

Inflectional verbal morphology in Malol

Lydia van den Berg

LSPNG conference, September 2021

contents

1. background
2. formal side:
 - 2a. Malol verbs
 - 2b. paradigms for verbal prefixes
 - 2c. vowel raising with 1 | 2sg
 - 2d. verbs in actual sentences
3. functional side:
 - 3a. use of realis
 - 3b. use of irrealis
 - 3c. use of imperfective
4. conclusions

1. the Malol language

- Spoken in Sandaun Province
- Austronesian (but heavily influenced by Papuan neighbours)
- ca. 4,500 speakers
- Part of a multi-language translation project (AWTP)
- Malol speakers in Ukarumpa several times for grammar analysis

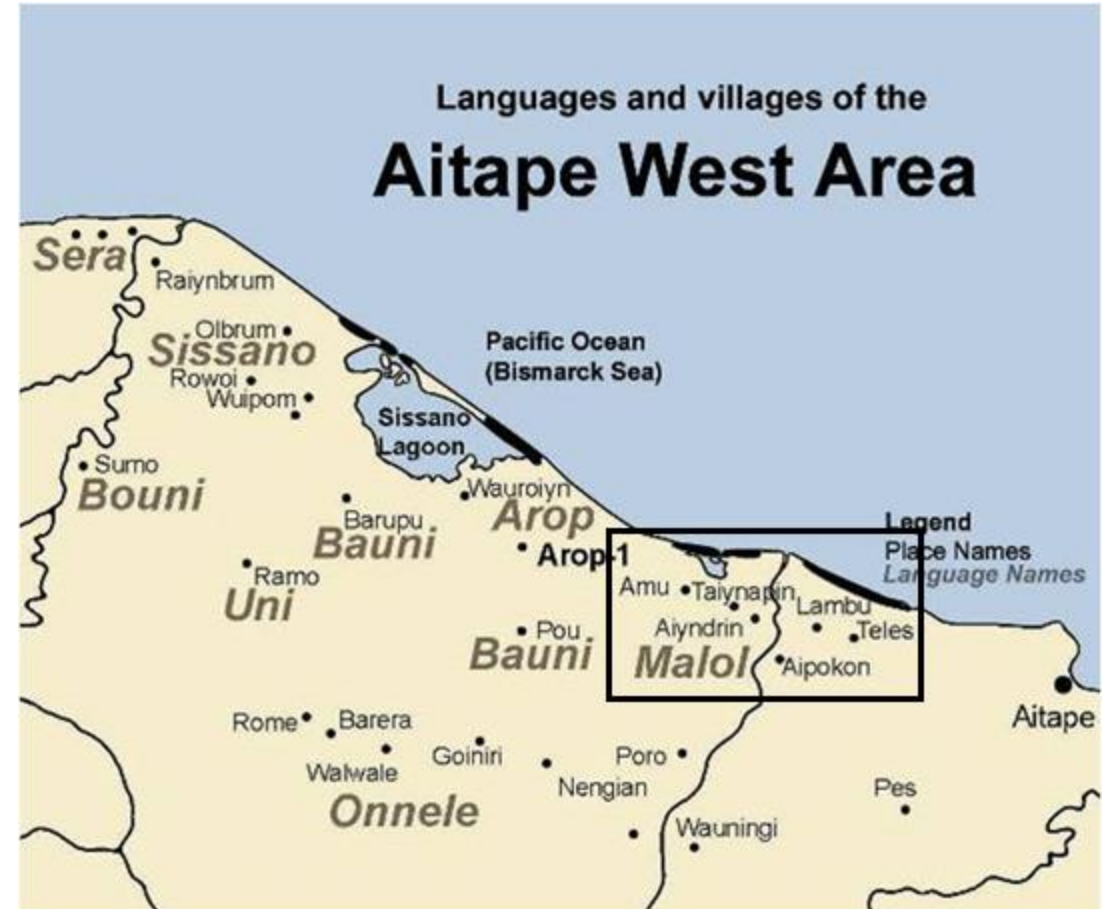


1. AMU village, August 2021



1. the Malol language

- language/dialect chain: Malol-Arop-Sissano-Sera
- Papuan neighbours to the south (Torricelli family) and to the west (Skou family)
- SVO language
- (C)V(C) syllable pattern
- very little inflection or derivation, except for inflection on verbs



