Warlmanpa coverbs and inflecting verbs – an overview

Information here largely based on David Nash's Warlmanpa lexicon (all errors are my own!) and Browne (2024)

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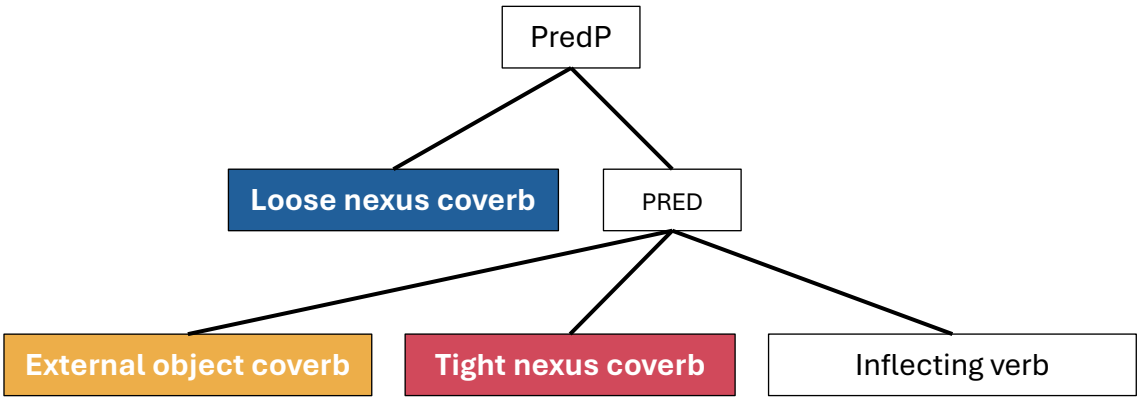
Structure and order

In Warlmanpa, I distinguish 3 types of coverb:

1. Loose nexus
2. External object
3. Tight nexus

This is primarily based on their syntactic properties. I posit a PredP (loosely adapted from Krauße & Harvey, 2021):



The PRED structure is fixed:

- no flexible word order
- no intervening units (even the pronominal clitics).

In contrast, the loose nexus coverbs can occur on the periphery, either the left or right (i.e. flexible word order), shown in (1), and can have intervening clitics (2). Unlike adverbs, loose nexus coverbs must still be immediately adjacent to PRED.

(1) [Nga-rnu-rra]$_{PRED}$ wirrpiny.
eat-PST-IMPF completely
'was eating it all'

(2) Yarta=yijala=rla [wulyurr ya-ka]$_{PRED}$!
again=ALSO=3OBL pour put-IMP
'pour some more for him!'

Does the UPred precede or follow the IPred?

Loose nexus coverbs can precede or follow IPred. All other coverbs must (immediately) precede, with relative ordering External Object – Tight Nexus – Inflecting Verb.

What can intervene between the UP and the IP?

Pronominal clitics, and some other semantics clitics – and only for loose nexus coverbs. No cases of intervening word-level units that I am aware of.

Can there be more than one UP attached to the IP?

Not investigated in great detail, but current analysis is:

- **two** coverbs (of **different** types) can co-occur
  (1) ***Kangkurr*** ***[kutij*** *ka-nya*]PRED ‘standing submerged’
  submerge **stand** be-PRES
  (2) [***Yirrkin*** ***karta*** *pi-nyi*]PRED ‘will dig with someone/something’
  with **spear** act_on-FUT
- Unclear whether two coverbs of same type can co-occur (requires further investigation)

What kind of morphological boundary is there between the UP and the IP (separate words, template morphology, clitic, compound, suffix)?

Evidence ***for*** phonological compound with inflecting verb

Coverbs do not appear to have word status because they generally cannot occur in isolation.

Firstly, coverbs cannot be the matrix predicate of a clause (copula verb notwithstanding). They cannor occur without an inflecting verb (compare Ngumpin languages where coverbs can be matrix predicate).

Secondly, in non-finite subordinate clauses, each word must be marked with a suffix indicating its relation to the matrix clause. For example, in (3), the subordinate clause “fixing a boomerang” has two phonological words: “fix” (good-CAUSE) and “boomerang”. Both are therefore marked with a suffix (in this case, *-ka* ‘different object simultaneous’.

