

Ngadju Verbs: A Fresh Approach
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Abstract

The Ngadju language from the south of Western Australia has hitherto presented a complex verbal system which is markedly different to those of its neighbours. The three major existing analyses of the Ngadju verbal system present strikingly contradictory approaches and analyses which have been inconsistent and have not satisfactorily accounted for the data. This study presents a fresh analysis drawn from a dataset of newly transcribed and interlinearised field recordings made by fluent Ngadju speakers in 1970, and presents an account of the Ngadju verbal system from the ground up. Prior analyses have insisted on either a tenseless and aspectless verbal system which non-obligatorily marks only for number, or a tense system with an inventory of non-obligatory suffixes with no known function. In contrast, the present study establishes that Ngadju is marked for aspect, and that aspect agrees with the number of the agent of the clause.

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1. Background to Ngadju

Ngadju (also referred to in older resources as Ngadjumaya, Ngadjunmaya, Partuk, and Kalaaku) is a language of the Ngadju Nation from the southern Goldfields region of Western Australia. From the continent-spanning Pama-Nyungan family, Ngadju is identified alongside Kaalamaya and Mirniny as a language of the regional Mirning language family that covers the central-to-eastern south of Western Australia, into South Australia. As of 2025, Ngadju is severely endangered, with community-led efforts to revitalise the language continuing and growing. While Ngadju regularly demonstrates features and forms shared with many Australian languages of the Western Desert and beyond, as an exemplar of the Mirning family, many elements are often distinct and mark the language as unique in the region.

2. Verbal morphology in Australian languages

All Australian languages employ a grammatical category of single-morpheme roots which take inflectional suffixes marking for tense, aspect, or mood, a broad category which Dixon has called ‘simple verbs’ (Dixon, 2002, p. 70). Within Australian languages, the most common TAM paradigm is one of past and non-past, however future/non-future and past/present/future are also observed (Dixon, 2002, p. 71). Less commonly, some Australian languages employ a purely aspectual system, in which Perfective and Imperfective form the primary TAM suffix inventory and tense is absent (Dixon, 2002, p. 72). The majority of Australian languages will also use at least one imperative form, distinct from other verbal suffixes, used to express commands (Dixon, 2002, p. 79). Lastly, an irrealis mood may be observed, marking for events which are yet to happen at time of utterance, or which might have happened but did not (Dixon, 2002, p. 72). The inventory of TAM suffixes in Australian languages may also vary, with Wik-Ngathan from the Cape York Peninsula of Queensland employing just two: (Irrealis and Realis), and Panyjima from the Pilbara region of Western Australia fourteen (Dixon, 2002, p. 212). Across the breadth of Australian languages, as one would expect in any area of that size, the verbal systems in place demonstrate considerable diversity and complexity.

3. Verbal morphology in Western Australian languages

Conservative accounts of Western Australian language families identify eleven language families within the agreed colonial borders of Western Australia (Dixon, 2002, p. xxviii). Of these, the Western Desert/Wati family, representing roughly twenty speech forms, covers the majority of the inland state, as well as parts of the Northern Territory and South Australia, and the overwhelming majority of the Goldfields-Esperance region. The Wati/Western Desert family borders the Mirning language family to the south, of which Ngadju is a member, while shared features as well as distinct contrasts are common between the two families.

3.1. Inflectional categories in Western Australian languages

Pitjantjatjarra is a prominent and relatively well-documented Wati language spoken to the northeast of Ngadju Country, and can be used as an example of a typical Western Desert language and as a comparison to Ngadju. Pitjantjatjarra employs a system of twelve inflectional categories, applied to four verb classes (Goddard & Defina, 2020, p. 9):

Table 1 Summary of Pitjantjatjarra verbal inflectional suffixes (Goddard & Defina, 2020, p. 9). The four verb classes are listed on the horizontal axis, demonstrating the class-based allomorphy of the suffixes.

	\emptyset	<i>la</i>		<i>ra</i>	<i>wa</i>
		<i>i</i> -final stem	non- <i>i</i> -final stem		
Imperative	-\emptyset	-la		-ra	-wa
Continuous Imperative	-ma	-nma		-nama	-ngama
Past	-ngu	-rnu		-nu	-ngu
Past Imperfect	-ngi	-ningi		-nangi	-ngangi
Present	-nyi	-ni	-rni	-nanyi	-nganyi
Future	-ku	-lku		-nkuku	-ngkuku
Characteristic	-payi	-lpayi		-nkupayi	-ngkupayi
Negative	-wiya	-lwiya, -wiya		-nkuwiya	-ngkuwiya
Circumstantial	-nyangka	-nnyangka		-nkunyangka	-ngkunyangka
Serial	-ra	-ra		-la	-la
Intentive	-nytjikitja	-ntjikitja		-nytjikitja	-nytjikitja
Purposive	-nytjaku	-ntjaku		-nytjaku	-nytjaku

Pitjantjatjarra exemplifies an Australian language with a verbal system that encodes for tense, aspect, and mood, with several suffixes covering two of these functions simultaneously. Verb classes are identified and traditionally labelled based on their respective Imperative suffixes as the most readily-identified and contrastive suffix category. A verbal system such as that of Pitjantjatjarra will be immediately familiar to those accustomed to the majority of Western Australian languages.

3.2. Bound pronouns in Western Australian languages

While all Australian languages have pronouns of some variety, a common feature of Wati/Western Desert languages is bound pronouns, a feature shared by over half of Australian languages (Dixon, 2002, p. 337). Whereas systems without bound pronouns require noun phrases to represent core arguments of clauses, systems with bound pronouns allow for affixes which are included within the verb-form. While some Western Australian languages employ a large bound pronominal system, e.g., Ngaanyatjarra, (thirty-three bound pronouns

covering three cases and eleven number/person combinations), Pitjantjatjarra has a system of sixteen, as summarised in Table 2:

Table 2 Summary of Pitjantjatjarra free (left) and bound (right) pronouns based on Eckert and Hudson. (1988, p. 145).