1. the Malol language

(1)

<i>Elinka,</i>	<i>re</i>	<i>lin</i>	<i>ke-r-tera</i>	<i>i,</i>	<i>ean kopanan</i>	<i>tapo</i>	<i>nakoa</i>
but	3PL	not	REAL-3PL-find	3SG	because	crocodile	DEM3
<i>prum</i>	<i>ajiyn</i>						
big	very						

‘However, they didn’t find him, because that crocodile [was] very big’
(A2-01)

(C)V(C) syllable patterns, five vowels and four diphthongs, palatal nasal;
SVO, stative clauses are verbless

2a. Malol verbs

(2) *Tem* *i* *ka-wama* *tal* *re* *to-r-ow* *re* *peiy* *ene,*
time 3SG REAL-come place 3PL IMPF-3PL-get PL fish DEM1

kos *i* *k-ej* *la* *iy*
and 3SG REAL-take fishing.net 3SG.POSS

kos *i* *ka-pat-iw* *raiyn.*
and 3SG REAL-jump-DOWN water

‘When he came [to] this place [where] they were fishing, he took his fishing net and he jumped down [into] the water’ (A2-01)

2a. Malol verbs

i **ka-**wama 'he came'
re **to-r-**ow 'they were getting'
i **k-**ej 'he took'
i **ka-**patiw 'he jumped down'

every verb stem has a
Tense-Aspect-Modality
prefix (plus sometimes
also **person marking**)

prefix:	<i>ka-</i>	verb stem:	<i>-wama</i>	'to come'	
	<i>to-r-</i>		<i>-ow</i>	'to get'	
	<i>k-</i>		<i>-ej</i>	'to take'	
	<i>ka-</i>		<i>-pat</i>	'to jump'	(suffix: -iw)

2a. Malol verbs

- there are three TAM categories:
 - realis (**REAL**) past, perfect
 - irrealis (**IRR**) future, imperative, conditional, purpose
 - imperfective (**IMPF**) various aspects, present continuous, general truths, possibly historic present
- each of these TAM categories has its own set of prefixes
- some TAM prefixes also carry person information (e.g. **r**- for 3PL)
- each set of TAM prefixes shows vowel harmony with verb stem vowel

2b. paradigms for the verb *-yiel* 'to see'

<i>-yiel</i> 'to see'	Free Pronoun	Realis	Irrealis	Imperfective
1SG	<i>yia</i>	<i>ke-yiel</i>	<i>awe-yiel</i>	<i>tek-yiel</i>
2SG	<i>e</i>		<i>awe-k-yiel</i>	
3SG	<i>i</i>		<i>awe-yiel</i>	
1DU	<i>oj</i>	<i>te-yiel</i>	<i>ate-yiel</i>	<i>mate-yiel</i>
1PL	<i>et</i>			
2DU	<i>oj</i>	<i>ke-yiel</i>	<i>awe-k-yiel</i>	<i>tek-yiel</i>
2PL	<i>om</i>			
3DU	<i>ruj</i>	<i>ke-r-yiel</i>	<i>awe-r-yiel</i>	<i>te-r-yiel</i> (< <i>tek-r-yiel</i> >)
3PL	<i>re</i>			

2b. paradigms for e-verbs: *-pej* 'run'

<i>-pej</i> 'to run'	Free Pronoun	Realis	Irrealis	Imperfective
1SG	<i>yia</i>	<i>ke-pij</i>	<i>awe-pij</i>	<i>tek-pij</i>
2SG	<i>e</i>		<i>awe-k-pij</i>	
3SG	<i>i</i>	<i>ke-pej</i>	<i>awe-pej</i>	<i>tek-pej</i>
1DU	<i>oj</i>	<i>te-pej</i>	<i>ate-pej</i>	<i>mate-pej</i>
1PL	<i>et</i>			
2DU	<i>oj</i>	<i>ke-pej</i>	<i>awe-k-pej</i>	<i>tek-pej</i>
2PL	<i>om</i>			
3DU	<i>ruj</i>	<i>ke-r-pej</i>	<i>awe-r-pej</i>	<i>te-r-pej</i>
3PL	<i>re</i>			