(3) *Nya-ngu=ju-n* *[partakurru-ma-nji-**ka*** *karli-**ka**]*
see-PST=1SG.NS-2SG.S good-CAUSE-INF-ALL boomerang-ALL
You saw me fixing the boomerang.

So, each phonological word takes a suffix. When coverbs appear in non-finite subordinate clauses, they are **not** marked with a suffix:

(4) *Yina-nga-rninja-**karra**-rlu* *karta* *pu-ngunya* *karli*.
sing-eat-INF-**SSCOMP**-ERG trim act_on-PRES boomerang
He is trimming the boomerang while singing.

This provides evidence that the coverb + inflecting verb constitute a single phonological word. This sets up a contrast between coverbs and adverbs, as adverbs **do** take suffixes in non-finite subordinate clauses)

(Something that needs to be figured out in the future is whether this is true of loose nexus coverbs which *follow* the verb – if this is even possible in subordinate clauses)

Evidence ***against*** phonological compounding with inflecting verb

Two counterarguments to phonological compounding.

Firstly, coverbs can rarely occur as afterthoughts:

(5) *Kalpa=nyanu ya-ka — tajpaka*.
tight=RR put-IMP properly
Tie it up — properly.

This may be limited to loose nexus coverbs – only those with their own salient meaning. But this hasn't been tested thoroughly.

Secondly, coverbs are not subject to vowel harmony:

(6) *Miti-pu-ngu*.

go[mother_in_law_speech]-act_on-PST

He went (addressed to mother-in-law addressee).

Compare verb roots, which have internal high vowel harmony:

***J**utp**u**-ng**u**nya* run-PRES

J**i**tp**i**-ny**i** run-FUT

In sum there is mixed evidence regarding the phonological wordhood of coverbs. In general, I treat the evidence for compounding as more convincing because of their general inability to surface without an inflecting verb. It may be the case that loose nexus coverbs can constitute their own phonological words in afterthoughts, or when there are clitics.

Note that in the grammar (Browne 2024), I sometimes represented coverb-verb constructions as separate words:

pirtij~pirtij jutpu-ngunya

upward~RDP run-PRES

And other times represented them as compounds – as I went back and forth between analyses…

kutij-partu-ngu

stand-leave-PST

So – clearly an area that needs to be worked out, for orthography's sake...

Inflecting predicates

Are simple verbs an open class in the language?

Simple verbs are closed class. Borrowings incorporated using verbalisers *-ja-* and *-ma-* (discussed later/below).

How many IPs are there in the language?

