general future]

The general future is also the tense provided when eliciting a question about the timing of a future event:

- (x) *Pandgumi u-rmandra?*
 when go-FUT.2PL
 ‘When will you all go?’ (2025-07-07_Field-notes)

Although there is a distinct proximate future tense, the general future is also sometimes used for events that are about to occur. For example in this instance the projected event begins a few seconds after speech time:

Amba va-rman kambu.
 story say-FUT.1SG PROX
 ‘I’ll tell the story about this.’ (2025-07-07_CP_01)

Future tense can also be used for events that are projected in the future from a past reference time. In (x) this is indicated by the second clause using a past tense.

Pr ar-gand Savnd vana mng-rmand pata pindga-sr n.
 soil 1pl-poss name language grasp-fut.1pl come enter-yest prox
 ‘The soil would take our Savnd language, (the tribe) moved in here.’ (2025-07-09_KSI_01)

The future tense can also be used for projected events that are uncertain to occur:

Kuyu ipu yvrag-rmand vatara.
speech small appear-fut.3sg maybe

‘A little story could come up maybe.’ (2025-07-09_KSI_03)

Future tense, combined with the propositional framer *va-*, can be used to indicate an intention that goes unfulfilled.

(x) *Sgm ta-rman va-ta kura-ny umin.*
pig spear-fut.1sg say-ss forest-loc go-dist.1sg

‘I wanted to spear (I will spear, I thought) a pig so I went to the forest.’ (2025-07-03_KeKu)

(y) *Kva-ny ugi nungand kandi kandamdi yvragagi.*

‘She went to the garden, her sickness came on.’

Angga pay-mi pa-rman va-ta andgi avgati kptiti.
return come-dist.3sg come-fut.1sg say-ss then hungry evening

‘She was coming back, she was trying to come (I will come, she thought), hungry in the evening.’ (2025-07-10_CP_04)

The **imperative tense** requires further research. Whereas Mum verbal paradigms generally involve distinct forms for every tense/person cell, the imperatives involve several syncretisms. The *-mara* IMP.2PL and *-mu* IMP.3PL forms appear to be syncretic with the same person forms in distant past. The IMP.2PL has several naturalistic examples that appear to be semantically quite distinct from distant past tense. For example (x) is a series of instructions given to multiple workers in a procedural demonstration, while (y) is from a narrative quoting adults instructing children. Thus the IMP.2PL / DIST.2PL syncretism appears to be well evidenced, despite its divergence from the rest of the suffixation system. On the other hand, the IMP.3PL form is thus far known only from elicitation.

(x) *Ariya siki*
‘Okay, rope!’

Karava-mara!
‘(You all) wrap it around!’

Sang nggu-mara!
nothing give-imp.2pl
‘(You all) just give it to him!’ (2025-07-04_BHD)

(y) *Andgu nyingin smbmarng.*
‘Then they sent the children.’

“*Nar u-mara!*”
2pl go-imp.2pl
‘“You all go!”’

“Uta nurng Wasu tmbuta nurgand maku-ga mngata pay-mara!”
come-imp.2pl
‘“Go to them at Wasu, get their cargo, bring it back!”’ (2025-07-07_CP_02)

There also appears to be person syncretism, between *-m* IMP.3SG and *-m* IMP.1PL. This is unexpected since all persons are distinct in all other tenses. In elicitation this suffix was given

for both persons, though it would be desirable to have clearer naturalistic examples demonstrating that it does indeed apply to both persons.

Finally, for 2SG the imperative does not have a regular suffix, but instead a variety of bare stem and irregular forms. The following have been identified so far:

U-gu! ‘Go!’

Pa-ny! ‘Come!’

Mnga! ‘Hold!’

Ngggu! ‘Give!’

Yg! ‘Close it!’

Contrasting with both the basic future tense and the imperative is the **proximate future tense**, *-t* FUT.PROX, which is used for events that have not yet happened, but are very close to happening. Since imperatives tend to mandate actions to happen soon, the proximate future and the imperative may be subtle alternatives in some situations.

In some examples, the proximate future may be construed as the next event to occur after an event that is already underway or is imminently commencing. Most of our naturalistic examples occur in two-clause sentences, with the future proximate verb in either first or second half of the sentence. In the examples where the future proximate is the first clause, the second one always uses the general future tense, or the imperative. An example with general future (x) suggests that when future proximate and general future events are juxtaposed, the future proximate is represented as occurring closer to speech time. In example (x), the two events could be conceived as temporally overlapping; however we will see below that a reduplicated form is used to specifically construe future events as overlapping. The arrival event that is marked with future proximate is here projected from a past reference time in which it was imagined. In the first sentence it is projected with the general future, and in the second sentence as proximate future, though it is unclear why this is the case.

- (x) *Angga vu pamata va-ga yvraga-rmand nungambi t-gi.*
 return SUPP when say-DS appear-FUT.3SG PROX.MASC do-ds.3SG
 ‘I wondered when (a white person) would come back and appear, this is the guy now.’
- Anti u-ta yvrage-ti ngg-mdang.*
 then go-SS appear-FUT.PROX.3SG see-FUT.1PL
 ‘(the white person) will arrive, we will see him.’ (2025-07-09_KSI_01)

More examples have been identified where a future proximate is followed by an imperative (y-zz), as well as further examples below where it comes after an imperative. This raises the question of whether the future proximate is in fact connected with modality, rather than temporal proximity. On the other hand, it may be simply that imperative utterances often imply temporally proximate future actions, and vice versa. Examples (y-zz) use future proximate to project one or two actions that will occur immediately after speech time, and which are preparatory actions for a culminative action, expressed with an imperative verb.

- (y) *Km-ga indgu-ti mikiram-trng kava kur-m.*
 bow-top enter-fut.prox.3sg clear.path-fut.prox.1pl bird shoot-imp.3sg
 [Describing the next action about to take place as a group together build a bird hide]
 ‘He will bring the bow inside, we’ll get out of the way, then he must shoot the bird.’
 (2025-07-04_BHD) [CHECK why is there no DS marking here??]