		<i>Subject</i>		<i>Object</i>		<i>Possessive</i>	
<i>first person</i>	1SG	ngayulu	-rna	ngayunya	-rni	ngayuku	-tju
	1DU	ngali	-li	ngalinya	-linya	ngalimpa	-limpa
	1PL	nganarna	-la	nganarnanya	-lanya	nganampa	-lampa
<i>second person</i>	2SG	nyuntu	-n	nyuntunya	-nta	nyuntumpa	
	2DU	nyupali		nyupalinya		nyupalimpa	
	2PL	nyura		nyuranya		nyurampa	
<i>third person</i>	3SG	paluru	-∅	palunya	-∅	palumpa	-ra
	3DU	pula	-pula	pulanya		pulampa	
	3PL	tjana	-ya	tjananya		tjanampa	

Pitjantjatjarra bound pronouns are generally added to the first noun phrase of a clause, with the result that they may be appended to nouns or verbs (Eckert & Hudson, 1988, p. 143). Pronominal systems such as that described above are common within Wati/Western Desert languages and may be seen as an identifying typological feature.

4. Previous accounts of Ngadju verbal morphology

Three existing analyses of Ngadju verbal morphology are presented here to provide a background to the present study. Each analysis provides valuable insight and observations on the topic of Ngadju verbs, however I argue here that each prior analysis overlooks key factors that more rigorously account for the Ngadju verbal system.

4.1. Carl-Georg von Brandenstein

The first published systematic analysis and account of Ngadju verbal morphology was conducted by Carl-Georg von Brandenstein in his grammar (1980). Von Brandenstein's analysis is based on original tape-recorded fieldwork conducted in 1970 and working closely with eleven speakers.

4.1.1. Numeric suffixes

In von Brandenstein's account, rather than tense, aspect, or mood, Ngadju verbs emphasise number (1980, pp. 16–17). Von Brandenstein claims that Ngadju verb stems are appended non-obligatorily with a set of numeric suffixes which agree with the grammatical number of the Subject or Agent, as summarised in Table 3:

Table 3 Summary of von Brandenstein's numeric suffix system.

Number	Suffix	Von Brandenstein's notes
Singular	-ki-, -ku-	Most likely a derivative of kayanu one
Dual	-pi-	Sign of dual known also from other languages, c.f., the common -pula both<half of pair or forms like northwest Nyiyapali -payina, -payimpa .
Trial	-pirri-	obviously made up of D -pi- and PL -rra
Plural	-karra-, -ngarra-, -njarra-, -jarra-, -ngarri-, -jirri- -ngalpa-, -alpa-	C-harmonic with the V-harmonic variants -ngarri-, -jirri- collective PL from ngalpa big, plenty

Von Brandenstein notes that the dual is becoming less frequent and is not applied consistently among speakers at the time, a point commented on by the speakers themselves. The trial and plural forms are also admitted to at times being used interchangeably. Von Brandenstein also recognises that transitivity plays no part in verb-forms, providing the following examples, which are assumed to be constructed by the author rather than drawn from natural language data (1980, pp. 16–17):

- (1) **Matayi nyinakin.**
It sits/it lives.
- (2) **Matalu nganya nangukin.**
It sees me.
- (3) **Ngajukuja nyinapin.**
We two sit/we two live.
- (4) **Ngajukujalu matana nangupin.**
We two see it.
- (5) **Matayi nyinapirrin.**
They sit/they live.
- (6) **Matalu nganya nangupirrin.**
They see me.
- (7) **Marlpa nyinalpan.**
The people sit/the people are.
- (8) **Marlpa ngalparrulu matana nangukarran.**
Lots of people see it.

Von Brandenstein claims that number is sometimes elided on the Agent/Subject noun, with the verbal number suffix carrying the numeric load of the clause, however the examples provided are for the noun **marlpa person/people** which is a consistently zero-plural noun in Ngadju:

(9) **Marlpa yankukin.**
The person is going.

(10) **Marlpa yankukarran.**
The people are going.

In the absence of tense, von Brandenstein records an inventory of descriptors from which temporal placement of a clause can be interpreted, alongside context:

Table 4 Summary of the inventory of temporal descriptors proposed by von Brandenstein (1980).

Descriptor	Meaning	Example	Translation
mawun / karra mawun / tukurr mawun	<i>ago, past, long time, always</i>	Ngaju mawun yankun	<i>I went a long time ago</i>
kumpa	<i>after, soon, before, PAST</i>	Ngaju kumpa yankun	<i>I have already been</i>
kanka	<i>the other day, a short while ago, recently, yesterday, before</i>	Ngaju kanka yankun	<i>I went recently</i>
yayi	<i>now</i>	Ngaju yayi yankun	<i>I am going now</i>
yayi purtayi	<i>today</i>	Ngaju yayi purtayi yankun	<i>I am going today</i>
purta / puta / putayi / puta mawun	<i>soon, near future, later on, perhaps, by and by</i>	Ngaju purta yankun	<i>I am going soon</i>
yaparti	<i>tomorrow</i>	Ngaju yaparti yankun	<i>I will go tomorrow</i>
jila / jula	<i>FUTURE</i>	Ngaju jila yankun	<i>I will go later</i>
purta mawun /karra mawun	<i>some time in future</i>	Ngaju puta mawun yankun	<i>I will go some time later</i>

4.1.2. The ‘participle’

The centrepiece of the Brandensteinian account of Ngadju verbal morphology is the ‘participle’ (1980, pp. 16–17). In von Brandenstein’s view, finite indicative Ngadju verbs are commonly, but not universally appended with a form-final participle. Formally, this participle takes a variety of nasal-initial allomorphs; **-n** in most cases; **-ngy** following semi-retroflex consonant clusters; and **-nu** or **-ngu** following stems which include the Continuative aspect suffix **-na/-n-**. Von Brandenstein claims that these forms must be etymologically related to Wati/Western Desert past suffixes, however importantly maintains throughout his work that

in the Ngadju context they are devoid of temporal meaning. Von Brandenstein provides the following four examples for **yanku-** (to go), however these appear not to be drawn from natural language and were rather constructed by the author for the purpose of demonstration (1980, p. 26).