2b. paradigms for o-verbs: -so 'shoot'

-so 'to shoot'	Free Pronoun	Realis	Irrealis	Imperfective
1SG	<i>yia</i>	<i>ko-su</i>	<i>awo-su</i>	<i>tok-su</i>
2SG	<i>e</i>		<i>awo-k-su</i>	
3SG	<i>i</i>	<i>ko-so</i>	<i>awo-so</i>	<i>tok-so</i>
1DU	<i>oj</i>	<i>to-so</i>	<i>ato-so</i>	<i>mato-so</i>
1PL	<i>et</i>			
2DU	<i>oj</i>	<i>ko-so</i>	<i>awo-k-so</i>	<i>tok-so</i>
2PL	<i>om</i>			
3DU	<i>ruj</i>	<i>ko-r-so</i>	<i>awo-r-so</i>	<i>to-r-so</i>
3PL	<i>re</i>			

2b. paradigms for a- verbs: *-mat* 'die'

<i>-mat</i> 'to die'	Free Pronoun	Realis	Irrealis	Imperfective
1SG	<i>yia</i>	<i>ko-muot</i>	<i>awo-muot</i>	<i>tok-muot</i>
2SG	<i>e</i>		<i>awo-k-muot</i>	
3SG	<i>i</i>	<i>ka-mat</i>	<i>awa-mat</i>	<i>tak-mat</i>
1DU	<i>oj</i>	<i>ta-mat</i>	<i>ata-mat</i>	<i>mata-mat</i>
1PL	<i>et</i>			
2DU	<i>oj</i>	<i>ka-mat</i>	<i>awa-k-mat</i>	<i>tak-mat</i>
2PL	<i>om</i>			
3DU	<i>ruj</i>	<i>ka-r-mat</i>	<i>awa-r-mat</i>	<i>ta-r-mat</i>
3PL	<i>re</i>			

2c. vowel raising in 1 | 2 SG stems

- central vowel 'a':
 - mat* => -*muot* 'die' *a=>uo*
 - par* => -*pur* 'move' *a=>u*
 - 'aiyn* => -*'uiyn* 'eat'
- front vowel:
 - pej* => -*pij* 'run' *e=>i*
 - men* => -*min* 'sit, be'
 - tera* => -*tira* 'find'
 - 'eiy* => -*'iey* 'dig' *ei=>ie*
- back vowel:
 - so* => -*su* 'shoot' *o=>u*
 - loan* => -*luon* 'hear' *oa=>uo*
- no change:
 - yel* => -*yel* 'see' (*i, ie, u, ua* can't be raised higher)
 - pua* => -*pua* 'float'
 - niya* => -*niya* 'think'

2d. verbs in actual sentences

(2)

<i>Tem</i>	<i>i</i>	<i>ka-wama</i>	<i>tal</i>	<i>re</i>	<i>to-r-ow</i>	<i>re</i>	<i>peiy</i>	<i>ene,</i>
time	3SG	REAL-come	place	3PL	IMPF-3PL-get	PL	fish	DEM1

<i>kos</i>	<i>i</i>	<i>k-ej</i>	<i>la</i>	<i>iy</i>
and	3SG	REAL-take	fishing.net	3SG.POSS

<i>kos</i>	<i>i</i>	<i>ka-pat-iw</i>	<i>raiyn.</i>
and	3SG	REAL-jump-DOWN	water

‘When he came [to] this place [where] they were fishing, he took his fishing net and he jumped down [into] the water’ (A2-01)

- *kawama* ***ka-wama***, **realis**, ‘come’
- *torow* <***tok-r-ow***, **imperfective**, ‘get’, **3PL** person marking
- *kej* <***ke-ej***, **realis**, ‘take’
- *kapatiw* ***ka-pat-iw***, **realis**, ‘jump’, directional suffix ‘DOWN’

2. verbs in actual sentences - irrealis

(3)

<i>oj</i>	<i>ate-peiy</i>	<i>otuol</i>	<i>lilen</i>	<i>twana</i>	<i>iyin</i>	<i>oj</i>	<i>ata-'aiyn.</i>
1 2DU	IRR.1PL-search	food	some	also	PURP	1 2DU	IRR.1PL-eat