- (z) *Nmbu mnga-ta tam-tra indgu-m.*
 dist hold-ss put-fut.prox.2pl enter-imp.1pl
 ‘You all will take (the bow) to the other side then pass it inside.’ (2025-07-04_BHD)
- (xx) *“Tam-na tam-tra smag-m,” va-mu.*
 put-fut.prox.2sg put-fut.prox.2pl fasten-imp.1pl say-dist.3pl
 “‘You will put (the magic stone), you will all put it, then we must fasten it,” they said.’
 (2025-07-07_CP_02)

We turn now to examples in which the future proximate occurs after some other clause in a sentence. These involve a first clause that is either non-finite, where the agent of both actions is the same (w, x), or a first clause with imperative aimed at the addressee, followed by a second action to be enacted by the speaker (y).

- (w) *Mun mnga-ta nggu-tra.*
 another grab-ss give-fut.prox.2sg
 ‘You all will grab another one and give it.’ (2025-07-04_BHD)
- (x) *U-ta mnj-tn.*
 go-ss sit-fut.prox.1sg
 ‘I’m going to sit down.’ [spoken while standing in a conversation, indicating that the speaker is about to leave the conversation] (2025-07-07_Field-notes)
- (y) *Panga nggu na mar-tn.*
 string.bag give.imp.2sg conj carry-fut.prox.1sg
 ‘Give me the string bag and I’ll carry it.’ (2025-07-03_ChAm)
- (z) *Kasiram-na u-tn.*
 go.first-imp.2sg go-fut.prox.1sg
 ‘You go first and I will go (after).’ (2025-06-30_Field-notes)

The future proximate is also used in a common polite expression, a simple sentence used when parting from someone. Note that there appears to be variation in the suffix form of this verb, though this needs to be CHECKED.

- Na-ng atara ngg-tin. ~ nggatn*
 2sg-dat later see-fut.prox.1sg
 ‘I’ll see you soon.’ (2025-07-05_SK_03)

One other use is in self-correction, where the future proximate tense indicates the corrected speech act. Note that this example also illustrates sensitivity to the appropriateness of different past tenses.

- Anta yaga-marng ... “yaga-smarng” v-tn.*
 after ascend-dist.1pl ... ascend-med.1pl say-fut.prox.1sg
 ‘After that we came up (dist. past) ... “we came up (med/ past)”, I should say.’ (2025-07-07_CP_01)

The future proximate also occurs in a reduplicated form, which I call the ‘**precursor**’ form. It is formed by reduplicating onset and nucleus if there is one, but not the coda, of the future proximate suffix, thus C(NC) > C(N). The precursor form is used to express an event that is projected to occur, and will be the setting for a following event, which will overlap with it. Notice that this is similar to the use of reduplication in different-subject verbs that temporally overlap with the following event (see §Clause chains).

will be immediately followed by some other event. In keeping with this function, this tense is generally used as the first half of complex sentences [CHECK] of the form ‘first X will happen, then Y will happen’.

	FUTURE PROXIMATE	PRECURSOR
1SG	<i>u-tñ</i>	<i>u-ttn</i>
2SG	<i>u-na</i>	<i>u-nana</i>
3SG	<i>u-ti</i>	<i>u-titi</i>
1PL	<i>u-trng</i>	<i>u-trtrng</i>
2PL	<i>u-tra</i>	<i>u-tratra</i>
3PL	<i>u-tu</i>	<i>u-tutu</i>

Table. Future forms of the verb *u-* ‘go’.

- (x) *Kama-rm nda u-trtrng kutvu pa-na.*
 this-purp dist go-prec.1pl back come-2sg.fut.prox
 ‘For this (to get money), once we go (to town), you follow us behind.’ (2025-07-07_CP_01)
- (y) AlKu: *Yi ambava-rman sgnda.*
 1sg story say-fut.1sg next
 ‘I will tell a story next.’
- MaKu: *Na ambavar-nana yi sginda.*
 2sg story say-prec.2sg 1sg next
 ‘You will narrate and I will follow (with questions and comments).’ (2025-07-10_CP_04)
- (z) *Yi u-ttn na sgnd pany.*
 1sg go-prec.1sg 2sg next come.imp.2sg
 ‘Once I go, you come after.’ (2025-07-10_SoKu)

It is also worth mentioning that the word for evening, *kvtiti* ~ *kptiti*, may be derived from a reduplicated proximate future construction, i.e. *kv-ti-ti* ‘night-FUT.PROX.3SG-RDP’, though this does not syntactically function like a verb.

Tense distinctions for past events

Mum has multiple tenses that can be used to express events that occurred before speech time. The most general is the distant past, while the yesterday tense and the medial past both have more specific temporal meanings, and the current tense can be used for events that occurred earlier on the day of speech. Morphologically, the current tense is unmarked, yesterday and distant past are marked with *-s* and *-ma* respectively, and the medial past combines the latter two suffixes, *-s-ma*.

	CURRENT	YESTERDAY	DISTANT PAST	MID PAST
1SG	<i>tar-in</i>	<i>tara-s-n</i>	<i>tara-m-in</i>	<i>tara-s-m-in</i>
2SG	<i>tara-na</i>	<i>tara-s-na</i>	<i>tara-ma-na</i>	<i>tara-s-ma-na</i>
3SG	<i>tar-i</i>	<i>tara-s-r</i>	<i>tara-m-i</i>	<i>tara-s-m-i</i>
1PL	<i>tara-rng</i>	<i>tara-s-rng</i>	<i>tara-ma-rng</i>	<i>tara-s-ma-rng</i>
2PL	<i>tara-ra</i>	<i>tara-s-ra</i>	<i>tara-ma-ra</i>	<i>tara-s-ma-ra</i>
3PL	<i>tara-yu</i>	<i>tara-s-yu</i>	<i>tara-m-u</i>	<i>tara-s-m-u</i>

Table. Tenses used for past events, illustrated with *tara-* ‘shoot, spear’.