Present:	nguntu yankun	=	<i>you are going</i>
Future:	nguntu jila yankun	=	<i>you will go</i>
Past:	nguntu kumpa yankun	=	<i>you went</i>
Potential:	nguntu purta yankun	=	<i>you intend to go, you might go</i>

Von Brandenstein further describes a Continuative suffix (**-n-**, **-na-**) which is occasionally found between the verb stem and the ‘participle’. Von Brandenstein places importance on the Continuative in word-forming and etymology, providing examples of verb stems which he considers to be the result of the application of the Continuative, e.g. **kuwana-** *to listen/hear*, **nyina-** *to sit/live/be*, **rapan-** *to appear/stay visible*. Von Brandenstein claims that the addition of the Continuative results in the participle taking its **-nu** allomorph, which would have underlying forms such as ***nyinananu** (**nyina+na+nu**) instead become e.g. **nyinakan** with stress on the last syllable, however no further argument or evidence is provided, with no examples in the text.

Thus, in von Brandenstein’s account of core Ngadju verbal morphology, a form such as **yankukarran** could be glossed as **yanku+karra+n** *go+PL+PART*, indicating that the subject is plural. In his account the form would contain no aspectual or temporal information, relying on context or auxiliaries elsewhere in the utterance for any relevant interpretations.

4.2. Steven Roberts

A second sketch grammar functioning predominantly as a review of von Brandenstein’s was produced by Steven Roberts c.1995 (n.d.). Roberts appears to have based his work entirely on von Brandenstein’s written publication and did not have access to speakers or field recordings. Roberts accepts and repeats several of von Brandenstein’s accounts, however disagrees strongly with others.

Roberts rejects von Brandenstein’s numeric account of Ngadju verbs on account of the quantity of proposed allomorphs and that there are no observable conditions of selection, arguing that they must instead represent distinct morphemes altogether. Roberts considers von Brandenstein’s account of numeric suffixes to be a claim of bound pronouns, which he identifies as a relatively recent feature of many Australian languages (Dixon, 2002, p. 341). Seeing the relatively recent emergence of bound pronouns as the cause of their being entirely word-final in most languages, Roberts considers these numeric suffixes in Ngadju unlikely to be genuine pronouns due to their medial position, i.e., always followed by the nasal-initial ‘participle’/‘tense suffixes’. Importantly, von Brandenstein never claims that these suffixes are bound pronouns, and as they contain no information relating to grammatical person, it would be difficult to describe them as pronouns in any case.

1. Tense suffixes: **-nu** PAST, **-n/-ng** NON-PAST.

Roberts rejects the participle interpretation of the verb-form-final nasal suffixes, instead tentatively analysing two nasal-initial suffixes as tense suffixes, with **-nu** PAST, **-n/-ng** NON-PAST.

Roberts briefly mentions von Brandenstein’s reference to auxiliary verbs without providing any examples or comment. Roberts presents a tentative system of at least two verb classes with a possible third, as summarised in Table 5. Roberts admits that these classes are not consistent and provides the summary with a caveat, leaving the derivational auxiliaries out entirely.

Table 5 Summary of Roberts' Ngadju verb classes and verbal suffix allomorphy. The three verb classes are listed on the horizontal axis, demonstrating the class-based allomorphy of the suffixes. Items with question marks are included verbatim in the original document and represent a tentative inclusion.

	\emptyset	n	r
Irrealis	-ku	-nku	
Past		-nu	
Non-Past	-ng	-n	
Imperative	-ka	-n(k)a	-ra
Iterative	-ju	-nju	
Transitiviser	-ja	-nja	
‘Let’	-ji	-ti	
Purposive			-rti
Perfect	-ki	-nki	
?	-ya	-nta	
? Continuous		-ni, -na	
?			-lpa
?	-pi		

4.3. Graham and Marmion

A third sketch grammar was produced by the late Mr. Graham and Douglas Marmion, in which von Brandenstein’s written material was summarised and reinterpreted by Graham, an adult heritage learner of Ngadju, with linguist Marmion.

By their own admission, Graham and Marmion closely adhere to Roberts’ analyses, considering the more recent analysis of Ngadju verbs to be more coherent than von Brandenstein’s, and more consistent with contemporary understandings of Australian languages (2008, p. 23).

- Tense suffixes: **-nu** PAST, **-n** NON-PAST.

Graham and Marmion accept Robert’s tense analysis of verb-final nasal suffixes, with **-nu** PAST, and **-n/-ng** NON-PAST. While not providing any specific analysis of their own, Graham and Marmion acknowledge that Roberts’ rejection of von Brandenstein’s

numeric-only suffixes and his position that more functionality must be present, is likely the correct interpretation. While Roberts does not mention the role of temporal descriptors, Graham and Marmion provide the following examples:

- ▷ **kanka**: Graham disagrees with von Brandenstein’s claim that this means *yesterday*, and instead translates it as *already/before*.
- ▷ **purrayi**: clearly representing **puranyi** as recorded elsewhere, translated as *later*.
- ▷ **kumpa**: translated as *before* with no comment.

5. Observations of verbal morphology in Ngadju

The present study represents the latest systematic account of Ngadju verbal systems, which draws from the original audio field recordings conducted half a century ago, supplemented by the three prior analyses listed above. Importantly, the present analysis is also assisted by modern spectrographic representation where audio is indistinct. Whereas von Brandenstein worked closely with fluent speakers of Ngadju, his transcription practice suffers from being purely impressionistic, resulting in considerable transcription errors, and deliberate insertions of non-existent sequences. While Graham and Marmion, and to a lesser extent Roberts apply more contemporary linguistic insights, it is not apparent that they had access to the original field recordings, meaning that Roberts in particular was working solely from the written record, and that Graham and Marmion are working from the written record with Graham’s adult heritage learner knowledge.