‘the two of us will also look for some food so we can eat.’(A4-01)

- *atepeiy* *ate-peiy*, irrealis, ‘search’, 1PL person marking
- *ata-'aiyn* *ata-'aiyn*, irrealis, ‘eat’, 1PL person marking

2. irrealis prefixes and 1|2sg verb stem

(4)

<i>Kopanan</i>	<i>vanila</i>	<i>inyjia</i>	<i>aw-oal</i>	<i>aw-ospaja</i>	<i>5-pla</i>	<i>po'om,</i>
if	vanilla	1SG.POSS	IRR-bear	IRR-be.sufficient	5	sheaf
<i>yia</i>	<i>w-ij</i>	<i>atowuon</i>	<i>iny...</i>			
1SG	IRR-receive.1 2SG	money	PURP			

‘If my vanilla bears enough [fruit] [to make] five bundles, I will have money to...’ (A4-04b)

- *awoal* *aw-oal* < *awo-oal*, **irrealis**, ‘bear’
- *awospaja* *aw-ospaja* < *awo-ospaja*, **irrealis**, ‘be sufficient’
- *wij* *w-ij* < *awe-ej*, **irrealis**, ‘get’, 1|2sg verb stem

3a. use of **realis**: past tense

(2)

<i>Tem</i>	<i>i</i>	<i>ka-wama</i>	<i>tal</i>	<i>re</i>	<i>to-r-ow</i>	<i>re</i>	<i>peiy</i>	<i>ene,</i>
time	3SG	REAL-come	place	3PL	IMPF-3PL-get	PL	fish	DEM1
<i>kos</i>	<i>i</i>	<i>k-ej</i>	<i>la</i>	<i>iny</i>				
and	3SG	REAL-take	fishing.net	3SG.POSS				
<i>kos</i>	<i>i</i>	<i>ka-pat-iw</i>	<i>raiyn.</i>					
and	3SG	REAL-jump-DOWN	water					

‘When he came [to] this place [where] they were fishing, he took his fishing net and he jumped down [into] the water’ (A2-01)

kawama, kej, kapatiw

all **realis** past tense
(story that describes a historic event)

3a. use of **realis**: perfect

(5)

<i>Iynowune-kea,</i> now-D	<i>et</i> 1PL	<i>to-ho</i> REAL.1PL-do	<i>sawe</i> knowledge	<i>pan</i> COMP	<i>et</i> 1PL
<i>ta-wama</i> REAL.1PL-come	<i>teniey</i> blood	<i>iyin</i> POSS	<i>Taper'iey.</i> T.		

‘Now we know that we come from Taper'iey blood.’ (A1-01)

- *toho* ***to-ho*, realis, ‘do’, 1PL, present perfect**
- *tawama* ***ta-wama*, realis, ‘come’, 1PL, present perfect**

3b. use of **irrealis**: future

(4)

<i>Kopanan</i> if	<i>vanila</i> vanilla	<i>inyjia</i> 1SG.POSS	<i>aw-oal</i> IRR-bear	<i>aw-ospaja</i> IRR-be.sufficient	<i>5-pla</i> 5	<i>po'om,</i> sheaf
<i>yia</i> 1SG	<i>w-ij</i> IRR-receive.1 2SG	<i>atowuon</i> money	<i>iny...</i> PURP			

‘If my vanilla bears enough [fruit] [to make] five bundles, I will have money to...’ (A4-04b)

- *awoal*, *awospaja*, (*a*)*wij* all **irrealis** future and/or conditional

3b. use of **irrealis**: imperative

(6)

<i>Tem</i> time	<i>eteiyn</i> fire	<i>awa-'aiyn</i> IRR-eat	<i>ono</i> house	<i>e'i,</i> 3SG.POSS	<i>e</i> 2SG	<i>mas</i> must	<i>awe-k-pij</i> IRR-2-run.1 2SG
<i>awo-k-uw</i> IRR-2-get.1 2SG	<i>raiyn.</i> water						

‘When your house is on fire, you must run to get water’ (elic)

