

Verbal agreement of datives in Nyangumarta

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1 Language introduction

Nyangumarta is a Pama-Nyungan language (Marrngu subgroup) spoken in Western Australia. It has a rich system of nominal case morphology and verbal agreement. There are three series of verbal pronominal suffixes (Sharp 2004:244) which agree with subjects, objects, and indirect objects, respectively. They inflect for person, number, and an inclusive/exclusive distinction for first person dual and plural. A chart is given in the appendix.

There is additionally a verb-final suffix *-a*, which Sharp analyzes as a purposive marker: ‘The general function of this morpheme is to indicate that an action was performed for a particular purpose although when it attaches to the indirect object verbal pronouns it indicates benefactive or possessive’ (Sharp 2004:247). However, there are many counter-examples where purposive goals (1b), benefactives (2b), and possessed objects (3b) do not necessarily trigger the *-a* suffix on the verb.

- (1) a. **‘Come’**
Palama milpa-nyɪ karlaya...
that come-NFUT emu
‘The emu was coming back...’ (Sharp 2004:175, 5.26)
- b. **‘Come’ + Purposive goal (no -a)**
Jinta kuyi-rrangu milpa-nyɪ-yi [parrja-na-ku mirti-ja-ku.]
other meat-PL come-NFUT-3PLS look-NMLZ-DAT run-ABL-DAT
‘The other animals came to watch the race.’ (Sharp 2004:134, 4.65)
- (2) a. **‘Hit’**
Wirla-rna.
hit-NFUT
‘S/he hit it.’ (Sharp 2004:65, 2.35d)

- b. **‘Hit’ + Benefactive (no -a)**
 Wirla-rna-ngu.
 hit-NFUT-2SGD
 ‘S/he hit it for you.’ (Sharp 2004:68, 2.41)
- (3) a. **Possession (with -a)**
 Pungka-nya-ngu-a.
 fall-NFUT-2SGD-P_{HAVE}
 ‘Yours fell.’ (Sharp 2004:248, 7.15d)
- b. **Possession (no -a)**
 Ka-nganya-rni janinyi nyungu-rrangu ngaju-mili-rrangu
 take-PRS-1SGS 3PLO this-PL 1SG-GEN-PL
 partany-karrangu kuyi-karti.
 child-PL meat-ALL
 ‘I’m taking my children for meat.’ (Sharp 2004:137, 4.81)

Clearly the semantic meaning of *-a* is more complicated than previously characterized. I will show that there are two syntactically distinct homophonous *-a* suffixes in Nyangumarta, and this homophony has until now obscured their function. The first *-a* is a low applicative (Pylkkänen 2002) which denotes a transfer of possession relation between two DPs and which I equate with P_{HAVE} (Harley 2002). The second *-a* is an indirect object agreement marker which agrees specifically with inanimate or non-specific animate arguments, and which I illustrate specifically with benefactives.

In section (2) I summarize the recent literature on applicatives and lay out diagnostic tests to distinguish high and low applicatives. In section (3) I analyze Nyangumarta benefactives as high applicatives. In section (4) I turn to a double object construction in Nyangumarta and show that *-a* in this construction is a low applicative and can be equated with Harley’s (2002) P_{HAVE}. Section (5) discusses instances of verb-final *-a* which are not low applicatives, and section (6) concludes.

2 Applicatives

Pylkkänen (2002) observes that applicative constructions have very different syntactic properties cross-linguistically, even when their surface appearance is similar. For example, both English and Chaga have double object constructions involving an applied benefactive argument, but only in Chaga can such a benefactive be added to an unergative verb.

(4) **English**

- I baked a cake.
- I baked **him** a cake.
- I ran.
- *I ran **him**.

(5) **Chaga**

- N-ǎ-ĩ-lyì-í-à m-kà k-élyá
 FOC-1s-PRS-eat-APPL-FV 1-wife 7-food

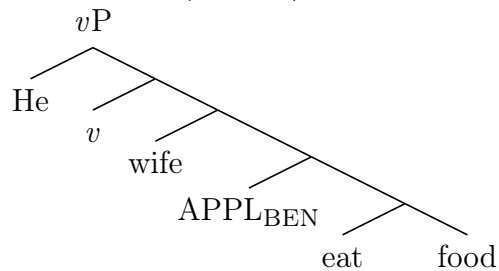
‘He is eating food for his **wife**.’

