

Jack Sullivan, Yale University

Edited by Jackie Coffin and Sue Hanson

Goldfields Aboriginal Language Center

### Observations of Wangkatja Verbal Suffixes

This paper investigates the function of an underdescribed verbal suffix in Wangkatja which is cognate with the serializing verbal suffix in its closest relatives. It also describes the function, morphology, and distribution of two other verbal suffixes: the simple present and the imperative. Section one provides a brief background to the Wangkatja language, its linguistic affiliation, and its history. Section two gives a brief overview of serial constructions in the Wati subgroup and lays out some data concerning the cognate suffix in Wangkatja. It also investigates possible cognates to this suffix in other Wati languages. It will conclude by offering an analysis that builds on previous work in Wangkatja. Sections three and four will present preliminary observations on the simple present and imperative verbal suffixes.

## 1.0 Background

Wangkatja is a member of the Wati language family, a subgroup of the Pama-Nyugan family of Australian languages. The Wati subgroup extends over a large portion of the western half of the Australian continent, and encompasses a dialect continuum of closely related language varieties. Wangkatja has been described as a contemporary Wati variety centered around the Mount Margaret Mission near Laverton, WA. The migration of peoples to the Mount Margaret Area and the subsequent contact of various Wati varieties produced a semi-novel language, which most closely resembles Ngaanyatjarra. The form of this language was further impacted by its use as a language of instruction and education (Sue Hanson, personal communication, 2023).

The name Wangkatja, previously spelled Wangkatha, has had several different applications in the past. It was once ascribed to what is now called Cundelee Wangka and has

also been used as a general name for the Western Desert dialect continuum. These different applications and the unique situation out of which it was born contribute to the confusion as to what Wangkatja exactly is or was. While contemporary descriptions pinpoint it as the language spoken around Mount Margaret, data gathered from those speakers doesn't always line up with the data in the Wangkatja corpus<sup>1</sup>. Furthermore, the corpus contains some internal inconsistencies which may point to the presence of multiple dialects. A hypothesis presented by Sue Hanson is that the Wangkatja acquired in an educational setting may differ from the Wangkatja spoken amongst community members, but the degree to which these hypothetical dialects differ and who speaks what dialect have yet to be determined (personal communication, 2023). More research is needed to determine the relationship between the dialect(s) recorded in the corpus and the dialect spoken by contemporary speakers. In this paper the analysis that I present will be based on the data available to me in the corpus.

Like other Wati varieties, Wangkatja marks syntactic relationships using extensive case morphology. As is typical of these languages, it is primarily suffixing, exhibits split-ergative alignment, and has a relatively free word order. The phonological inventory of Wangkatja is similar to that of other Wati varieties, having a five way contrast in stops and nasals and no voicing distinctions. Like the other Wati languages, Wangkatja divides verbs into 4 different classes which determine their inflectional suffixes

While the language closely resembles other Wati varieties, it is divergent in many key aspects. A near universal feature of the Wati languages is the simultaneous existence of free and bound pronominal systems. Wangkatja uses solely free pronoun forms, presumably having lost the bound pronouns. Wati languages also have complex verbal morphology, frequently having upwards of 15 verbal suffixes that mark nuanced combinations of tense and aspect. In comparison it has been argued that Wangkatja has just 4 verbal endings. It is unclear at this

---

<sup>1</sup> When using the word *corpus* I am referring to the Wangkatja Toolbox kept at Goldfields Aboriginal Language Center. This toolbox draws from several different sources including dictionaries, sketch grammars, grammar exercises, and wordlists.

point whether the language is tense or aspect marked, or whether its system exhibits a combination of both.

## 2.0 Serial verb constructions and the *-rra* suffix

Serial verb constructions are a cross-linguistically common phenomena in which multiple inflected verbs act together as a single predicate with no intervening markers of coordination.