The present study is based on twelve freshly-transcribed and interlinearised audio recordings conducted by von Brandenstein from July to October 1970 in the Western Australian towns of Norseman, Esperance, Coolgardie, and Yalata in South Australia. Nine of the recordings are straightforward narratives told by a single speaker, two are messages for another individual recorded by a single speaker, and one is a narrative told by two speakers in conversation. Of the twelve, six are presented fully transcribed and interlinearised in von Brandenstein’s text, however the remaining six represent the first transcriptions of these field recordings undertaken, to the best of our knowledge. Due to the inconsistent sound quality of the recordings, visual inspection through the *Praat* program (Boersma & Weenink, 2024) is used to confirm the properties of forms when unclear.

5.1. Ngadju aspect

In comparison to Wati family languages to the north and east, Ngadju employs a smaller inventory of verbal suffixes. Ngadju also contrasts with Wati languages in its employment of an aspect-marking system rather than a tense-aspect system. This absence of obligatory tense-marking is demonstrated succinctly by three examples in an additional manuscript interlinearisation of eighty-eight utterances produced by von Brandenstein two years after the publication of his grammar¹ (1982, p. 1). Each of these utterances spanning three temporal spheres contain the identical verb-form **yankun** regardless of temporal placement:

1 The text *Eighty-Eight Grammar Text Sheets: Exemplifying Grammatical, Lexical, and Phraseological Diversities as well as Links of 25 Aboriginal Languages From Western Australia* is not otherwise used as a data source in the present document due to a lack of access to the original field recordings, if there indeed are any.

(11) **Ngaju yayi yankun yarna don't want to.**
I am not going right now, I don't want to.

(12) **Nguntu kanka muju yankun.**
You went there recently.

(13) **Matayi yaparti yurlu yankun.**
It will come here tomorrow.

Notably, marking of temporal placement rests entirely on the choice of temporal descriptors, here **yayi** *now*, **kanka** *recently*, **yaparti** *tomorrow*. These three utterances beginning the eighty-eight English sentences are the responses of an elicitation tool used by von Brandenstein to concisely take a snapshot of a language's pronominal and temporal structures. This pattern is found throughout the Ngadju corpus, where simple verb-forms of stem+NASAL-initial suffix are found regularly, with no formal contrast between temporal spheres:

(14) **Kampirtinya puatal ngarlku ngarrijakin.**
We ate out stomachs full, which made us lie down.
(Yaan (Peter Flynn), Norseman, W.A., 8th of July 1970)

(15) **Rimil ngaju yankun rimiliny walyi marlun.**
I am alone, I just go on, on my own, poor old thing!
(Gerdie Newman, Esperance, W.A., 6th of August 1970)

(16) **Kuyana jurla ngarlku manjali, kuyana, kuyana nyakinya tiirpurrkin ngarta.**
I will eat the Wild cucumbers and plant-based food, the Wild cucumbers that this tree is full of.
(Gerdie Newman, Esperance, W.A., 6th of August 1970)

(17) **Wijanu wamurti, paarru, wijanu wamurti ngarrin kurpala, kurpala ngarrin; pankarta, manjali tii wuuna, ngarlka wijanu nanjarrku wijanu.**
I got back to camp, and when I got to camp, I lay down to sleep, lay there sleeping. In the early morning: Cook the damper and the tea! Eat! Then I went out for meat.
(Angkata (Phyllis Williams), Yalata, S.A., 2nd of July 1970)

(18) **Nanjarr kuninya jujukata wijanu (laughs), nanjarrkata wijanu juju wurtu wijanu jujukata.**
I go out with the dog and it's meat that I get (laughs), I go out for meat with the dog.
(Angkata (Phyllis Williams), Yalata, S.A., 2nd of July 1970)

(19) **Purta ngaju nyakinya muju mirnu wijanu, kuni jurrkangu ngaju come kunka.**
Soon I will go north, from the south where I recently came from.
(Norman Wicker, Norseman, W.A., 15th of October 1970)

This immediately demonstrates that Roberts', and Graham and Marmion's non-PAST analysis of verb-final nasal suffixes is not supported by the data.

An important analytic factor involved in analysing Ngadju verbs is the observation that many uninflected Ngadju verbs display a superficial similarity to Wati verb-forms inflected for

tense, however this is misleading. The verb **yanku-** *to go/come* for example is consistent between all temporal spheres and agents, as are indeed all Ngadju verbs, e.g. **junu-** *to speak*, **nangu-** *to see*, **kuwana-** *to listen/understand*, **nyina-** *to sit/be*, **ngarlku-** *to eat*. Applying a Western Desert-informed analysis, these verb-forms may appear immediately to comprise a verb root and a tense suffix, as demonstrated in Table 6.

Table 6 Hypothetical analysis of common Ngadju verbs assuming Ngaanyatjarra verbal morphology (Glass & Hackett, 2003, p. 6).

Ngadju verb root	English	hypothetical morphemic breakdown	hypothetical morphemic gloss
junu-	<i>talk, speak, tell</i>	* ju+nu	* <i>talk</i> +PAST
nangu-	<i>see</i>	* na+ngu	* <i>see</i> +PAST
kuwana-	<i>hear, listen, understand</i>	* kuwa+na	* <i>hear</i> +PRES
nyina-	<i>sit, be, live</i>	* nyi+na	* <i>sit</i> +PRES
ngarlku-	<i>eat</i>	* ngarl+ku	* <i>eat</i> +FUT
yanku-	<i>go, come</i>	* yan+ku	* <i>go</i> +FUT

An analysis such as that above does not account for the functional and distributive observations made for their use for one crucial reason: these verb-forms are entirely consistent and do not change under any circumstance, as evidenced by the following examples:

(20) **Warama ngarlkun mantala nyinan pampily yapurru.**

They ate chops and sat down, tired and happy.

(Yaan (Peter Flynn), Norseman, W.A., 8th of July 1970)

(21) **Kuyana jurla ngarlkun manjali, kuyana, kuyana nyakinya tiirrpurrkin ngarta.**

I will eat the Wild cucumbers and plant-based food, the Wild cucumbers that this tree is full of.

(Gerdie Newman, Esperance, W.A., 6th of August 1970)

(22) **Nyuntu kuwanan nganya?**

Are you listening to me? / Do you understand me?