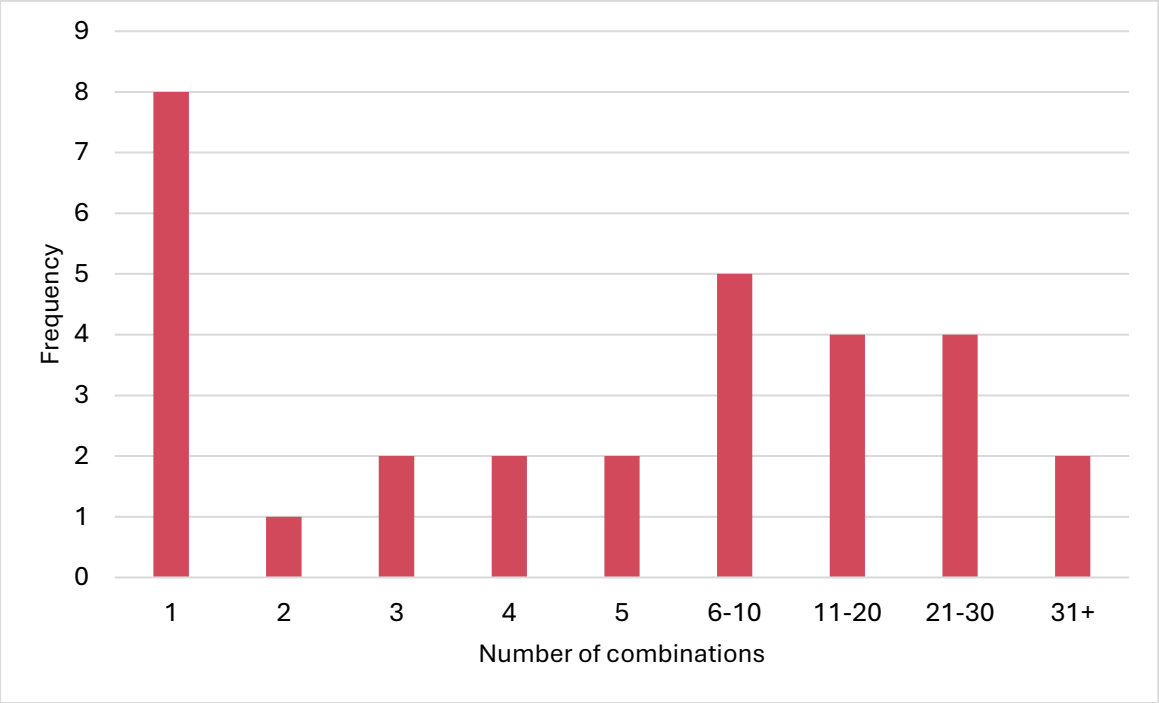
Approx 45 inflecting verbs:

Verb	Gloss	Class	**# combinations**	Notes
-ja-	become, INCH	1d	**25**	Difficult to count because some are nominals, but seem to have relatively lexicalised meaning, e.g. ***jinta-ja-*** one-INCH- 'meet' All CVs that combine with *-ja-* can combine with at least one other element, usually *-ma-* 'causative' possibly except pirriya-ja- 'feel cold' Exists as nominal *pirriyarla* 'cold time' probably <**pirriya-rla* 'cold-LOC'
jama-	grind	2	**0**	
ji-	burn	1c	**1**	*Milily-ji-* 'shine as sun' This CV restricted to this combination
-jiya-	cook	2	**2**	Only found in combinations
jumpa-	kiss	2	**0**	
jitpi-[1]	run	3	**8**	Many related to running except possibly: *Tiirl-jitpi-* 'shatter, split, burst' (*tiirl* quite productive to mean 'split')
ka-	take	3	**7**	
ka-	sit, be	1d	**65**	
kapi-[1]	chase	3	**4**	

Verb	Gloss	Class	**# combinations**	Notes
karla-	poke, spear	2	**3**	
kinja-	wet	2	**1**	This CV *waramarn* only occurs in this combination
kipa-	twist together	2	**0**	
kiya-	throw	2	**9**	
kuma-	cut	2	**1**	Occurs with *tiirl* which is fairly productive
kupa-	cook	2	**1**	Occurs with *ngarrak* which is fairly productive
la-	shoot	2	**4**	
lamarta-	hold	2	**0**	
li-[1]	cry	3	**0**	
-ma-	cause, get	5	**43**	
marta-	have	2	**1**	This CV *jina* only occurs in this combination
murla-	copulate	2	**0**	
nama-	crush	2	**0**	
nga-	tell	2	**5**	
nga-	eat	4	**12**	
ngarta-	trim	2	**0**	
ngaya	void	2	**0**	
nguka-	drink	2	**1**	Occurs with *wirrpiny* which is fairly productive
nya-	see	3	**3**	
nyurla-	knead	2	**0**	
pa-	go	1c	**21**	
paka-	hit, chop	2	**22**	
pali-[1]	die	1b	**0**	
pangi-[1]	scratch, dig	2	**0**	
parti-[1]	rise	1b	**15**	
piya-	break, bite, cut	2	**6**	
pi-[1]	kill	3	**19**	
wa-	speak	1a	**16**	
wa-	fall	5	**24**	
waka-	climb	2	**0**	
wayi-[1]	search for	2	**1**	
winja-	leave alone	2	**0**	

