

Grammaticalisation and verbal compounding in Central Australian languages

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November 2017

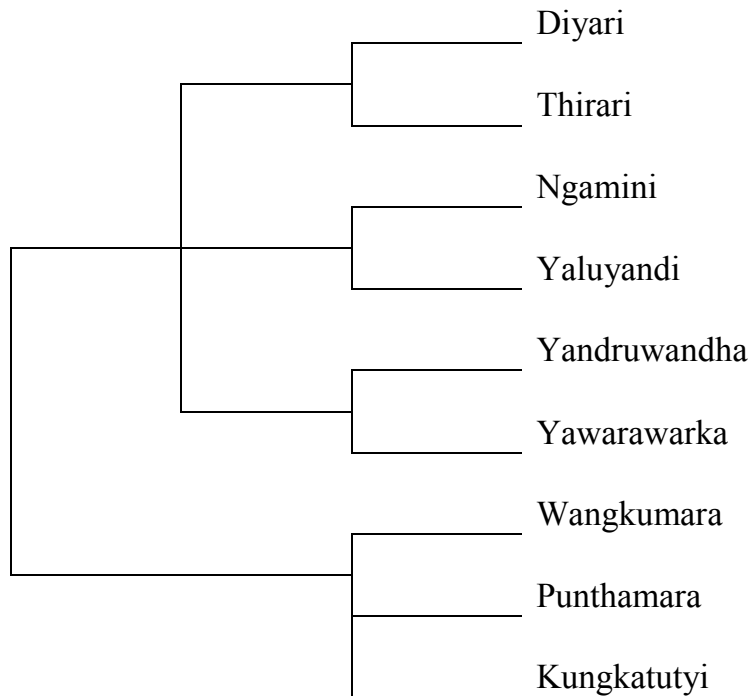
Typical structure in Australian Aboriginal languages:

VERB WORD = ROOT + (DERIVATION)ⁿ + INFLECTION

However, in Yandruwandha and Wangkumara:

VERB WORD = ROOT + (DERIVATION)ⁿ + **ROOT** + INFLECTION

Languages considered and their subgrouping.



Yandruwandha verbs:

1. **root plus inflection** — as in *wawa-nga* see-fut ‘will see’
2. **root plus derivation plus inflection** — as in *wawa-yindrri-nga* see-reflex-fut ‘will see one’s self’
3. **root plus derivation plus derivation plus inflection** — as in *windrri-ma-yindrri-nga* enter-caus-refl-fut ‘will put oneself in’

Also there are compounding roots that can follow derivation and precede inflection – these are very common in texts (compound roots are bolded):

(1)	<i>Ngaparla</i>	<i>kuldru</i>	<i>paku-ngari-ri</i>	<i>nga</i>	<i>yanku-la</i>	<i>kurra-waga-ri</i>
	well	hole	dig-down-unspec	then	bough-emph	put-around-unspec
	<i>nga</i>	<i>windri-pandhi-nga</i>	<i>palha</i>	<i>muku-li</i>	<i>wirlpi-nhina-rnanga</i>	<i>ngala</i>
	then	enter-down-fut	bird	bone-erg	whistle-sit-cont	then
	<i>kathi</i>	<i>thana</i>	<i>ngara-ngara-mini-rlyi-la</i>	<i>warruwici-li-ci</i>	<i>thawa-wara-nga</i>	<i>thawa-wara-nga</i>
	animal	they	nom hear-hear-run-sim-emph	emu-erg-emph	go-arrive-fut	go-arrive-fut
	<i>ngara-ngara-mini-rlyi-la</i>	<i>warruwici-li-ci</i>	<i>thawa-wara-nga</i>	<i>thawa-wara-nga</i>		
	hear- hear-run-sim-emph	emu-erg-emph	go-arrive-fut	go-arrive-fut		
	<i>thanggu-waga-waga-nga</i>	<i>ngala</i>	<i>karna</i>	<i>purri-nhina-rlyi</i>	<i>ngari</i>	
	stand-around-around-fut	then	person	hide-sit-sim	down	
	<i>mingka-yi</i>	<i>ngarru</i>	<i>thanggu-thalka-wara-rlyi</i>	<i>dranyi-nga-la-ci</i>	<i>yara-li</i>	
	hole-loc	only	stand-up-arrive-sim	pelt-fut-emph-emph	boomerang-erg	