The **current tense** is used for current or recently completed events. It is morphologically unmarked, that is to say, current tense verbs have no suffix in the position between stem and subject suffix, where other tense have an overt tense suffix. Current tense is used for events that are underway at speech time, as in (x), which was said to me as the event was being witnessed by the speaker and myself, and (y), where the quoted speaker describes an extended event that is still unfolding. But it is also used for events that have completed before speech time, as in (z), which was said to me some moments after we witnessed the occurrence.

- (x) *Peter kuku kuvraguvra vungg arkita mnga-ta pa-y.*
 Peter water drinking.water container two hold-ss come-curr.3sg
 ‘Peter is bringing two containers of drinking water.’ (2025-07-05_SK_03)
- (y) “*Aa yasi John nangga Samuel yivu pa-yu,*” *va-mu.*
 INTJ bro.elder John COM Samuel now come-CURR.3PL say-DIST.3PL
 “‘Brother John and Samuel are coming today,” they said.’ (2025-07-07_CP_02)
- (z) *Akakara kmba-i yagw-i.*
 chicken top-LOC ascend-CURR.3SG
 ‘The chicken jumped up on top (of a wooden frame).’ (2025-07-05_SK_03)

Because our recordings generally involve either narratives of long past events, or procedural instructions, we have few naturalistic examples of the current tense, though I have the impression that it is frequently used in everyday interaction. In elicitation, speakers consistently use the current tense when asked how to describe events that occurred either ‘this morning’ or ‘just now’ (y, z). On another occasion, I was instructed to use a current verb form without any adverbial modifiers, after an insect bit me on the genitals moments earlier (yy). It is also the form elicited when describing the lighting of a fire, which was not given any temporally specification, but can be presumed to be recent since the fire was still burning (zz).

- (y) *Tugu kupsung sgm tar-i.*
 now morning pig spear-curr-3sg
 ‘This morning he speared a pig.’ (2025-07-05_DA-JA_tenses)
- (z) *Tugu sgm tar-i.*
 now pig spear-curr-3sg
 ‘He just now speared a pig.’ (2025-07-05_DA-JA_tenses)
- (yy) *Akvat yang s-i.*
 insect 1sg-acc bite-curr.3sg
 ‘An insect bit me (just now).’ (2025-06-30_Field-notes)
- (zz) *Agu pamata krav-na.*
 fire how cook-curr.2sg
 ‘How did you light the fire?’

The **distant past tense**, *-ma* DIST, is used very frequently for events that occurred before speech time, and it might be considered a kind of general or default past tense, as speakers often propose it as a translation when the time of occurrence has not been specified.

[ADD examples with specifically distant time, and those with unspecific time]

The distant past is the tense elicited by a question about the timing of a past event:

- (x) *Na pandgumi yvragr-mana?*
2sg when appear-DIST.2SG
'When did you arrive?' (2025-07-07_Field-notes)

The **yesterday past tense** could also be labelled the 'recent past', since not all uses are strictly the day before speech. However it also has a clear relationship to the day before speech, as speakers tend to explain it as 'yesterday'. In elicitation context it is consistently used when eliciting sentences containing 'yesterday', and in general not used for other contexts (for some exceptions see below).

Some good spontaneous examples occur in a narrative about a troublesome pig. Most of the narrative uses distant past or medial past (see below), but after the pig has been killed in the main action, the narrator then switches to some further events that occurred the day before speech time (x). This passage uses the yesterday past for its tensed clauses (note that medial verbs, as in the first clause, have no tense).

- (x) *Am u-ta ngga-gin.*
yesterday go-ss see-DS.1SG
'Yesterday I went to see,'
Mugumugum avi k-siyu.
various.types good stay-yest.3pl
'that all the (vegetables) were okay.'

[3 clauses]

"Kru-ndu mav gumbany indguta,"
man-gen belly ?? enter-ss
' "Now you are inside mens' bellies," '

"Su tvur-na," va-sn.
shit change-CURR.2SG say-YEST.1SG

' "You have turned into shit (you have been digested)," I thought.' (2025-07-07_CP_01)

Another spontaneous example shows use of the yesterday past with an event that clearly took place a long time ago. Continued relevance of the situation is a possible explanation.

Kru mukr nma.

'These white men (missionaries).'

Argand nyimbi yigta yagamrata pindgasr.

'They called our names, (the tribe) got up and came in (to the missionary village).'

I turn now to evidence regarding the temporal boundary between yesterday and today. A rain episode that commenced the day before speech and continued into the night, but was completed around midnight, is expressed with the yesterday form (x), as is a nocturnal event that was completed by dawn (y). The former of these examples also shows an interesting example of a TAM/person suffix attaching to a temporal word, *kvngit-sr* 'midnight-YEST.3SG'. However when someone had been sitting in the house wind from midnight until dawn, and reported this fact at 7am, this was expressed with the current tense, likely because

it is construed as overlapping with the day of speech. On the other hand, when someone expressed that there were working on a task the day before speech, but had not completed it, they used the yesterday tense (zz), perhaps because although the overall task remained uncompleted, the spate of work conducted on the previous day was construed as complete.

- (x) *Am kuku turutmb u-ta kygi u-ta kvngit-sr.*
 yesterday water rain.cont go.ss stay-ds.3sg go.ss midnight-yest.3sg
 ‘Yesterday it rained continuously until midnight’ (2025-07-13_Field-notes)

- (y) *Ayang kvi avi mang-karga-sin.*
 ‘I did not sleep well last night.’ (2025-06-30_Field-notes)

- (z) *Kvngiti ni-ny ms-ta ky-gi-n pgr.*
 midnight prox-loc sit-ss stay-ds-curr.1sg light
 ‘I’ve been sitting here from midnight until dawn.’ (2025-07-13_Field-notes)

- (zz) *Manda mutu-sn.*
 not.yet finish-yest.1sg
 ‘I didn’t finish it yet (yesterday).’ (2025-07-07_Field-notes)

The yesterday past is also used in some elicited contexts where there has been no mention of ‘yesterday’ (either in the current prompt, or in the immediately preceding prompts). One possibility is that yesterday tense can signal a combination of completedness and ongoing relevance. One speaker explained a pair minimally contrasting sentences to me in this way. Example (x) uses yesterday past to address someone who has already arrived at one’s village. By contrast, the current tense is used in (y) to address someone who is one their way somewhere. Although we have seen above that the current tense can also be used for recently completed events, the contrast in (x, y) raises the possibility that yesterday past may in some situations distinguish a completed event from one that is incomplete. Notice also that the arrival of a traveller should also be considered relevant if the traveller is still there. In the same discussion, the speaker also proposed a combination of yesterday past with the negation suffix as a way of asking about an event that did occur, but should not have (z). These constructions require further research.