Verb	Gloss	Class	**# combinations**	Notes
ya-	put	2	**10**	
-ya-	go	5	**5**	
yila-	drip, leak, melt	2	**0**	
yu-[1]	give	3	**1**	This CV *palyarr* only occurs in this combination

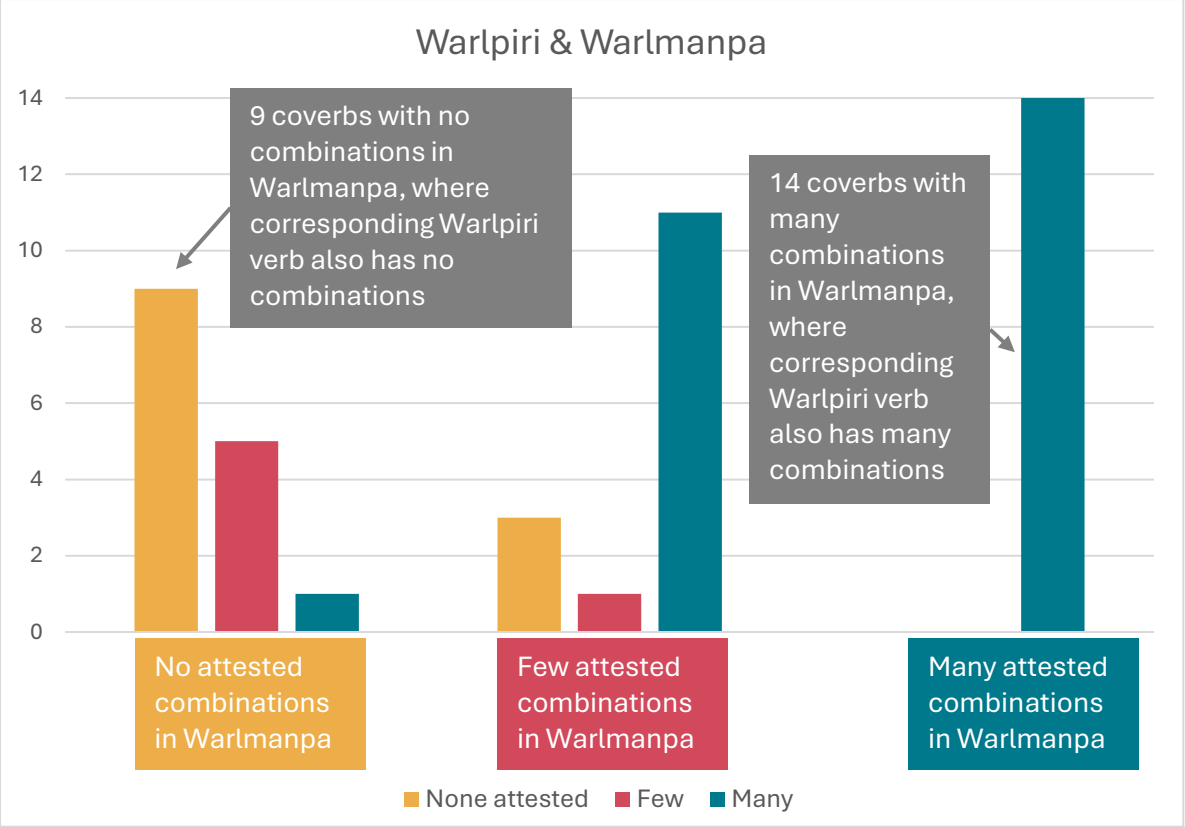
Inflecting verbs by number of coverbs they (are known to) occur with:

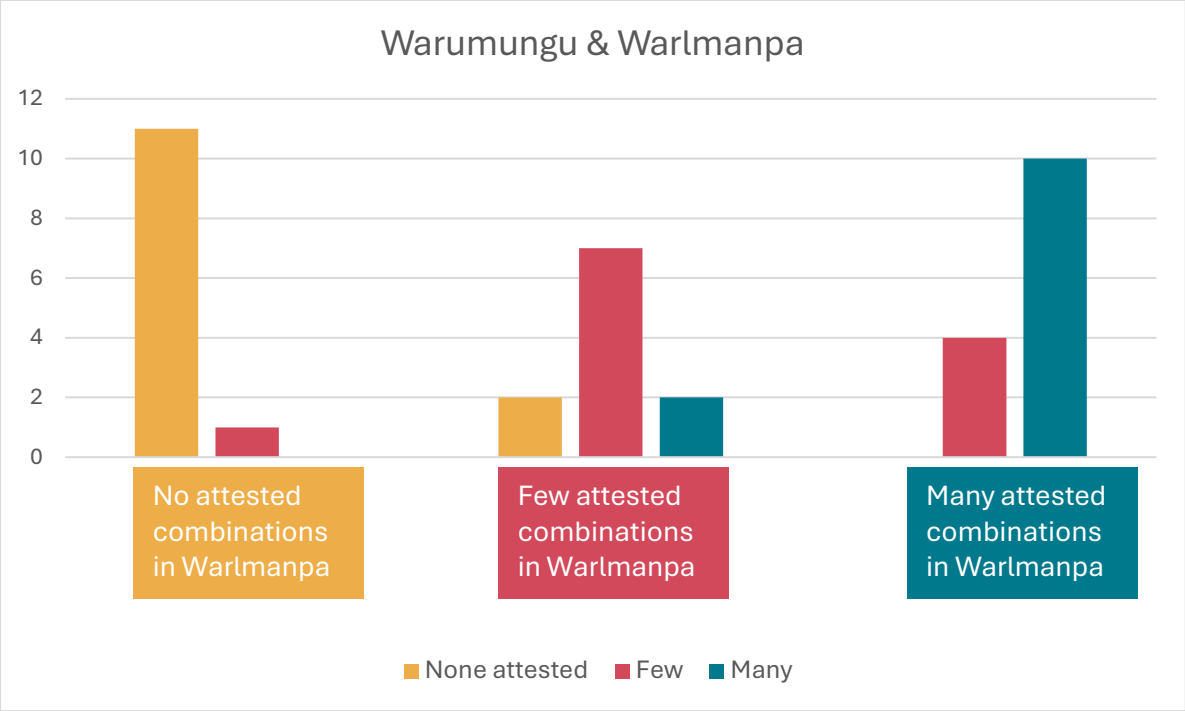


Coverb productivity between languages

If a coverb combines with no/few/many inflecting verbs in one language, is there a tendency for it to combine with no/few/many inflecting verbs in other languages?

Below are graphs comparing firstly Warlpiri and Warlmanpa; then secondly Warumungu and Warlmanpa. Each plot shows the number of coverbs for each category (no combinations, some combinations, many combinations). Note this is based on *semantic* correspondence not *diachronic* correspondence (but highly conflated of course).


Warlpiri & Warlmanpa
14
12
10
8
6
4
2
0
9 coverbs with no combinations in Warlmanpa, where corresponding Warlpiri verb also has no combinations
14 coverbs with many combinations in Warlmanpa, where corresponding Warlpiri verb also has many combinations
No attested combinations in Warlmanpa
Few attested combinations in Warlmanpa
Many attested combinations in Warlmanpa
None attested
Few
Many


Warumungu & Warlmanpa
12
10
8
6
4
2
0
No attested combinations in Warlmanpa
Few attested combinations in Warlmanpa
Many attested combinations in Warlmanpa
None attested
Few
Many

Can the IPs that appear with UPs appear as independent verbs without accompanying UPs? If they can do they have the same meaning or different meanings (e.g. bleached?)

Verbs restricted to coverb constructions include ***-nga-*** 'eat', ***jiya-*** 'cook', and ***-ya-*** 'go'. The rest can occur independently (*-ja-* and *-ma-* are bound but can occur with nominals).

-Nga- 'eat'

In isolation, means 'to eat'. In combination usually (but not necessarily) means 'move'. Some examples:

- *Jirti-nga-* 'stalk'
- *Purn-nga-* 'jump'
- *Purt~purt-nga-* 'boil'
- *Yina-nga-* 'sing'

A number of potential analyses.