‘Well, they would dig a hole and put boughs around it. Then [a man] would get down into the hole and whistle with a bird bone, and the emus would hear it as they were passing. They would come and stand around, while the man hid down in the hole. Then he would jump up and hit [one] with a boomerang’ [Breen 1975 ex. 448].

In compound verbs, first root is head:

1. transitivity of the compound corresponds to the transitivity of the first verb root, eg. *wawa-* ‘TS sees TO’ is transitive, and so too is *wawa-thika-* ‘TS sees TO while (TS is) returning’; *walki-* ‘IS climbs’ is intransitive, and so too is *walki-thika-* ‘IS climbs back’.
2. first root may be followed by a derivational suffix (which can affect its transitivity) -- these always **precede** any compounding roots.
3. semantics: first root carries the main lexical meaning and compounding roots have modifying, adverbial-type semantics, eg. add directionality component, ie. action directed upwards/downwards/into etc.

Structure:

Verb Word = Head_Verb + (Derivation) + Compounding_Verbⁿ + Inflection

Types of compounding verbs:

1. identical in form and almost identical in semantics to free verb roots;
2. identical in form but different in semantics from free verb roots; and
3. do not correspond to free verb roots.

TABLE 1. **Yandrruwandha affixes with verb root form and similar meaning**

VERB ROOT	MEANING	COMPOUND SEMANTICS
Roots with motion semantics		
1. <i>-thawa-</i>	go	action done while agent is in motion
2. <i>-mini-</i>	run	action done while agent is in motion
3. <i>-thika-</i>	return	action directed back to point <i>of</i> origin (also an altruistic action done for someone other than the agent)
4. <i>-pandhi-</i>	go down	action directed downwards
5. <i>-ngari- g</i>	go down	action directed downwards
6. <i>-thalka-</i>	go up	action directed upwards (also action in morning)
Root without motion semantics		
7. <i>-yukarra-</i>	spend a night	action at night or in darkness

TABLE 2. **Yandrruwandha Affixes with verb root form and different meaning**

VERB ROOT	MEANING	COMPOUND SEMANTICS
1. <i>-thawa-</i>	go	action done while agent is in motion
Affixes corresponding to intransitive verbs		
8. <i>-nhina-</i>	sit	continuing action or state (and action during the daytime)
9. <i>-windrri-</i>	enter	action away from speaker
10. <i>-tharra-</i>	fly	action done thoroughly or completely
Affixes corresponding to transitive verbs		
11. <i>-waga-</i>	shift	action oriented around some referent
12. <i>-thayi-</i>	eat	action done for benefit of agent
13. <i>-warrka-</i>	throw	action in morning

COMPOUNDING ROOT	COMPOUND SEMANTICS
14. <i>-durra-</i>	continuing action while in motion
15. <i>-wara-</i>	denotes arrival
16. <i>-para-</i>	action across or into

Double compounds:

1. *-thalka-wara-* ‘go up’ + ‘arrive’, eg. *thanggu-thalka-wara-* ‘stand right up’ (Breen ex. 29), *kukupathalka-wara-* ‘jump right up’ (Breen ex. 28)
2. *-thika-pandhi-* ‘return’ + ‘go down’, eg. *walki-thika-pandhi-* ‘climb back down’ (Breen ex. 19)

3. *-mini-windri-* 'run' + 'enter', eg. *thanggu-mini-windri-* 'get up and go' (Breen ex. 32)
4. *-thara-para-* 'fly' + 'inside', eg. *mandri-thara-para-* 'take out of' (Breen ex. 42)

Wangkumara verbs. McDonald and Wurm (1979:36):

“[d]erivational suffixes not affecting transitivity are of two types. One well-defined group ... is adverbial in nature, specifying direction of the action of a verb with respect, usually, to the speaker.”