Consider the following data from Cantonese:

*Keoi<sup>5</sup>dei<sup>6</sup> seng<sup>4</sup>jat<sup>6</sup> haang<sup>4</sup>gai<sup>1</sup> tai<sup>2</sup>hei<sup>3</sup>*  
3PL      always    **walk-street**    **see-movie**

'They're always going shopping and going to the movies' (Matthews, 2006)

Verb serialization cannot be ascribed to a single grammatical function, as the meaning and use of these constructions vary widely across languages (Aikhenvald, 2006). However, Aikhenvald notes that there are traits that serial verb constructions display cross-linguistically, including being monoclausal; having a singular tense, aspect, or polarity value; and co-referentiality constraints

Verb serialization is a very productive phenomenon within the Wati subgroup. However, according to Goddard's (1988) analysis of serializations in Yankunytjatjara, another Wati language, these languages are abnormal in that they have dedicated morphology for serial verbs. In Yankunytjatjara the form of the serial marker is *-rra/-ra/-nkula/-ngkula* depending on the class of the verb that it attaches to (Goddard, 1985). This serial suffix (referred to simply as *-rra* henceforth) is observable in other Wati languages, such as Ngaanyatjarra and Cundeelee Wangka. Goddard (1988) describes two different types of serializations: tight serializations, where there are no gaps between serial verbs, and loose serializations, where gaps are present.

Tight:

1)

*Karingarna atu-ra yuru-ra kapurtu-ra kata-ngka tjunku-pai.*<sup>2</sup>

mint.bush **chop-SER** **moisten-SER** **make.into.wad-SER** head-LOC put-CHAR

‘(One) chops up the mint bush (with a rock), moistens it (in a wooden dish)

makes it into a wad (with the hands), (and) puts it on the head.’ (Goddard, 1988)<sup>3</sup>

Loose:

2)

*Papa pala mirra-nyi walytja purtu nyaku-la.*  
dog just.there cry.out-PRES owner in.vain **see-SER**

‘That dog is crying out, not being able to see its owner.’ (Goddard, 1988)

A seemingly cognate suffix is also present in Wangkatja. This suffix can be affixed to verbs in constructions which would be deemed as tight serializations by Goddard’s criteria.

3)

*Murti-nguru paltju-ra ma-pitja.*  
knees-ON **walk-RRA** DIR-go-IMP<sup>4</sup>

‘(He’s) coming along, walking on his knees.’

4)

*Munga-munga-ngka paka-lku kapi tjiki-ku kuka nyina-rra nga-lku.*  
first.thing.morning-LOC wake.up-FUT water drink-FUT meat **sit-RRA** eat-FUT

‘First thing in the morning, (I) will get up and have some water, and sit down and eat some food.’ (Douglas, n.d.)

Interestingly it does not occur in these contexts reliably, as there are examples of tight serializations in the Wangkatja corpus that lack the *-rra* suffix. Furthermore, there are no examples in the Wangkatja corpus of loose serializations employing the *-rra* suffix.

5)

---

<sup>2</sup> I am opting to use Western Australian Pitjantjatjara orthography which represents retroflex consonants as digraphs as opposed to Southern Australian orthography which uses underscored consonants.

<sup>3</sup> Omission of verbal arguments, especially objects, is frequent in Wati languages. The arguments are recovered based on context.

<sup>4</sup> The imperfective verb form here is odd and will be treated later.

*Mama-lu pini-ngka tjunu-ngu katal-tjaku.*  
father-ERG shoulder-LOC put-PAST carry-PURP

'The father put (the kangaroo) on his shoulder to carry it.'

6)

*Ngurra-ku ma-pitja-ngu waru tili-rnu kunkun-pa ngarri-ngu.*  
home-LOC DIR-go-PAST fire light.fire-PAST sleep-EUPH lay-PAST

'(he) came home, lit a fire, laid down and went to sleep.' (Jones, 2015)

Another distributional difference between Yankunytjatjara *-rra* and Wangkatja *-rra*, is that it is possible for a *-rra* marked verb to stand alone in a clause in Wangkatja.

7)

*Karlaya-ku marnngu nyina-rra parna-ngka.*  
emu-POSS nest **sit-RRR** ground-LOC

'The emu's nest sits on the ground.' (Jones, 2015)

8)

*Yiwarra kurluny-pa ma-ngarri-rra kapi-kutu.*  
road small-EUPH **DIR-lay-RRR** water-ALL

'The little road stretches towards the water.' (Douglas, n.d.)

In Yankuntjatjara, following Goddard (1985), clauses which employ serial verb forms almost always contain an inflected verb. He cites only a single exception to this rule; in clauses separated by a contrastive marker, the left side of the construction can contain standalone serial verbs. The inconsistent presence of *-rra* in serial verb constructions and its ability to occur alone in a clause demonstrate that it cannot be analyzed as a simple serial verb marker. In the following sections, I will investigate some cognates to Wangkatja *-rra* and develop an analysis of this suffix.