Analysis 1: Synchronic analysis could recognise two (or more) inflecting verbs:

- *Nga-* 'eat'
- *-Nga-* 'move'
    - (or, if incorporating 'sing' (intransitive) and 'boil' (transitive), then something really generic)

This reflects the diachronic situation, and is the analysis taken up for Warlpiri (e.g. Nash 1986: 246). It allows for an analysis whereby elements can (and should, where possible) combine productively.

Analysis 2: Combinations have lexicalised meanings.

Analysis 3: allow that coverbs can contain the exhaustive predicational semantics, and the IP is simply there to mark TAM in some combinations. This is the analysis I take up in the Warlmanpa grammar.

As a side note, none of this really explains how *yina-* ended up as a CV in Warlmanpa. Compare Warlpiri *yunpa-rnu* 'sing-PAST) (*yunpa > yina in Warlmanpa by sound change). But, it provides evidence for not proliferating verb numbers because by time you come up with a second lexical entry for *-nga-*, I'm not convinced it would buy you anything meaningful in Warlmanpa (cf Warlpiri where the combinations really do seem to be restricted to movement).

-Ya- 'move'

Not too much to say, other than similar issues – historically derived from a 'go' verb, now has non-movement combinations:

Laki-ya-nta 'howl (as dog)' *laki* only found in this combination

Purlun-ya-nya 'enter'

Uninflected parts

Are UPs an independent open class in the language? Or can more than one part of speech appear in the position of a UP in the UP/IP construction?

I am not aware of any other word types that can take the UP slot in an UP-IP construction.

Do UPs affect the argument structure of the resultant construction (e.g. do they add or subtract arguments, do they affect the selectional restrictions placed on arguments, do they affect case assignment to arguments)?

External object coverbs

Warlmanpa appears to have a small class of **'external object' coverbs** which introduce a dative-marked oblique argument to a predicate:

(7) *Yiwirti=rna-rla* *yirrkin-paka-rnu* *ngurlu-ku*.
Tree=1SG.S-3.OBL with-hit-PST seed-DAT
I will hit the tree with seeds.

(8) *Japanangka-rlu=rla* *kurtu-ku* *yirrkin-la-rnu* *wawirri*.
subsection-ERG=3.OBL child-DAT with-shoot-PST kangaroo
Japanangka, with the child, shot the kangaroo.

The interpretation of the dative-marked nominals is entirely contrained by the coverb. Without it:

a) The argument structure of *paka-* 'hit' and *la-* 'shoot' is ERG-ABS;
b) a dative oblique can be introduced, but could only be interpreted as benefative/malefactive/possessive. In the grammar, I argue this is effectively an argument not an adjunct because it is marked by the bound pronouns (dative-marked adjuncts not marked).

The formal analysis of argument structure and predicate composition for external object coverbs varies (Browne, 2021; Simpson, 1991). What is interesting in Warlmanpa

is that there need not be an oblique argument. In fact, *yirrkin* can seemingly introduce no new entity:

(9) ***Yirrkin**-pa-nya-nya=rna*.
With-go-MOT.AWAY-PRES=1SG.S
I'll go with someone/something.

(Even an unexpressed inanimate oblique would still be marked with *=rla*)

And similarly it can co-occur with a comitative-marked nominal, i.e. a construction where the 'accompaniment' is doubly marked by a nominal suffix and the coverb:

(10) *Ngayu=ma=rna* *yulu* ***yirrkin**-karta-pi-nyi* *kirtana-**parna**-rlu*.
1=TOP=1SG.S ground **with**-spear-act_on-FUT father-**PROP**-ERG
I'll dig the ground with my father.

Other effects on argument structure

Has not been systematically analysed, but there seem to be other coverbs which **add** arguments:

	-ya-	'ABS go, move' (*doesn't occur in isolation but is intransitive with some other CVs)
wirri	*-ya-*	'ERG chase ABS'

And some which **reduce**:

	karla-	'ERG spears ABS'
nyaru	*karla-*	'ABS howls' ?
	paka-	'ERG hits ABS'
jinjirla	*paka-*	'ABS sneezes'

Do UPs fall into different semantic and/or morpho-syntactic classes?