(Gerdie Newman, Esperance, W.A., 6th of August 1970)

(23) **Yayi, nyakinya ngaju nyinankin, junukin nyakinya, ngaata kujarra nyinakuwanakarran nganya.**

Now, I keep on sitting here, talking about this, and the two Europeans are listening to me.

(Gerdie Newman, Esperance, W.A., 6th of August 1970)

It is therefore clear that Ngadju verbs are not marked for tense, and remain unchanged between temporal spheres. The superficial similarity to Wati/Western Desert verb roots appended with tense suffixes is an interesting area that requires further study and is likely the result of historical language contact and reanalysis. What is also clear of Ngadju verbs is that whereas Wati/Western Desert verbs stems are often monosyllabic, Ngadju verb stems are near-universally disyllabic or greater. This observation provides a likely mechanism for the

historical reanalysis of Wati verbal roots into Ngadju, however further research is required to make a solid case.

The second clear contrast with Wati/Western Desert languages in Ngadju is that there is no evidence for enclitic pronouns, with grammatical person marked entirely by free pronouns. Of crucial note to the analyst, although the suffix **-n** is formally identical to the common 2SG subject suffix in many Wati languages (see Table 1 above), the above examples make it clear that this suffix does not perform this function due to its use in clauses with pronouns of any grammatical person. Special attention must be made to this nasal ending, as its distribution among utterances is considerable; of the 347 identifiable verbs in the data analysed, 156 are appended only with a nasal-initial suffix, and of these **-n** is by far the most common.

-n	-nu	-ng	Total
124	23	9	156

In light of no observable temporal or pronominal verbal suffixes, the option of an aspectual function is left and is the likeliest candidate for the function of these nasal-initial suffixes. Were it to be the case that Ngadju verbs are not marked for aspect, and factoring in the observable lack of pronominal or temporal marking, Ngadju would be argued to be neither tense nor aspect-marked, as is von Brandenstein's indirect claim. This is extremely unlikely, and an essentially unheard of phenomenon in Australian languages (Dixon, 2002, p. 269).

Based on the distribution and observable function of these forms, the suffix **-n** is a Perfective used regardless of grammatical number or person, alongside a set of two allomorphs applied to a few small verbal categories: **-nu**, **-ng**. These allomorphs suggest a loose system of verb classes:

- ▶ The **-n** class represents the overwhelming majority.
- ▶ Of the twenty-three tokens of **-nu**, 20 are for the verb **wija-** *to run/ride/move quickly*, two for **paja-** *to bight, to fight*, and one for **wuuna-** *to cook*.
- ▶ Of the nine tokens for **-ng**, six are for **kani-** *to go*, two are for **katarri-** *to be cut off from*, and one for **marni-** a variant of **marnu-** *to get*.

This system is radically distinct from that of most Western Desert languages which predominantly provide four-part verbal categorisation in which four counterpart allomorphs of any given verbal suffix may be consistently predicted.

This leaves the longer suffix forms described by von Brandenstein as agreeing for the number of the agent/subject, which can be demonstrated to be an Imperfective, contrasting with the Perfective.

Several examples of the Perfective/Imperfective contrast in Ngadju are presented below:

- (24) **Ngaju purtayi nyinan. Matali nyinan nangungarrin. Ngaju poor fella pala maya junukin.**
Then I sat down. They sat down and were watching. I am just talking, poor fella.
 (Angkata (Phyllis Williams), Yalata, S.A., 2nd of July 1970)

- (25) **Ngaju pala nyinanangukin wartu-wartu matali nyinalpan, nangukarran.**
I was just watching them intently as they were sitting and looking around.

(Angkata (Phyllis Williams), Yalata, S.A., 2nd of July 1970)

(26) **Ngaju not karntijunukin.**

I am not speaking it incorrectly.

(Angkata (Phyllis Williams), Yalata, S.A., 2nd of July 1970)

(27) **Purtayi ngajuwija maralu nanjarr karlaka wuwunangarkupirrin yarungu.**

Then the two of us were cooking the meat in the fire with our hands and eating it at the picnic.

(Kupiny (Eileen Flynn), Norseman, W.A., 8th of July 1970)

The following is an example provided in text only, for which an audio recording has not been found, however it quite clearly demonstrates the Imperfective/Perfective contrast:

(28) **Nyakinya matayi kuninya kanka yuulu yankun parrunu yayi yankunkin.**

This is the one that came here recently and now keeps coming again.

(von Brandenstein, 1980, p. 31)

Whereas the Perfective indicates a verbal class system where allomorph selection is consistent, the Imperfective demonstrates dramatic and at present unpredictable variation. There is significant allomorphy among the plural suffixes while the single, dual, and trial are consistent, a quality shared by the noun and descriptor plural suffixes, with which the verb plural suffixes share formal similarities, e.g., **-ngarri** N_PL, **-ngarri** DESC_PL.

Table 7 Summary of Ngadju Imperfective suffixes and allomorphic counts of the plural.

SG	<i>tokens</i>	DU	<i>tokens</i>	TR	<i>tokens</i>	PL	<i>tokens</i>
-kin	128	-pin	2	-pirrin	6	-lpan	22
						-jarrin	1
						-karran	24
						-ngarra n	2
						-ngarrin	2
						-warran	8
total	126		2		6		59
							193

There is furthermore a formal similarity shared between noun, descriptor, and Imperfective plurals with some verbal roots. This suggests that these suffixes marking for plurality are historically derived from lexemes describing space, a notion that von Brandenstein touches on briefly:

- ▶ Von Brandenstein considers it likely that the SG_IPFV **-kin** is derived from **kayanu** *single/one*.
- ▶ Von Brandenstein considers the descriptor **ngalpa** *big* as the source of the PL_IPFV used only on **nyina-** *to sit* **-lpan**.