- (x) *Na mum-rm pa-sna?*
 2sg what-purp come-yest.2sg
 ‘Why did you come?’ (2025-07-07_Field-notes)
- (y) *Na mum-rm pa-na?*
 2sg what-purp come-yest.2sg
 ‘Why are you coming?’ (2025-07-07_Field-notes)
- (z) *Ma-indgu-sna?*
 NEG-enter-YEST.2SG
 ‘Why did you enter (my house, when you shouldn’t have)?’

Another speaker provided an alternative formulation for distinguishing completed and ongoing events, in this case without clear relevance to speech time. In this instance, both events were expressed in the current tense, but with the completed event adding an extra *-ga* suffix. This suffix is not yet well understood, though it has previously been described as either topicalising constituents or subordinating clauses (Daniels 2015: 279).

- (x) *Yagw-in-ga.*
 ascend-curr.1sg-top
 ‘I have walked up (finished).’ (2025-06-30_Field-notes)

- (y) *Yagw-in.*
ascend-curr.1sg
'I am walking up.' (2025-06-30_Field-notes)

The **mid-past tense** -*sm* MID is the least well understood of the past tenses. At least for some speakers, it does appear to have a relatively clear temporal meaning expressing events that occurred before yesterday, up to about a month ago. However this time span is not clearly distinct from the distant past, which for most or all speakers can also be used for all events earlier than yesterday. The oldest speaker I consulted proposed that only yesterday past is acceptable for the day before speech, both distant and mid- past are acceptable for time between two days ago and a few days ago, with only distant past being acceptable beyond that:

<i>tugura yvrage-i</i> (CURR)	'arrived today'
<i>ayang yvrage-sr</i> (YEST)	'arrived yesterday'
<i>aykrung yvrage-sm</i> (MID) ~ <i>yvrage-mi</i> (DIST)	'arrived two days ago'
<i>kkayngrng yvrage-sm</i> (MID) ~ <i>yvrage-mi</i> (DIST)	'arrived three days ago'
<i>apnay yvrage-sm</i> (MID) ~ <i>yvrage-mi</i> (DIST)	'arrived four days ago'
<i>kuga yvrage-mi</i> (DIST)	'arrived a long time ago'

On another occasion, a senior speaker Raymond Kumbaimara explained the distinction between the mid-past and distant past tenses as follows (in mixed Tok Pisin / English, with partial translations inserted in square brackets):

'*Tara-smi* (spear-MID.3SG), em i olsem [that's like], em i bin shutim last wik o three days bifo. *Tara-mi* (spear-DIST.3SG), em i samting i kamap [happened] long ol taim bifo. Some years ago. Taim i stap liklik mangki i bin shutim. [He speared it when he was a young boy.] O tumbuna em shutim [Or if ancestors speared it] em *tara-mi* (spear-DIST.3SG). *Tara-smi* (spear-MID.3SG), em i olsem, laswik tasol [just last week] em i shutim... three days before, one week.' (2025-07-01_AnKu_05)

However the temporal specification of mid-past described above does not account consistently for all the examples encountered. One example heard in the wild (x) describes a house-building event that did not occur within the last week, but rather some years ago. The explanation for this is unclear.

- (x) *Mnunga tav (smbra) mnga-smi.*
husband house work hold-mid.3sg
'Her husband built the house' (2025-07-07_Field-notes)

A series of spontaneous examples of mid-past tense occur in a narrative, the beginning of which occurs 4–5 months before speech time.¹ In the opening of the narrative, several distant past verbs are used, as well as a current tense verb (for reasons that remain unclear).

¹ As estimated by the speaker, Jerry Marimaka. We discussed this after translating the narrative in early July 2025, and Jerry said that the events happened in February of the same year. The narrative begins with the temporal adverb *aykrung*, which has been translated at other times as 'a few days ago', but Jerry said that was not a good way of expressing it, and *mutawk ndany* 'the other month' would have been better. This suggests that the temporal meaning of expressions like *aykrung* may be flexible, but this needs more research.

JeMa: *Sgm nand-ga ... mngamu gamang.*
'Your pig, the one they took.'

Tmba-grs nggu-mu o ma-nggu-mu?
stone-seed give-DIST.3PL or NEG-give-DIST.3PL
'Did they give money for it or not?'

SoKu: *Manda usi ... ma-nggu-yu.*
not.yet still neg-give-curr.3pl
'Not yet, they didn't give any.'

Soon after this, the narrative moves into another phase, signalled by a time adverbial *mutawk ndany* 'that month', which was here translated by consultants as 'las mun', i.e. 'last month' or perhaps 'a month ago'. The tense also shifts, to the mid-past. However the next few clauses do not continue in this tense, but rather use a mixture of current and distant past tenses, before completing the passage with another clause in the mid-past tense.

SoKu: *U-smin mutawk ndany.*
go-MID.1SG moon DEM.DIST
'I went (to Madang) last month.'

uta kigin kigin man gand gi nurng pindvind-iny
'I went but didn't get it, so I called them by phone'

Kuynda varata ki tugu ngg-in.
talk ?? ?stay.curr.3sg now ?see-curr.1sg
'? I talked to them (on the phone) and asked them (about the money)'

Manda usi.
'Not yet.'