## 2.1 Possible cognates to Wangkatja *-rra*

The Wangkatja *-rra* suffix has many potential reflexes across the Wati subgroup with several different functions. Establishing cognacy between monosyllabic morphemes must be

made in a conservative manner, but all of the instances of *-rra*-like suffixes across the different Wati languages have somewhat similar functions. As already mentioned, the *-rra* suffix has similar serializing functions in Yankunytjatjara, Pitjantjatjara (Hudson and Eckert 1994), and Cundeelee Wangka (Hadfield et. al 2022). A *-rra*-like suffix, *-ra* is also present in Ngalia. Muir et al. (2016) tentatively gloss *-ra* as marking progressive aspect. They state that it usually marks an action in the present time frame, however it can also indicate that an action is occurring at the same time as another action in the clause.

9)

Nyaa **rurrkuli-ra?**  
what **think-PROG**

‘What are you thinking?’

10)

Ngayu-lu nya-ngu kurti yurtu-ngka **nyina-ra.**  
1s-NOM see-COMP ghost car-LOC **sit-PROG**

‘I saw a ghost sitting in the car.’ (Muir et. al, 2016)

Finally in the closely related Ngaanyatjarra *-rra* is described as being a participle (Glass 2003). Very little descriptive data is given on this suffix is given in the sketch grammar, aside from stating that it “indicat[es] something that happens immediately prior to something else” (15). Understanding the behavior of the participle suffix in Ngaanyatjarra is further made difficult by its being polysemous with the present tense marker. In the following sentence and many other contexts it is unclear whether the suffix should be glossed as a participle that can stand alone or as present tense.

11)

Nyina-rra wiltja-ngka  
sit-? shade-in

‘He’s sitting in the shade.’ (Glass, 2003)

## 2.2 Wangkatja *-rra* as an aspect marker

The distribution of the *-rra* suffix in the Wangkatja corpus and its syntactic behavior mirrors most closely the *-ra* suffix in Ngalia. Its ability to occur as the sole verb in a clause matches up to the Ngalia data presented in (9). Furthermore, as is evident in (4)<sup>5</sup> it can occur alongside an inflected verb to denote concurrent actions. The parallels between Ngalia *-ra* and Wangkatja *-rra* have previously been noted in Bower et. al's (2020) sketch grammar of Wangkatja. Bower et. al tentatively propose that *-rra* is a marker of progressive aspect with the caveat that more data is needed. This conclusion fits nicely with the comparative data from Ngalia and examples such as (3) and (4). On the other hand, examples (7) and (8) do not entirely read as progressive actions, but rather as states with no defined beginning or end. Therefore, I prefer the tentative label of imperfective for Wangkatja *-rra* as a reflection of three principle readings that verbs marked with it have:

1. Denoting actions in progress, as in (3)
2. Denoting simultaneous action, as in (4)
3. Denoting states with no defined beginning or end, as in (7)

Like in Ngalia, the default tense reading for this inflection when occurring on its own is present, as exemplified by (3). When co-occurring with other tense-inflected verbs it does not contribute tense information to the clause. The third type of reading is implemented in longer narrative contexts to supply background information. In these types of contexts it is translated into English simple present.

12)

Kintirr-kintirr-ku marnngu nyina-rra warta-ngka  
 wagtail-POSS nest sit-IMPF tree-LOC

Kintirr-kintirr-lu palya-rnu marnngu tjanpi-tjarra  
 wagtail-ERG make-PAST nest spinifex-COM

Palunya ngampu kutjarra kurluny-pa tju-nu.

---

<sup>5</sup> In light of this, I would amend Douglas' translation of "... I will get up and have some water, and sit down and eat some food." to "eat some food while sitting". The lack of an inchoative suffix, as is customary in change of posture constructions, gives further support to my translation.

3sg egg two small-EUPH put-PAST

Tjananya nga-la nirrin warnka.  
3pl eat-IMP beetle caterpillar

'Wagtail's nest is in the tree. Wagtail made his nest with grass. It has two little eggs. They eat beetles and caterpillars.' (Jones, 2015)

There are several confounding factors to this analysis. Firstly, all of the attestations of this verbal suffix in the corpus appear on stative verbs. Bower et. al present a single non-stative example in their sketch grammar, *pungkula* 'hitting actually now' (42). The relative paucity of data in the corpus for this suffix makes it impossible to establish if this tendency represents a true selectional preference. Further confirmation of this analysis rests heavily upon the acquisition of more data, especially the use of this suffix in longer, more fleshed out contexts as opposed to the isolated sentences present in the corpus.