- *awa'aiyn* ***awa-'aiyn*, irrealis, ‘eat’, hypothetical**
- *awekpij* <***awe-k-pej*, irrealis, ‘run’, 1|2SG stem, 2SG, imperative**
- *awokuw* <***awo-k-ow*, irrealis, ‘get’, 1|2SG stem, 2SG, imperative or purpose**

3c. use of **imperfective**: habitual

(7)

<i>Et</i>	<i>mate-letala</i>	<i>et</i>	<i>kos</i>	<i>re</i>	<i>pujelen</i>	<i>lilen</i>	<i>te-r-peiyjek</i>	<i>et.</i>
1PL	IMPF.1PL-hide	1PL	and	PL	children	some	IMPF-3-PL-search	1PL

‘We would hide ourselves and some [other] children would look for us.’
(A2-02)

- *mateletala* ***mate-letala***, **imperfective**, ‘hide’, **1PL**, **past habitual**
- *terpeiyjek* <***tek-r-peiyjek***, **imperfective**, ‘search’, **3PL**, **past habitual**

3c. use of **imperfective**: present

(8)

<i>Wus</i>	<i>tok-os.</i>
rain	IMPF-wash

‘It is raining.’ (conv)

(9)

<i>Tapan</i>	<i>tako</i>	<i>yia</i>	<i>tek-is</i>	<i>temeiyn</i>	<i>inyjia...</i>
time	one	1SG	IMPF-say.1 2SG	woman	1SG.POSS

‘One day I was saying to my wife...’ (A1-02)

- *tokos* ***tok-os*, imperfective, ‘wash’, present**
- *tekis* **<*tek-es*, imperfective, ‘say’, 1|2SG stem, verbs of ‘saying, thinking, asking, wanting’**

3c. use of imperfective

(10)

<i>I</i>	<i>lin</i>	<i>k-es</i>	<i>ia</i>	<i>aj</i>	<i>tako,</i>	<i>etea-n</i>	<i>tak-aiy</i>	<i>i</i>
3SG	not	REAL-say	1SG	word	one	liver-3SG.POSS	IMPF-rise.up	3SG
<i>na</i>	<i>bek</i>	<i>ene-kea,</i>	<i>bek</i>	<i>ko-ho</i>	<i>raiyn</i>	<i>raiyn.</i>		
OBL	bag	DEM1-D	bag	REAL-do	water	water		

‘He didn’t speak a word to me, he was angry (lit. his liver rose up in him) about this bag, the bag that was soaking wet.’ (B2-04)

- *etean takaiy i* ‘his liver rose up in him’ *tak-aiy*, imperfective, ‘rise up’
- strong emotion? / historic present?

3. use of all three

(11)

<i>kos</i>	<i>oloa-n</i>	<i>i</i>	<i>tek-niya</i>	<i>pan</i>	<i>ko-loan</i>	<i>ya</i>
and	thought-3SG.POSS	3SG	IMPF-think	COMP	REAL-can	1SG
<i>wo-su</i>	<i>maiyn</i>	<i>tako.</i>				
IRR-shoot.1 2SG	bird	one				

‘and he thought to himself that he could go and shoot a bird (lit. it is possible [that] I will shoot a bird).’ (C-02a)

- *tekniya* *tek-niya*, **imperfective**, ‘think’, **verbs of saying, etc**
- *koloan* *ko-loan*, **realis**, ‘can’, **modal verb, always in realis**
- *wosu* >*awo-so*, **irrealis**, ‘shoot’, following **modal verb -loan**

4. conclusions

- each verb stem in Malol is always prefixed with a **TAM** marking (and sometimes there is person marking as well)
- Malol has a nice three way contrast: **realis** / **irrealis** / **imperfective**
- the prefixes for realis, irrealis and imperfective undergo partial **vowel harmony**, triggered by the first vowel in the verb stem
- most verbs have a separate stem for first and second person singular, where **vowel raising** has taken place
- realis is mainly used for past tense, irrealis is used for future, imperatives, conditionals and purpose, and imperfective is used for aspect (e.g. habitual, continuative), present continuous, and maybe also for historic present
- all this verbal morphology makes it difficult to know how to list verbs in a Malol dictionary in a user-friendly way