More transparently, the verb **ngarri-** *to lie down*, is formally identical to the noun, descriptor, and Imperfective plurals **-ngarri**, **-ngarri**, and near-identical to the Imperfective plural **-ngarrin** respectively. Although von Brandenstein's hypotheses surrounding **-kin** and **-lpan** are less clearly linked, the shared formal properties of these suffixes and the verb **ngarri-** are

difficult to avoid. These examples, in particular the first, strongly suggest that Ngadju grammatical person is less purely numeric in a European sense and more conceptually defined by mass and/or physical space, i.e., **-ngarri** might be more accurately represented as *spread out over a horizontal space* rather than the Indo-European-centric *plural*, while **-lpan** would likewise better be understood as *a big group* rather than a straightforward plural.

The **-lpan** suffix is only found on a single verb, the common **nyina-** lexeme with broad multifaceted meanings ranging from the act of sitting to abstract states of being. The high proportion of utterances which include this essential verb reflects the high token count of the **-lpan** Imperfective.

The remaining suffixes are formally similar and vary primarily by their first segment, however selection rules have not as yet been determined. As depicted in Table 7 above **-karran** is the canonical form, with most other variants used sparingly. Some regular selection patterns can be observed, however they are not consistent. For example **ngarlku-** *to eat* is found in the plural Imperfective with both **-karran** and **-warran**, while **nangu-** *to see* is found with **karran**, **-ngarran**, **-ngarrin**, and **-warran**. Assuming that this precludes the possibility of a verb-class-related selection rule, there remains the possibility that a more fine-grained functional/semantic roles is at play here, or failing that a degree of free variation.

Of note, the phoneme /n/ is found at the end of almost all indicative finite verb forms in the Ngadju corpus, while the Imperative and Irrealis lack this segment, e.g.,

ngaju nyinan	<i>I sit, I sat, I will sit</i>
ngaju nyinakin	<i>I am sitting, I was sitting, I will be sitting</i>
ngajuwija nyinapin	<i>we two are sitting, we two were sitting, we two will be sitting</i>
ngajupin nyinapirrin	<i>we three are sitting, we three were sitting, we three will be sitting</i>
ngajungarri nyinalpan	<i>we are sitting, we were sitting, we will be sitting</i>
nyina!	<i>sit!</i>
ngaju nyinku	<i>I would/could/should have sat, I would/could/should/will sit</i>

These observations provide scope for two alternative analyses at the underlying morphological level:

1. The segment /n/ is in itself a modal suffix ***-n** marking for indicative mood and the Imperfective suffixes are vowel-final, e.g., ***-ki-** rather than **-kin**. This analysis however assumes that the Perfective marker is null, contrasting with Imperfective suffixes in the same position, e.g., ***nyina+∅+n** compared with ***nyina+ki+n**. The assumption of a null Perfective is problematic however, as the Ngadju single Imperative is more transparently **-∅**. This analysis is more similar to but distinct from that proposed by von Brandenstein (1980, pp. 16–17, 26–28). Von Brandenstein's account does not recognise the aspectual nature of these verbal features and is insufficient in capturing the nature of Ngadju verbs.
2. The preferred analysis presented in the present study identifies the final segment /n/ appended to a verbal stem as a Perfective suffix **-n**, while the Imperfective suffixes vary and are also /n/-final, e.g. **-kin**. This analysis avoids the assumption of a null

suffix and its complications regarding the Imperative, and simply assumes a degree of euphony or simple coincidence regarding the final segments of all indicative verb-forms.

Analysis option 1

ngaju nyina+∅+n vs
 1SG sit+PFV+INDIC
I sit

ngaju nyina+ki+n vs
 1SG sit+SG_IPFV+INDIC
I am sitting

Analysis option 2

ngaju nyina+n
 1SG sit+PFV
I sit

ngaju nyina+kin
 1SG sit+SG_IPFV
I am sitting

Furthermore, no examples of the Imperfective demonstrate any of the word-class-determined variability found on the Perfective. For example, **wija-** is found in all tokens of the Perfective with **-nu**, however no examples of the Imperfective with equivalent variability are found, e.g. ***wijakinu** or ***wjakarranu** are not evidenced whereas **wjakin** and **wjakarran** are. This could however be argued to indicate that the Imperfective neutralises verb-classes distinctions, i.e., all verb-classes taking the **-n** class suffix in the Imperfective.

Option two is preferred as it provides a simpler account avoiding over-analysis of the syllable into smaller segments, while avoiding the assumption of a null suffix, although it provides no conclusive account for the universal /n/-final in indicative verbal forms other than coincidence or euphony.

6. Ngadju temporal placement descriptors

As von Brandenstein records, temporal descriptors abound in the Ngadju data. This further supports the observation that Ngadju does not employ absolute tense in its verbal morphology, and that temporal placement is interpreted through these descriptors alongside context. While von Brandenstein's account only regards this set of descriptors as largely temporal in nature, more recent research has uncovered deeper temporal, aspectual, and modal distinctions between them (for a more detailed analysis, see Fuchs-Lynch, 2025).

- **mawun:** Discontinuous Past, *used to*

(29) Ngaju mawun kajaku paaru ngaju ngalpa nyaki nyinajunukin maya.

I was little back then, but now I am an adult and just sit and say this.

(Gerdie Newman, Esperance, W.A., 6th of August 1970)

- **kumpa:** Perfect Aspect, *already*,

(30) Ngaju nyinanangukin, tuuka yuulu kumpa kanka.

I was sitting and watching on the hill here recently.

(Gerdie Newman, Esperance, W.A., 6th of August 1970)

- **kanka**: Recent Past, *the other day, a short while ago, recently, yesterday, before*

(31) **Kumpa ngaju kanka mijalta yankun wangaralayi yamurti wangara ngalpa yaalykin.**
The other day I went down close to the water where the sea was roaring.
(Gerdie Newman, Esperance, W.A., 6th of August 1970)
- **yayi**: *now, these days, today, present*
The temporal deictic centre lexeme **yayi**, covers a variety of ‘present’ senses, *now, today, these days*, a feature shared by at least one lexeme in all Australian languages (Austin, 1998, p. 147).