### 3.0 Present tense suffixes

Following Fasolo (2008a), the "simple present" tense in Wangkatja is marked by the suffixes: *-rranyi*, *-ranyi*, *-ngkulanyi*, and *-nkulanyi*, according to verb class.

13)

Kurlpirrpa ma-pitja-lanyi.  
gray.kangaroo DIR-go-PRES

'The gray kangaroo is going (leaving).'

14)

Kaparli-lu tjitji yampu-ranyi.  
grandmother child hug-PRES

'Grandmother is hugging the child.' (Fasolo, 2008b)

Fasolo states that other Wati dialects distinguish between a present progressive, marked by the *-rranyi* suffix, and a simple present, marked by the suffixes *-nyi*, *-rni*, *-nganyi*, or *-nanyi* depending on verb class. Wangkatja, he asserts, uses only the *-rranyi* form and that this verb form is ambiguous between simple present and present continuous readings. Consulting the



Wangkatja corpus, Fasolo's assertion seems to be right, however there is a small number of entries containing verbs marked with the *-nyi* suffix and its related forms.

15)

Tjitalpa witurru-nyyi.  
cup hold.tight-PRES

'(She) is holding the cup tight.'

16)

Nganytjarrpa nyina-nyyi  
on.side sit-PRES

'He's sitting on the side.'

17)

Nyurra yarlamayu-rni  
you tell.lies-PRES

'You're telling lies.' (Douglas, n.d.)

These verbal forms are translated in an identical way to the longer *-rranyi* forms and do not appear to be distributionally different. Due to the very low frequency of these forms in the corpus and the general lack of context for example sentences, a true synonymy between these two suffixes cannot be established. Interestingly Wangkatja's "simple present" form, which is identical to the present continuous form of "other languages" cited by Fasolo, is morphologically transparent. It is composed of the imperfective suffix and the short simple present form *-nyi*. This morphological transparency may be an indicator that the *-rranyi* suffix originated as a present continuous marker.

The relatively low frequency of the simple *-nyi* suffix points to its being replaced by the longer *-rranyi* suffix. This would be an example of the cross-linguistically common grammaticalization pathway whereby progressive verbal forms come to replace simple present tenses (Kuteva et. al, 2019). This is pure conjecture, as more contemporary data is needed to establish the behavior of the *-rranyi* suffix. Cross-sectional or comparative data may also help to

elucidate if there was ever a distinction between the two forms. Finally, as of yet I have been unable to find another Wati language which has a tense form that resembles *-rranyi* and its variants like Fasolo (2008) alludes to. Composed tense forms such as this do appear to be somewhat common across the Wati family (cf. Cundeelee Wangka and Ngaanyatjarra).

#### 4.0 The imperative

In the Wangkatja corpus there are several examples of imperative marked verbs (insert endings here) being translated into the present tense

Nganurti ma-pitja-∅ kayili-kutu kurli-ku  
turkey DIR-go-IMP north-ALL hot-PURP

'Turkeys go north for warmth.'

Karlaya mama-lu kurluny pini kanyi-la  
emu father-ERG baby many look.after-IMP

'The father emu cares for the chicks.'

Marlu pini kunkunarri-∅ kurli puri-ngka  
roo many sleep-IMP sheoak shade-LOC

'Kangaroos sleep in the shade of the sheoaks.' (Jones, 2015)

The above examples express statements that are generally true about the world as opposed to making claims about actions that have happened, are happening, or will happen. While at this moment the full nature of the verbal system in Wangkatja isn't understood, it may be that the tenseless/aspectless nature of the imperative is being employed in these sentences to render a habitual or generic reading.

#### Conclusion

The identification of an imperfective aspect marker in Wangkatja has broad implications for the analysis of the entire verbal system. In the past, people have considered the language to only display tense marking with 4 verbal inflections. The presence of this aspect-marking suffix demonstrates that the verbal system may have a more complex paradigm than originally

thought. This is not surprising, given the large verbal paradigms possessed by its nearest neighbors.

There are several more avenues of research that need to be explored in the verbal domain of Wangkatja, many of which rely on further elicitation and consultation with speakers. Firstly, the imperative and the imperfective seem to have overlapping functions, namely the ability to make generic and background statements. More data is needed to disambiguate between the two of these categories. Another interesting aspect is the difference between the two present tense forms, *-rranyi* and *-nyi* and their relationships with one another. Data that is more contextually rich would allow us to see if the suffixes have the same meanings or if the *-nyi* suffix continues to be used. A further roadblock to answering this question is brought up in Bower et. al (2020), where it is cited that many of the *-rranyi* verb forms were not accepted as grammatical by their consultants. This inconsistency again points towards there possibly being several different dialects that are all considered to be Wangkatja. Verifying and characterizing this dialectal variation is a critical step in creating an accurate descriptive account of the language.