I set up categories (loose nexus, external object, tight nexus) based on morphosyntax. These do not necessarily align to semantic classes (e.g. some tight nexus coverbs are fairly adverbial).

Do UP/IP constructions vary as to semantic compositionality?

In many combinations, especially where the coverb does not occur in other combinations, the coverbs contain the exhaustive semantics of the predication. The inflecting verb is essentially a TAM marker:

(721) *Ngarrka-ngu=ju* *karli* ***kiya-nmi**-rni.*
man-ERG=1SG.NS boomerang **throw**-FUT-TWD
The man will throw a boomerang at me.
H_K01-506A, DG, 01:04:06 hrs

(722) *Ngarrka=rla* *wa-nganyu* *karnta-ku* ***wijja-kiya-rnu.***
man=3SG.OBL speak-PAST woman-DAT **farewell-throw**-PAST
The man spoke to the woman before [he] left her.
N_D02-007842, BN, 50:14 mins

Some productive coverbs are somewhat compositional:

	jutpu-	AgentABS **runs**	exemplified in (717)
wuruly	*jutpu-*	AgentERG **runs (out of sight)**	exemplified in (718)
	kiya-	AgentERG **throws** ThemeABS	
wuruly	*kiya-*	AgentERG **throws** ThemeABS **(out of sight)**	
	ka-	AgentERG **moves** ThemeABS to GoalALL	
wuruly	*ka-*	AgentERG **moves** ThemeABS to GoalALL **(out of sight)**	

(717) *Maliki* *jutpu-ngunya.*
dog run-PRES
The dog is running.
H_K01-505B, DG, 02:39 mins

(718) *Wawirri=rna-palangu* *nya-ngu* *jirrama,* *wuruly* *jutpu-ngu=pala.*
kangaroo=1SG.S-3DU.NS see-PAST two conceal run-PAST=3DU.S
I saw two kangaroos, they ran out of sight.
H_K01-506A, DG, 55:20 mins

In these combinations, *wuruly* specifies the THEME is out of sight in the resultant state of the event. Less straightforward when combining with *nya-* 'see, perceive', where it seems to add a dative argument/oblique:

	nya-	AgentERG sees ThemeABS
wuruly	*nya-*	AgentERG places ThemeABS **(out of sight) for ExperiencerDAT**

(719) ***Nya-nyi****=rna-ngu.*

see-FUT=1SG.S-2SG.NS

I'll see you.

H_K06-004555, LOF, 41:13 mins

(720) *Jawarti=rna-ngu* ***wuruly*** ***nya-nyi****-rni.*

tomorrow=1SG.S-2SG.NS **conceal** **see**-FUT-TWD

Tomorrow I will come and hide the meat from you.

wrl-20180531-01, DF, 16:52 mins

Productivity

How are loan-verbs assimilated into the language?

All (English) loan words borrowed in as nominals (cf. Ngumpin languages where they can be borrowed as coverbs: McConvell, 2009; Meakins, 2010). Some cases of words borrowed in as particles, but not common.

For a borrowing to be functionally predicational, it combines with *-ja-* for an intransitive predicate, and *-ma-* for a transitive predicate. With Warlmanpa words, *-ja-* is an inchoative (become) and *-ma-* is a causative; but when occuring with borrowings, these verbs lose their semantics and only serve to indicate transitivity.

Pirraku-ja-nya 'becoming thirsty'

Thirsty-INCH-PRES

Work-ja-ngu 'worked'

Work-INCH-PAST

Table 6.31 Aktionsart of *-ja-* based on status of derived word

	Durative	Telic	Dynamic
Non-loans	–	+	+
Loans	±	±	+

(Browne 2024: 287)

Some (but not many?) coverbs can be derived into a nominal using *-wari* 'nominaliser', in which case the derived nominal can be predicational:

(11) *Ali=nya* *jurlaka* *kiit-wari* *panja*.
that=FOC bird break-NMLZ wing
'That bird has a broken wing.'

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