Ma-mngarng usa tgi angga pugu-i uta.
'We didn't get it yet, then we went back to the village'

"Angga mba-tara!"
return ?come-fut.prox.2pl
'"You all come back first!"'

"nand tmba-grs ga angga- gumdang" vamu
'"we will come back and give your money," they said'

vagu pa-smin pugu-i
'they said that and I came to the village'

A second narrative unfolds via questions and answers, and deals with events that occurred about one week before speech time. The questioner Solbanus uses the mid-past tense, while the answerer Jerry mostly responds using the distant past. Jerry only uses the mid-past once, which is a direct answer to Solbanus using the same verb stem (*mang-u-smana ... mang-u-smin*), and may therefore be attributed to mirroring the form of the question; however the next question-answer also repeats the same verb stem, while changing tense (*k-smana ... ki-min*).

SoKu: Aa ... mnggata nmbu... yang nangga kta yagu-**smana** gany
'Ah, going down here, you went up to my place'

mugum smbira mnga-**smana**

‘what were you doing?’

JeMa: yaguta smbira aru nyambas and-**min**

‘I went up there and I did a big task’

smbira mnga-**min**

‘I did some work’

agumnd nmata ... nngnng

‘ripe crops like that [points to cacao grove], these ones’

tpa tpa nyambas ambagin

‘I mean, the thick grass’

nyingi yang guramata tavuga-**mu**

‘the children were helping me to cut it’

SoKu: smbira mngata ... pugu aru ndany mang-u-**smana**?

‘working, you didn’t go to the big village (Madang)?’

JeMa: mang-u-**smin**

‘I didn’t go.’

SoKu: pugu-y taya k-**smana**

‘you just stayed in the village (Kimbugor)’

JeMa: *Pugu-y ki-min u-rm...*
village-LOC stay-DIST.1SG go-PURP
‘I just stayed, to go...’

Maku mnga-min garanu...
goods hold-dist.1sg ?unable
‘I wanted to collect goods...’

A third narrative has a similar pattern of Jerry using the distant past, and Solbanus using the mid-past. The story begins with a temporal adverb, *aykrung* ‘a couple of days ago’. However Solbanus does not use the mid-past consistently. He uses mid-past in the first clause of his story, and again in the last clause, and in between uses the distant past. The mid-past verb in final clause appears to be an overt self-correction from the distant past verb in the previous clause. As in the first narrative above, Solbanus seems to use mid-past to introduce and complete these narratives.

JeMa: *Aykrung ... kuku mngga-gi.*

2.days.ago water descend-ds.3sg

‘A couple of days ago, the rain was falling.’

uta sgm nyinggi pamata tara-**mana** nggata

‘how did you spear that pig nest’

upri urata uta tara-**mana** u sang

‘went calling out to the dogs when you went spearing, or none?’

uta tara-**mana**

‘you went spearing’

SoKu: *Amba va-rmn kambu.*
 story say-purp.1sg ??
 ‘I’ll tell that story’

Uta kuku mngga-gi kusa kavu-ta u-smin.
 go water descend-DS.3SG spear carry-SS go-PST.MID.1SG
 ‘Rain was falling, I went carrying a spear.’²

uta Kinbugur kunya nda tanggu utututu kunya iti ngga-gin
 ‘(I) went to the Kimbugor kunai grass, I stepped in, kept going, in the middle I saw’

Sgm ndama nyinggi kavarata...
 ‘A pig was putting down a nest...’

[several utterances]

Mnd gup-i kavara-**min**
 ‘I threw it at its underarm’

kavara-gin... NGEK mba-ta
 ‘I threw it, NGEK it cried out’

kura kmбра kigi "mmhmm" amba-**min**
 ‘(the pig) jumped out, "Oh no", I thought’

"n mandarin" va-**min**
 ‘"I didn't spear it", I thought’

uta kta... nggagin nyingi tuku n singgu tva-rama-**mu**
 ‘I hesitated, I saw piglets went running out in every direction’

[several utterances]

Anta yaga-marng.
 after ascend-PST.DIST.1PL
 ‘After that we went up (dist past).’

“Yaga-**smarng**,” v-tn.
 ascend-PST.MID.1PL say-FUT.PROX.1SG
 ‘“We went up (mid past),” I should say’

It is unclear why Jerry and Solbanus generally use different past tenses in these narratives, though it is consistent with the suggestion that both tenses are applicable at this time scale, and may additionally indicate individual speaker variation. The self-correction at the end may indicate that the mid-past is not usually used by these speakers in unselfconscious speech, but is perhaps seen as the correct form for events at this time-scale.

Habitual tense is used for things that extend over a person’s whole life, including people who are now deceased so the activity is past. But habitual is not used in some cases where it may have been expected, perhaps due to start/end points. E.g. describing someone going to school somewhere, or working somewhere, does not seem to provoke habitual, but instead uses the Current tense.

² First part of the sentence may also mean ‘I went down to the river’. The DS marking is then unexpected, but this was the translation previously noted. Translation needs checking.

Spatial expressions

Needs much more research

Spatial adverbs

By ‘adverb’ I just mean a word that doesn’t obviously fit the main classes of noun or verb.

gumba ‘inside’

mr ‘top’

samba ‘near, next to’

(i)ndgu ‘under, inside??’

Kva gumba-ny.

garden inside-LOC

‘Inside the garden.’ (2025-07-07_CP_01)

Kund gumba nda-mbu.

bird.hide inside DIST-LOC

‘Inside that bird hide.’ (2025-07-03_FrSk)

Motion verbs

These are used very frequently, and should perhaps be considered as an associated motion construction. The four main verb used are:

u- ‘go’

pai-, pa- ‘come, go’

mnggu- mngga- ‘descend’

yaga- ‘ascend’

Unknown markers

Here are some things that are not yet understood.

bn

Only one example so far, and translation is not so clear:

(x) “*Angga-wum*” *bn*,

return-hort ??