More broadly in the Wati subgroup, the historical connection between serial verb markers and markers of progressive/imperfective aspect is something that would benefit from further study. There have been treatments of serialized verbs developing into markers of aspect in Murrinh-Patha (Nordlinger, 2009) and Ngan'gityemerri (Reid, 2002), but there are no investigations of connections between overt markers of these two categories. A formal analysis of the semantics of these cognate suffixes would allow for a reconstruction of the proto-Wati *-rra\**. This could lead into an analysis of the directionality and pathways of change that resulted in this range of meanings of this suffix in the descendant languages.

## Works Cited

- Aikhenvald, A. (2006). Serial verb constructions in a typological perspective. In A. Y. Aikhenvald & R. M. W. Dixon (Eds.), *Serial Verb Constructions: A Cross-Linguistic Typology* (pp. 1–68). Oxford University Press.  
[https://doi.org/10/8/9310\\_Aikhenvald\\_2006\\_compressed.pdf](https://doi.org/10/8/9310_Aikhenvald_2006_compressed.pdf)
- Bowern, C., Evans, M., Silver, K., Sharp, J., & Martinez, R. (2020) *Sketch Grammar of Wangkatja*, unpublished, in progress.
- Douglas, W. (n.d.). *Wilf Douglas, Wangkatha Corpus* [dataset]. Goldfields Aboriginal Language Center Aboriginal Coporation.
- Eckert, P., & Hudson, J. (1994). *Wangka Wiru: A Handbook for the Pitjantjatjara Language Learner*. University of South Australia.
- Fasolo, S. (2008a). *Basic Wangkatja Grammar*. Karlkurla Language & Culture Aboriginal Corporation.
- Fasolo, S. (2008b). *Basic Wangkatja Grammar Lessons*. unpublished document, Karlkurla Language & Culture Aboriginal Corporation.
- Glass, A. (2003). *Ngaanyatjarra & Ngaatjatjarra to English Dictionary*. IAD Press.
- Goddard, C. (1985). *A Grammar of Yankunytjatjara*. Institute for Aboriginal Development.
- Goddard, C. (1988). Verb Serialisation and the Circumstantial Construction in Yankunytjatjara. In P. Austin (Ed.), *Complex Sentence Constructions in Australian Languages* (p. 177). John Benjamins Publishing Company.  
<https://doi.org/10.1075/tsl.15.08god>
- Hadfield, D., & Hadfield, B. (2022). *Cundeelee Wangka to English Dictionary: Cundeelee Wangka Dictionary 2022: Tjaa Uti Kantililtija*. Goldfields Aboriginal Language Centre Aboriginal Corporation.
- Jones, L. (2015). *Wangkatja Dictionary*. unpublished dictionary, Wangkanyi Ngurra Tjurta Aboriginal Language Center.

Kuteva, T., Heine, B., Hong, B., Long, H., Narrog, H., & Rhee, S. (2019). *World Lexicon of Grammaticalization* (2nd ed.). Cambridge University Press.

<https://doi.org/10.1017/9781316479704>

Matthews, S. (2006). On serial verb constructions in Cantonese. In A. Y. Aikhenvald & R. M. W. Dixon (Eds.), *Serial Verb Constructions: A Cross-Linguistic Typology* (pp. 69–87). Oxford University Press.

<https://www.semanticscholar.org/paper/On-serial-verb-constructions-in-Cantonese-Matthews/90a918de91a4f2ef00552d1417d0d4f3c0da310c>

Muir, K., Hanson S., Bower C., Budnick, R., Navarro, A., & Wilmoth, S. (2016). *A Sketch Grammar of Ngalia*, unpublished.

Nordlinger, R. (2009). *Serialised aspect in Murrinh-Patha*.

[https://www.academia.edu/3106009/Serialised\\_aspect\\_in\\_Murrinh\\_Patha](https://www.academia.edu/3106009/Serialised_aspect_in_Murrinh_Patha)

Reid, N. (2002). Serialized posture verbs in Ngan'gityemerri and other Northern Australian languages: 10. Sit right down the back. In J. Newman (Ed.), *The Linguistics of Sitting, Standing and Lying* (pp. 239–267). John Benjamins Publishing Company.

<https://doi.org/10.1075/tsl.51.11rei>