(32) **Purta ngaju kuwanakin junku nyakinya yayi.**
Later I will listen back to what I say now.
(Gerdie Newman, Esperance, W.A., 6th of August 1970)
- **purta**: Prospective Aspect, *soon afterwards, later on, then*

(33) **Purta matayi nguntuwarti parrunu jila junukin.**
Later it will be saying it again to you.
(Ngurni (Dick Donaldson), Coolgardie, W.A., 21st of July 1970)
- **karra**: Remote past, *a long time ago.*

(34) **Wanti kaja karra junukin nurrutan matayi ngarnka ngalpa.**
Long ago a little boy was telling me that he saw them there on a big cliff.
(Gerdie Newman, Esperance, W.A., 6th of August 1970)
- **yaparti**: *tomorrow*

(35) **Purta ngaju junku, juntikin yaparti.**
Later I will talk about it, I will have to talk about it tomorrow.
(Gerdie Newman, Esperance, W.A., 6th of August 1970)
- **jila/jula**: Desiderative Mood,

(36) **Ngaju wanna naku all julayangarrinya nanjarr yapurru Warnarntarrala kuninyala jula ngarkun yapurru paninya.**
I want to visit all the penguins down in Warnarntarra and eat the meat that is down there.
(Gerdie Newman, Esperance, W.A., 6th of August 1970)

Combined forms:

Ngadju TAM descriptors are frequently combined to create finer-grained temporal and aspectual positioning. The two most clearly observed are:

- **purta mawun**: Prospective Discontinuous Past, *was going to happen but did not, and is no longer relevant.*

(37) **Purta mawun ngaju marnu purlpakatalu ngawurrkin, purnika ngaju karra mawun kuninya ngaju purlpa ngaju marnukin.**

I was going to look for them and get them with a rifle. Long ago I used to on horseback, I used to get them with a rifle.

(Gerdie Newman, Esperance, W.A., 6th of August 1970)

- **karra mawun:** Remote Discontinuous Past, *was going to happen a long time ago but did not, and is no longer relevant.*

(38) **Karra mawun ngalpurru kaja ngalpurru paru yaanjan.**

A long time ago there used to be a lot of children, but not anymore.

(Gerdie Newman, Esperance, W.A., 6th of August 1970)

7. The Ngadju relative tense

Von Brandenstein mentions that Ngadju has a generally nominal character, based it would seem on his description of the nasal-initial verb endings as a ‘participle’, hence his assumptions of nominal case morphology in several suffixes. If we are to reject von Brandenstein’s categorisation of Ngadju verbs as functionally nominal in light of fresh analysis, the locative analysis also requires re-analysis. While Roberts, and Graham and Marmion seem to reject von Brandenstein’s analysis as well, they both consider this ending to be inconclusive, providing no analysis or suggestions. What is clear from the data is that there is a specific purpose to the **-nta** verb ending, and that this ending represents a relative tense in relation to the following clause. The two clauses are linked temporally with the marked clause occurring earlier, while the second takes regular verbal morphological endings. The relationship between the two clauses can be interpreted in two closely-related ways; as a simple sequence of events, or causally, with the unmarked clause being the direct result of the marked clause:

- 1) After (clause 1), (clause 2) occurs. e.g., *After eating, she felt full.*
- 2) (clause 2) is the case, because of (clause 1). e.g., *She felt full because she ate.*

(39) **Ngaju nyakinya munta ngaju nyinanta munta kalurru yurrkakin.**

After sitting here I’m really shivering with the cold.

(Gerdie Newman, Esperance, W.A., 6th of August 1970)

(40) **Ngaju too purta mantarlungu munta, jujupanya nyinanta purlpa yaanjan.**

I am really tired too, because I have no dogs and no rifle here.

(Gerdie Newman, Esperance, W.A., 6th of August 1970)

(41) **Manjali ngarlkunta munta purta nyinanta wamu ngarrinta kurpalyu.**

After eating and sitting here in camp I will lie down and then sleep.

(Gerdie Newman, Esperance, W.A., 6th of August 1970)

Von Brandenstein makes the unsupported claim that the participial locative constructions differ depending on whether the subject is consistent between the two clauses or not. As McConvell points out in his review of the text, the examples provided do not uphold this analysis, and examples are in fact given which do not hold a single subject between the two

clauses (1982, p. 193). Van de Ven (2024) demonstrates that switch reference is not a feature of Ngadju, and that subordinated clauses are generated through the typical juxtaposed/adjoined general modifying subordinate clause system. In GMSC systems such as Ngadju, subordinate clauses are found at the edges of main clauses, rather than through embedding. Van de Ven also notes that the sole observed morphological mechanism for Ngadju subordination is the application of **-nta**, by which a subordinate adverbial clause connects two clauses, with the second occurring after the first. The form **-nta** is another example of a Ngadju form which is identical to a bound second person object pronoun in some Western Desert/Wati languages, e.g., Pitjantjatjarra. Examples of **-nta** transparently make a second person object reading implausible:

(42) **Manjali ngarlkunta munta purta nyinanta wamu ngarrinta kurpalyu.**

After eating the plant-based food and sitting here at home I will lie down and then sleep.

(Gerdie Newman, Esperance, W.A., 6th of August 1970)

Were the above utterance to be interpreted with a 2SG_OBJ reading, the translation would be along the lines of *The plant-based food eats you and is you here and the camp lies down you to sleep.*

One analytical aspect of this verb ending which remains uncertain is whether the **-nta** ending is a morpheme in its own right, or a morpheme ***-ta** appended to the Perfective **-n**, i.e. would it be best to represent the morphemic breaks of a form such as **nyinanta** as ***nyina+n+ta** : *sit*+PFV+PRIOR or as **nyina+nta** *sit*+PRIOR. One hurdle to empirical analysis is that all examples of verbs identified with this ending are of verb roots from the common **-n** class. In the absence of any examples of variant Perfective endings with ***-ta** (e.g. ***-nuta**, ***-ngta**) it is unclear, however the assumption that the Perfective **-n** is the first segment is semantically consistent with a relative tense analysis, i.e., *once* (clause 1) *completed* (clause 2).