‘?If you say, “Let’s go back,”’

“*Angga-wum-dang*,” *ba-mi*.

return-hort-1pl.fut say-3sg.pst

“‘Let’s go back,” he said.’

Sentence structures

Basic clause structure

Many utterances consist of just a verb, and a few consist of just a noun phrase. In each case some other part of the meaning is implied. Examples of both types can be seen in the following three consecutive utterances:

- (X) a. *Megiyar Daka Market*
 (At) Megiyar Daka Market
- b. *Stop-ta*
 stop-SS
 (We) stopped.
- c. *Mainda ipu ukama ipu*
 betelnut little daka little
 (We got) a little betelnut, a little daka.
- d. *Asara kanda indu mnga-ta*
 tobacco there ?DEM get-ss
 (We) got tobacco there.
- e. *U-ma-rng*
 go-PST-1PL
 We kept going.

Lines (b,d) have verbs but these are SS forms (§sect), which provide no information about the identity of the subject. The final line (e) has a finite verb that reveals the subject to be 1PL. Line (c) has only a coordinate noun phrase, and leave the type of event (getting) to be deduced, though the following line soon reveals this if it could not be guessed already. In fact the only one of these five lines that combines a noun phrase and verb is line (d), where ‘getting tobacco’ is fully expressed.

Preverbal and postverbal domains

The verb-final position in line (Xd) is a fairly consistent pattern, as in many Papuan languages that verb-final. Agents, themes, recipients, beneficiaries

kar pnggr-m-i
 ‘he pulled the car’
 speid mngata
 ‘he got a spade’
 kndi kvt-m-i
 ‘the road became dark’
 draiva ambamin
 ‘I told the driver’
 arng guramata
 ‘he helped us’

The main exception to verb finality, i.e. the main type of post-verbal element, is locative and temporal expressions. This is another trait shared with surrounding languages, at least in the Sogeram family (REF). There are many more examples beyond the ones shown here, and postverbal position appears to be highly consistent for locative (and temporal) expressions.

yvruga-ta pa-ta kt gaing
 arrive-SS come-SS top DEM
 ‘We arrived at the top.’

mngga-ma-rng Rapak kuku gaing
 descend-PST-1PL name river DEM
 ‘We went down to Rapak river there.’

ina ipu ntumrami taim gaing
A little sun shone at that time

kwnggra-g-u kupsung
cook-DS-3PL morning
'They cooked in the morning.'

The locative pattern can also result in a post-verbal personal pronoun, if the persons role is as a locative reference. Note that this construction uses the dative case:

kete gain yuvuragata nur-ng
we arrived at the top, to those people

Another post-verbal element is the word *garn*, which is as yet poorly understood but from Samuel's description ('when you saw it, you use this to make the story clear'), appears to have an evidential function.

kanda gaing k-y garen
there DEM stay-3SG.CUR ?EVID
'There it stayed.'

Ordering of preverbal NPs

None of the examples above have more than a single NP before the verb, and this is no accident as most clauses have at most one NP, or one core NP plus a locative NP. Thus far just a handful of spontaneous examples have been identified with two non-locative (and thus preverbal) NPs. Although these are not enough to make any strong proposals, it is notable that these examples have personal pronouns in initial position, despite those not being in agentive roles, and not being the verbal subjects.

yang sgm paymi

yang sgm tvata paigi
'The pig came towards me. The pig came running towards me.'

nur kandain tmbagrs ipu guta
'we gave a little money to them'

There are a few further examples of multi-NP clauses from elicitation. However I am hesitant to read too much into these as elicitation prompts may effect the ordering. Verb-finality remains clear in these examples, and agents come before patients (A-P). However while verb-finality appears to be a robust pattern in the language, A-P ordering could well be primed by the English prompt, or alternatively could in fact reflect a tendency to put personal pronouns before other NPs. Further spontaneous speech is required on this point.

ndambgw samba tar-mand-yu
they will shoot a pig.'

Clause chains

Mum has a clause-chaining system, which specifies whether multiple events are sequential or simultaneous with each other, and whether they have the same or different subjects.

Sequential events are marked by a suffix on the first event, which is *-ga* for different subject (1, 2), and *-ta* for same subject (2, 3). Sequential events are separated by a minor intonational break (/) with level or rising pitch, distinct from the falling pitch (//) at the end. The *-gV* ds suffix sits in the slot where tense markers would otherwise appear, so that temporal distinctions are collapsed. E.g. in (2), there is no tense marker, though the context shows that

the event was in the distant past. (2) also suggests in the first line, *yuvuvig-ta*, that with simultaneous events, the first one expressed can have ss marking which links to the next event after the simultaneous pair. Between the last two lines, there is also an ss marker that ‘skips’ an intervening clause.

- (1) *Nung yvu-ga-na / kum-i //*
 you hit-DS-2SG die-3sg.curr
 ‘You hit him, and he died (earlier today).’

- (2) *Knđ yuvuvig-ta kigu mnggu-ga-rng /*
 road block-ss state-sim descend-ds-1sg
 ‘They were blocking the road when we came down,’

Ar-ng pa-ta /
 1pl-acc come-ss
 ‘they came over to us,’

Tmbagrs rm amba-gu. /
 money purp ask-ds
 ‘and asked us for some money,’

Kandain
 ‘at that place,’

Yaga-ta
 ascend-ss
 ‘they came up,’

Nyingi Binatang sara
 child name ?group
 ‘the Binatang boys,’

Nur-ung tenti kina nggu-ta
 3pl-acc twenty kina give-ss
 ‘gave them twenty kina,’

Knđ-ga mumdu-gu pgrgu mnggumarng.
 road-?? clear-ds ?? descend-1pl.dist
 ‘They cleared the road and we went down.’

- (3) *Kandain yuva-ta / sginda pay-ma-rng //*
 there wash-SS again travel-DIST.PST-1PL
 ‘(We) washed there, and again we travelled on (before yesterday).’