1. suffixes corresponding to verb roots:

- dhika-* back cf. *thika-* to return
- manja-* along cf. *manja-* to crawl
- waga-* at night cf. *waga-* to sleep, camp

2. suffixes not corresponding to a verb root:

- tharri-* hence, hither
- thaba-* away
- wari-* down

3. monosyllabic suffixes:

- nhi-* hence, hither
- pa-* upwards, in the morning (but cf. *walpa-* to go up)
- ka-* prior motion

(2) *Karna-bula pula-guru nuga-bula yantha-dhika-garla-rrri.*
 man-two they-two big-two go-back-present-irr?
 ‘Two big men are coming this way.’ (M&Wp81, ex. 238)

(3) *Kanga-dhika-garla ngathu nguthi-anha.*
 carry-back-pres I.erg meat-acc
 ‘I carry the meat back.’ (Breen 1981, ex. 144)

(4) *Mandha-dhika-rra nhanha-guru pakarranyi.*
 hold-back-imper that.acc-there boomerang
 ‘Bring back that boomerang.’ (M&Wp83, ex. 262)

(5) *Nhaja-dhika-garla nhulu-guru.*
 look-back-pres He.erg-there
 ‘He is looking back.’ (Breen 1981 ex. 146)

(6) *Yantha-garla nhia-guru thaltha-manja-garla.*
 go-pres he-there eat-along-pres
 ‘He is walking along eating.’ (Breen 1981 ex. 149)

(7) *Thamba-waga-nga nhia ngawula-nga-ninha.*
 creep-night-past he.nom dark- loc
 ‘He sneaked up in the dark.’ (Breen 1981 ex. 164)

- (8) *Yantha-tharri* *wii-angura*.
 go-hence.imper fire-ablat
 ‘Come away from the fire!’ (Breen 1981 ex. 140)
- (9) *Yantha-thaba*.
 go-away.imper
 ‘Go away!’ (Breen 1981 ex. 141)
- (10) *Kula-warri*.
 sit-down.imper
 ‘Sit down!’ (Breen 1981 ex. 154)
- (11) *Kula-pa-rra*.
 sit-up.imper
 ‘Sit up!’ (Breen 1981 ex. 158)
- (12) *Purda-pa-nga* *ngathu ngawuburu* *matha-inha-i*.
 tell-morning-immedpast I.erg morning boss-acc-?
 ‘I told the boss early this morning.’ (Breen 1981 ex. 163)
- (13) *Mandha-ka-nga* *ngathu* *wii-nhanha*.
 carry-prior-immed past I.erg firewood-acc
 ‘I went and got some firewood.’ (Breen 1981 ex. 151)

Compound verb phrases in Diyari, Ngamini, Yaluyandi

VP = RootVerb - (derivation)-ptcple CompoundVerb-inflection

1. sequences syntactically tightly bound. No words may appear between the two verbs. The two verbs are two phonological words, but are pronounced together under the same intonation contour;
2. first verb always takes a participial inflection (with allomorphs *-rnda*, *-rda*, *-ma*), second takes a tense/mood inflection with scope over the whole sequence;
3. second verb root restricted to a small set of intransitive verbs of stance or motion;
4. first verb is semantic and syntactic head: only it may be followed by derivational affix
5. the second verb provides adverbial qualification of semantics of first verb, typically motion or directional.