8. Summary tables

Table 8 Summary of forms and functions of Ngadju verbal suffixes observed, with natural language examples from the data.

Perfective	-n	yankun <i>gone</i>
	-nu	pajanu <i>bitten</i>
	-ng	kaning <i>gone</i>
Single Imperfective	-kin	nangukin <i>one looking</i>
Dual Imperfective	-pin	nyinapin <i>two sitting</i>
Trial Imperfective	-pirrin	yankupirrin <i>three going</i>
Plural Imperfective	-karran	wijakarran <i>many running</i>
	-ngarran	nangungarran <i>many looking</i>
	-ngarrin	kartakalngarrin <i>many cut off from</i>
	-lpan	nyinalpan <i>many sitting</i>
PRIOR	-nta	ngarlkunta <i>after eating</i>

As a summary of comparison between the four analyses presented above, Table 9 is provided below.

Table 9. Summary of the four analyses presented above. As functional analyses vary considerably, the accounts are presented by form.

	<i>von Brandenstein 1980</i>	<i>Roberts n.d. c.1995</i>	<i>Graham and Marmion 2008</i>	<i>GALCAC 2024</i>	
-n	Participle	non-PAST	non-PAST	Perfective	
-nu	Participle	PAST	PAST	Perfective	
-ngy	Participle	not found	not found	not found	
-ngu	Participle	not found	not found	not found	
-ng	not found	Non-PAST	Non-PAST	Perfective	
-n-	Continuative	not found	not found	Continuative	
-na-	Continuative	Continuative	Continuative	not found	
-ni-	not found	Continuative	Continuative	not found	
-ki(n)	Verb Singular	unsure	unsure	Singular Imperfective	
-ku(n)	Verb singular	unsure	unsure	not found	
-pi(n)	Verb Dual	unsure	unsure	Dual Imperfective	
-pirri(n)	Verb Trial	unsure	unsure	Trial Imperfective	
-karra(n)	Verb plural	unsure	unsure	Plural Imperfective	
-ngarra(n)	Verb plural	unsure	unsure	Plural Imperfective	
-njarra(n)	Verb plural	unsure	unsure	not found	
-jarra(n)	Verb plural	unsure	unsure	not found	
-ngarri(n)	Verb plural	unsure	unsure	Plural Imperfective	
-jirri(n)	Verb plural	unsure	unsure	not found	
-ngalpa(n)	Verb plural	unsure	unsure	not found	
-(a)lpa(n)	Verb plural	unsure	unsure	Plural Imperfective	
-nta	Participle LOC	+	unsure	unsure	PRIOR
-nja	Participle LOC	+	unsure	unsure	not found

9. Conclusion

The diversity of perspectives on Ngadju verbs has hitherto caused confusion in previous understandings of Ngadju, creating a hurdle for the growth and revitalisation of the language in the modern era. While von Brandenstein's fieldwork and description are important and valued, his assumption that Ngadju verbs largely lack tense and aspect morphology makes claims that are not upheld by observations of Australian languages at large. While Roberts, and Graham and Marmion critically assessed von Brandenstein's work and brought his errors and oversights to light, the assumption of tense-marking in the language was based on isolated examples that did not take the full dataset into account. The present study addresses both of these methodological hurdles, and in doing so presents a systematic account of some elements of the Ngadju verbal system, although others remain inconclusive. Ongoing endeavours to transcribe and analysis extant Ngadju field recordings and consultation with

members of the Ngadju community will cast further light on these features, and will further facilitate Ngadju language revitalisation in future.

References

- Austin, P. (1998). Temporal Reference, Tense and Aspect in Australian Aboriginal Languages. *Senri Ethnological Studies*, 45, 143–169. <https://doi.org/10.15021/00002939>
- Boersma, P., & Weenink, D. (2024). *Praat: Doing phonetics by computer [Computer program]*. Version 6.4.17. <http://www.praat.org/>
- Dixon, R. M. W. (2002). *Australian Languages: Their Nature and Development*. Cambridge University Press. <https://doi.org/10.1017/CBO9780511486869>
- Eckert, P., & Hudson, J. (1988). *Wangka Wiru: A handbook for the Pitjantjatjara language learner*. South Australian College of Advanced Education.
- Fuchs-Lynch, T. (2025). *Temporal Reference in Pitjantjatjara and Ngadju: An Analysis of Temporal Adverbs in Two Goldfields Languages*. Goldfields Aboriginal Language Centre Aboriginal Corporation.
- Glass, A., & Hackett, D. (Eds.) (with Newberry, B., Porter, G. P., Richards, J. W., Ellis, L. M., & Benson-de-Rose, S.). (2003). *Ngaanyatjarra & Ngaatjatjarra to English Dictionary* (First). IAD Press. <https://www.iadpress.com.au/products/ngaanyatjarra-ngaatjatjarra-to-english-dictionary>
- Goddard, C., & Defina, R. (Eds.). (2020). *Pitjantjatjara/Yankunytjatjara to English Dictionary* (Revised Second Edition, Updated). IAD Press.
- Graham, S., & Marmion, D. (2008). *Ngajumaya Grammar Notes*. Unpublished.
- McConvell, P. (1982). Review of Ngadjumaja, an Aboriginal Language of South-East Western Australia, by C. G. von Brandenstein. *Oceania*, 53(2), 192–193.
- Roberts, S. P. (n.d.). *A Sketch Grammar of Karlaaku*. (unpublished student essay).
- van de Ven, J. (2024). *Subordination in Ngadju: A Preliminary Analysis—With an additional learner’s guide on forming complex sentences in Ngadju*. Goldfields Aboriginal Language Centre Aboriginal Corporation.
- von Brandenstein, C.-G. (1980). *Ngadjumaja: An Aboriginal language of south-east western Australia*. Institut für Sprachwissenschaft der Universität Innsbruck.
- von Brandenstein, C.-G. (1982). *Eighty-Eight Grammar Text Sheets: Exemplifying Grammatical, Lexical, and Phraseological Diversities as well as Links of 25 Aboriginal Languages From Western Australia*.