Simultaneous events, where there is some overlap in temporal extension, are marked for different subjects with reduplication of the *-gV* suffix (3), and for same subject with an aspectual auxiliary verb *ky-* ‘stay’ in the first clause, and sometimes also in the second clause

- (4). Simultaneous events are not separated by any intonational break.

- (3) *Anta ky-gugu ara mnggu-ma-rng //*
 then stay-DS.SIM we descend-DIST.PST-1PL
 ‘(They) were there then, when we went down (before yesterday).’

- (4) *Tagara-ta ky-m-u ptarama-ta ky-m-u //*
 cut-SS stay-DIST.PST-3PL chop.up-SS stay-DIST.PST-3PL
 ‘They were cutting (a felled tree) and chopping it into pieces (before yesterday).’

Complex sentences

Conditional construction

I have not identified any grammatical marker corresponding to conditionality as such. One way that an English conditional can be translated is using the verb ‘see’:

Yi u-tñ ngga-ta na ki-ny.
1sg go-fut.prox.1sg see-ss 2sg go-2sg.imp
‘If I go, you stay.’ (*lit.* ‘you see that I go, you stay’)

Purposive constructions

You can have a noun marked as the purpose of a clause (see -rm under case marker), or one clause as the purpose of another clause. They both use the same marker. The purposive clauses have a verb without any other suffix:

Kuku yv-rm mngga-mi.
water hit-purp descend-3sg.dist
‘He went down to wash himself (water hit).’

Negation

Events that did not or will not occur. Sweeney (1994: 27; cf. Daniels 2015: 327) describes a negative ‘prefix’ *ma(ng)*, with an epenthetic velar nasal when the following verb begins with /a/. This appears to be the same in Mum but the vela nasal can occur in a wider variety of environments, and may have some variation. The boundary between negator and verb also provokes the stop nasalisation process, though again with some variation.

Yi ma-karg-rman.
1sg neg-sleep-1sg.fut
‘I will not sleep.’

Yi mang-u-min.
1sg neg-go-1sg.dist
‘I did not go.’

Kumi vin'gara / ma-nggumi. \ (\sim makumi)
die.3sg.curr suppose neg-die.3sg.curr
‘I thought he was going to die, but he didn’t die.’

Yi nynggm ma-nggi.
1sg food neg-stay.3sg.curr
‘I don’t have food. (*lit.* there is no food for me)’

Prohibitive:

Na smbra mamnga!
2sg task ?neg.imp
‘Don’t you do that work!’

Not possible:

(x) *Nma-ta u-ta pugu-y yuvraga-ta.*
?not.able-ssgo-ss village-?ALL arrive-ss
‘(We) ?cannot go and reach the village,’

Kand kuku nangga anti.
 dem water COM moment
 ‘This is the rainy season.’

Agutumba nma-ta mamnga tandmdu.
 vehicle ?not.able -ss ?neg ?pass
 ‘This vehicle cannot make it through.’

(y)S *nma-tay ... pama-ta karg-mdang.*
 ?? ?not.able -?? ??-ss sleep-1pl.fut
 ‘You cannot sleep at this kind of place.’

Lacking something:
Unanggu nma miku manman.
 ?lizard ?neg head ?neg
 ‘the lizard has no head.’

Quantification

Many. Not sure if it has to be countable.
Ayang sgm siru tarasen.
 yest pig many shoot-1sg.yest
 ‘Yesterday I shot many pigs.’

Interjections

?mai
 mai kaigura kiva kanda gi
 ?? wallaby paw def state
 ‘I saw a wallaby pawprint!’ (some time ago)
 ?andagi
 (x) “*Andagi!*” *ambamin.*
 “‘Okay!’ I said.”

Quotation

So far we have evidence only of direct-speech quotation, and not of indirect speech as in English ‘he said that he is coming’.
 All instances so far involve overt quotative SAY verbs, sometimes a single SAY verb precedes a string of several quoted sentences.

(x) *Amba-min, “Kumbe kakai nmbu.”*
 say-1sg.dist left direction
 ‘I told (him), “This way going left”.’

(y) *Draiva amba-min, “Kand numbu Areyanggon-ndu knu.”*
 driversay-1sg.dist right direction name-gen road
 ‘I told the driver, “The right side is the Areyanggon road”.’

The SAY verb can also follow the quote, and in this formulation we have also encountered the reduced forms *wamin* ‘say.1sg.dist’ and *bami* ‘say.3sg.dist’ (but should CHECK these).

(x) “*Andagi!*” *ambamin*.

““Okay!” I said.’

(y) “*Tkata-kata u-mdang,*” *wamin*.

?struggle go-1pl.fut ?say.1sg.dist

““We will struggle on,” I told (him).’

(z) “*Angga-wum-dang,*” *bami*.

return-hort-1pl.fut say.3sg.pst

““Let’s go back,” he said.’

Also examples with *vata*, which expresses thoughts, and perhaps especially or only mistaken beliefs:

“*Yaga-ta yika kagar-rman,*” *vata* “*Yika kagar-rman,*” *pugra-mi*.

ascend-ss loincloth tie-1sg.fut think loincloth tie-1sg.fut search-3sg.dist

‘I will get out and tie my loincloth’, he thought, “I will tie my loincloth”, he searched for it’

Appendices

Partial paradigms for selected verbs

I collate paradigms here for verbs where I have at least a few different forms.

Parenthetic forms are for different-subject in medial verbs; DSB = different subject base

Underscore indicates notable irregularities

	CURRENT	YESTERDAY	DISTANT PAST
1SG	<u><i>pa-n</i></u>		
2SG			
3SG	<i>pa-y</i>		
1PL			
2PL			
3PL			
	FUTURE	HABITUAL	IMPERATIVE
1SG	<i>pa-rman</i>		
2SG			<u><i>pany</i></u>
3SG			
1PL			
2PL			
3PL			
ss: <i>pa-ta</i>			

Table. Verb paradigm, *pay-* ‘come, go’.