- (14) *Nganha* *nganthi* *yingki-rna* *thika-mayi*.
 1sg.acc meat give-ptcple return.imper-emph
 ‘Give me the meat back!’ (Diyari)
- (15) *Nhawa* *thirriitha* *ngakarni* *parka-ma* *kurru-rna* *warra-yi*,
 he.nom dog 1sg.dat run-ptcple away-ptcple aux-pres

ngathi *nhinha* *manda* *thika-rna* *warra-yi*.
 1sg.erg 3sgmasc.acc get-ptcple return-ptcple aux-pres
 ‘My dog ran away but I brought him back.’ (Ngamini)

(16) *Yindi* *kurra-rnda* *thika*.
 2sg.erg put-ptcple return.imper
 ‘You put (it) back!’ (Yaluyandi)

TABLE 4. *Diyari*, *Ngamini* and *Yaluyandi* compounding verbs

	Diyari	Ngamini	Yaluyandi	Root Gloss	Qualifying Function
1	<i>thara</i>	<i>thara</i>	<i>thara</i>	go up	directed upwards
2	<i>ngari</i>	<i>ngari</i>	<i>ngari</i>	go down	directed downwards
3	<i>thika</i>	<i>thika</i>	<i>thika</i>	return	directed back to point of origin
4	<i>ngama</i>			sit	whilst stationary
5	<i>tharka</i>	<i>tharka</i>		stand	whilst standing
6	<i>karji</i>	<i>kawuwa</i>		go around	directed around some referent (prototypically a fire)
7	<i>wirari</i>			walk about	performed in various directions
8	<i>wirri</i>	<i>wirri</i>	<i>wirri</i>	enter	directed into a place
9	<i>parlka</i>	<i>parka</i>		travel	whilst moving
10		<i>marka</i>		crawl	whilst moving
11	<i>kurra</i>	<i>kurru</i>	<i>kurra</i>	put/place	directed away

TABLE 5. **Cross-linguistic comparison**

	Wangkumara	Yandruwandha	Diyari/Ngamini	Gloss
Deictic				
1		<i>thawa, mini</i>	<i>parlka</i>	whilst moving
2	<i>manja</i>	<i>durra</i>	<i>marka</i>	continuous in motion
3	<i>dhika</i>	<i>thika</i>	<i>thika</i>	back to origin
4	<i>tharri, nhi</i>	<i>wara</i>	<i>wirri</i>	towards speaker or into a place
5	<i>thaba</i>	<i>windri</i>	<i>kurra</i>	away from speaker
6	<i>pa</i>	<i>thalka</i>	<i>thara</i>	upwards (in morning for W & Y)
7	<i>warri</i>	<i>pandhi, ngari</i>	<i>ngari</i>	downwards
8	<i>waga</i>		<i>karji, karuwa</i>	around a referent
9		<i>parra</i>		across, out of
10			<i>wirari</i>	in various directions
11		<i>nhina</i>	<i>ngama</i>	whilst seated, continuous
12			<i>tharka</i>	whilst standing

Temporal				
13	<i>waga</i>	<i>yukara</i>		at night (<camp at night)
14	<i>warka</i>	<i>wara</i>		action in morning (< throw)
Other				
15		<i>tharra</i>		to completion
16		<i>thayi</i>		for oneself

Auxiliary verbs

Diyari, Ngamini and Yaluyandi also have Auxiliary verbs with tense/aspect functions that are homophonous with and apparently derive from main verbs. These are fully grammatical elements:

Verb phrase = RootVerb (-Derivation)ⁿ (CompoundingVerb-ptcle) Auxiliary-inflection

TABLE 6. Auxiliary verbs

	Diyari	Ngamini	Yaluyandi	Lexical verb	Aux sense
1	<i>ngana</i>	<i>ngana</i>	<i>ngana</i>	be	future
2	<i>wanathi</i>	<i>wapa</i>	<i>wapa</i>	go search	distant past
3	<i>wapa</i>			go	intermediate past
4	<i>warra</i>	<i>warra</i>		throw	today past
5	<i>parra</i>			lie (inanimate)	recent past
6	<i>wirri</i>			enter	last night past

Rebracketing, Morphologisation and Univerbation

Rebracketing – change in syntactic structure without change in surface string

Observation: participle inflection used in Diyari, Ngamini, Yaluyandi compound VP constructions is identical to a same-subject switch reference marker used in complex sentences:

Imperfective relative-present tense clauses are dependent and can precede or follow the main clause, with the second coreferential subject usually omitted:

(17) [*Nganhi* *thika-yi*]_{MAIN} [*mindri-rna*]_{DEPENDENT}
 1sg.nom return-pres run-imperfSS
 ‘I come back, running’

(18) [*Nganhi* *mindri-rna*]_{DEPENDENT} [*thika-yi*]_{MAIN}
 1sg.nom run-imperfSS return-pres
 ‘Running, I come back’

This could be rebracketed as:

- (19) [*Nganhi* *mindri-rna* *thika-yi*]_{MAIN}
 1sg.nom run-ptcple return-pres
 ‘I run back’

The same applies for transitive dependent clauses which could be rebracketed in the same way:

- (20) [*Nganhi* *thika-yi*]_{MAIN} [*nhinha* *nhayi-rna*]_{DEPENDENT}
 1sg.nom return-pres 3sgmasc.acc see-imperfSS
 ‘I come back, seeing him’
- (21) [*Ngathu* *nhinha* *nhayi-rna*]_{DEPENDENT} [*thika-yi*]_{MAIN}
 1sg.erg 3sgmasc.acc see-imperfSS return-pres
 ‘Seeing him, I come back’
- (22) [*Ngathu* *nhinha* *nhayi-rna* *thika-yi*]_{MAIN}
 1sg.erg 3sgmasc.acc see-ptcple return-pres
 ‘I see him as I come back’

For some motion verbs, eg. *ngari* ‘go down’, *thara* ‘go up’, there is semantic bleaching as the motion component of their semantics is lost but the deictic component is retained. Thus contrast the following:

- (23) [*Ngathu* *nhinha* *nhayi-rna*]_{DEPENDENT} [*ngari-yi*]_{MAIN}
 1sg.erg 3sgmasc.acc see-imperfSS go.down-pres
 ‘Seeing him, I go down’
- (22) [*Ngathu* *nhinha* *nhayi-rna* *ngari-yi*]_{MAIN}
 1sg.erg 3sgmasc.acc see-ptcple go.down-pres
 ‘I look down at him’ (where I could be stationary, eg. at the top of a tree)

In Yandruwandha and Wangkumara we seem to have evidence of further grammaticisation whereby the compound Verb words become compound Verb roots by morphologisation and univerbation:

Anderson (1988:336):

“[i]t is a commonplace of historical change that many morphological elements can be derived historically from originally independent words ... An originally syntactic collocation developed into a pattern of compounds, and the recurrent second element of these compounds was reanalysed as a derivational suffix. An original syntactic structure has been morphologized, and the rule which describes the addition of this affix to certain stems is a historical reflex of that syntactic structure.”

Hock (1986:338):

“univerbation, the morphological counterpart of Behagel’s law, by which elements forming a single lexical unit become a single word.”

VP = DependentVerb – (derivation)-imperfSS MainVerb-inflection

rebracketing



VP = RootVerb - (derivation)-ptcple CompoundVerb-inflection

univerbation



VP = RootVerb - (derivation)-CompoundVerb-inflection

There is a possible **phonological** trigger for the loss of the participial affix in the compound VP construction. In all these languages most verb roots are disyllabic. Word stress is not phonologically contrastive and falls on the first syllable of a word (or disyllabic morpheme). The third and fifth syllables of a word may bear secondary stress. Final syllables are always unstressed. In general, long polysyllabic words have an alternating stress pattern with stressed and unstressed syllables adjacent. In a compound sequence we would find the following stress pattern (where S stands for stressed syllable and U stands for unstressed syllable):

S U U S U U
CVC(C)V-(*rn*)*da* CVCV—tense/mood

The compound is pronounced as a single intonation unit and the pattern of alternating stressed and unstressed syllables in polysyllabic words could exert phonological pressure for the loss of the medial unstressed -(*rn*)*da*/*rna* and the reanalysis of the whole as a single word, giving:

S U S U U
CVC(C)VCVCV—tense/mood

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