	CURRENT	DIST PAST	FUTURE	IMPERATIVE
1SG	<i>mnj-n</i>	<i>mnj-m-in</i>	<i>mnj-rma-n</i>	-
2SG	<i>mnj-na</i>		<i>mnj-rma-na</i>	<u><i>mnj</i></u>
3SG	<u><i>mnj</i></u>	<i>mnj-m-i</i>	<i>mnj-rmand</i>	<i>mnj-m</i>
1PL				<i>mnj-m</i>
2PL				<i>mnj-ma-ra</i>
3PL				<i>mnj-m-u</i>
ss: <i>ms-ta</i>				

Table. Partial paradigm, *mnj*- ‘sit’.

	CURRENT	MEDIAL DS	IMPERATIVE
1SG	<i>yv-in</i>	<i>yvu-g-in</i>	
2SG		<i>yvu-ga-na</i>	<i>yvu</i>
3SG	<i>yv-i</i>	<i>yvu-g-i</i>	
1PL		<i>yvu-ga-rng</i>	
2PL		<i>yvu-ga-ra</i>	<i>yvu-ma-ra</i>
3PL		<i>yvu-g-u</i>	
ss: <i>yvu-ta</i>			

Table. Partial paradigm, *yvu*- ‘hit’.

	CURRENT	DISTANT PAST	MEDIAL DS
1SG	<i>mng-in</i>		
2SG			
3SG			<i>mnga-g-i</i>
ss: <i>mnga-ta</i>		ds: <i>mnga-gi</i>	

Table. Partial paradigm, *mnga*- ‘hold, take’.

	CURRENT	DIST PAST	FUTURE	IMPERATIVE
1SG	<i>karg-in</i>	<i>karga-m-in</i>	<i>karg-rma-n</i>	-
2SG	<i>karga-na</i>		<i>karg-rma-na</i>	<u><i>karga</i></u>
3SG	<i>karg-i</i>		<i>karg-rmand</i>	<i>karga-m</i>
1PL			? <i>karg-m-dang</i>	<u><i>karg-m</i></u>
2PL				<i>karga-ma-ra</i>
3PL				<i>karga-m-u</i>
MEDIAL DS				
1SG	<i>karga-g-in</i>			
2SG	<i>karga-ga-na</i>			
3SG				
1PL				
2PL				
3PL				

Table. Partial paradigm, *karga*- ‘sleep’.

Note that *kargmdang* is a negative construction ‘you cannot sleep here’

	CURRENT	DISTANT PAST	FUTURE	MEDIAL DS
1SG	<i>ngg-in</i>	<i>ngga-m-in</i>	<i>ngg-rma-n</i>	<i>ngga-g-in</i>
2SG	<i>ngga-na</i>		<i>ngg-rma-na</i>	
3SG	<i>ngg-i</i>		<i>ngg-rmand</i>	<i>ngga-g-i</i>
1PL	<i>ngga-rng</i>			
			IMPERATIVE	FUTURE PROXIMATE
1SG				<i>ngga-tn ~ ?ngg-tin</i>
2SG			<i>ngga</i>	
3SG			<i>ngga-m</i>	
1PL			<i>ngg-m</i>	
2PL			<i>ngga-ma-ra</i>	
3PL			<i>ngga-m-u</i>	

ss: *ngga-ta*

Table. Partial paradigm, *ngga-* ‘see’. Examples of ‘imperative’ here seem more like hortative, declaring a joint intention.

	CURRENT	DISTANT PAST
1SG		<i>nyndar-m-in</i>
2SG		
3SG	<i>nyndar</i>	

ss: *nyndar-ta*

Table. Partial paradigm, *nyndar-* ‘hear’. see 2024-02-11_Samuel-Ambos_02

	CURRENT	FUTURE	DISTANT PAST
1SG			
2SG			
3SG			
3PL			<i>v-u</i>

DS: *vag-i*

Table. Partial paradigm, *va-* ‘say, want’; related to *amba-* ‘say’.

	CURRENT	FUTURE	DISTANT PAST
1SG	<i>kwm-in</i>	<i>kwm-rma-n</i>	
2SG	<i>kwmu-na</i>	<i>kwm-rma-na</i>	
3SG	<i>kwm-i</i>	<i>kwm-rmand</i>	<i>kwmu-m-i</i>

Table. Partial paradigm, *kwmu-* ‘die’.

	CURRENT	FUTURE	YESTERDAY	DISTANT PAST
1SG	<i>yawgw-in</i>	<i>yawgu-rman</i>	<i>yawgu-sn</i>	<i>yawgu-min</i>
2SG				
3SG	<i>yawgw-i</i>			<i>yawgu-m-i</i>
3PL				<i>yaga-m-u</i>

SS: *yawgu-ta ~*

yaga-ta

Table. Partial paradigm, *yagw-* ~ *yaga-* ‘go up’.

	CURRENT	FUTURE	DISTANT PAST
1SG			
2SG			
3SG	<i>mnggw-i</i>		
1PL			<i>mnggu-ma-rng</i>
	ss: <i>mnggu-ta</i>		

Table. Partial paradigm, *munggw-* ~ *mngg-* ‘go down’.

	CURRENT	FUTURE	DISTANT PAST
1SG		<i>m-rma-n</i>	
2SG			
3SG	<i>?mr (?mr-ga)</i>	<i>m-rmand</i>	<i>mr-m-i</i>
	YESTERDAY	MEDIAL DS	
1SG			
2SG			
3SG	<i>mr-s-r</i>		

Table. Partial paradigm, *mr-* ‘swallow’. See 2024-02-11_Samuel-Ambos_02.

	CURRENT	FUTURE	DISTANT PAST
1SG	<i>irg-in</i>		
2SG			
3SG	<i>irg-i</i>		
	ss: <i>irga-ta</i>		

Table. Partial paradigm, *irga-* ‘cry (out)’.

	CURRENT	FUTURE	DISTANT PAST
1SG			
2SG			
3SG			
1PL			<i>mita-ma-rng</i>
	ss:		

Table. Partial paradigm, *mita-* ‘depart’.