- N-ǎ-i-zrìc-í-à m-bùyà
 FOC-1s-PRS-run-APPL-FV 9-friend

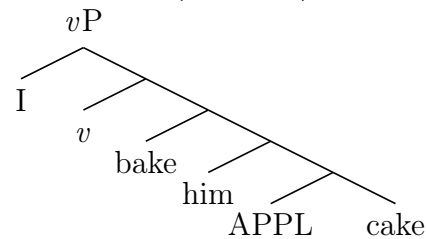
‘He is running for a **friend**.’ (Bresnan and Moshi 1993:49–50)

The syntactic differences reflect an underlying *semantic* distinction. The English double object construction contains a low applicative which introduces an indirect object low in the syntactic structure. It specifically denotes a ‘transfer of possession’ relation between the direct and applied objects; the reason it cannot occur with unergatives is because it necessarily involves a direct object. The Chaga benefactive contains a high applicative, which relates the benefactive argument to the event. It is thus similar to *vP* (Chomsky 1995; Kratzer 1996), which relates an external argument to an event. The difference between the two is schematized below.

(6) **High appl (Chaga)**



(7) **Low appl (English)**



These two types of structures make different syntactic predictions about the available lexical verbs, argument structure, passivization, and secondary predicates. These can be used as diagnostics to determine whether a given applicative is high or low.

2.1 Verb semantics

Since low applicatives create a thematic relation between two DPs, they cannot occur with verbs like ‘eat’ which involve destruction of the theme, nor static verbs like ‘hold’ which do not allow a transfer of possession. Predictably, double objects in English are ungrammatical with these types of verbs.

(8) **English (low applicative)**

- a. *He ate the wife the food.
- b. *John held Mary the bag.

Because the applied object in high applicatives stands in a relation to the entire event itself, the semantics of the verb should not make a difference. This is why the benefactives in Chaga (5) and Luganda, shown in (9) are allowed for a events involving destruction of the theme or no transfer of possession.

(9) **Luganda**

- a. Mukasa ya-som-e-dde Katonga ekitabo.
Mukasa PAST-read-APPL-PAST Katonga book
‘Mukasa read Katonga a book.’ (Pylkkänen 2002:25)
- b. Katonga ya-kwaant-i-dde Mukasa ensawo.
Katonga PAST-hold-APPL-PAST Mukasa bag
‘Katonga held the pot [sic] for Katonga.’ (Pylkkänen 2002:25)

2.2 Transitivity diagnostic

Because low applicative heads denote a relation between the direct and indirect object, they should be unable to appear in structures that lack direct objects. The prediction is that low applicatives should not be able to combine with unergatives while high applicatives can, and indeed, the double object construction in English cannot be used with unergatives, while benefactives in Chaga (5) and Luganda (11) can.

(10) **English**

*I ran **him**.

(11) **Luganda**

- Mukasa ya-tumbu-le-dde Katonga.
Mukasa PAST-walk-APPL-PAST Katonga
‘Mukasa walked for Katonga.’ (Pylkkänen 2002:25)

In addition, low applicatives cannot be used with unergative verbs with implicit object, such as ‘bake (a cake)’, even when the verbal semantics of transfer of possession are otherwise correct. Albanian benefactives are an example of a high applicative and show that they can occur with unergative verbs which have an implicit object.

(12) **English**

*I baked **him**. (Intended: I baked his cake / I baked him a cake)

(13) **Armenian**

Drita i pjek **Agamit** (rrepat).
D.NOM CL bakes A.DAT turnips.ACC

‘Drita bakes (turnips) **for Agim**.’ (McGinnis 2001:4)

2.3 Passivization

Another asymmetry concerning applicatives is that low applicatives only allow passivization of the indirect object, as shown by the contrasts in (14) for English and (15) for the Kinyarwanda locative applicative.

(14) **English**

a. Bill was baked a cake by John. [ApplP_{low}, IO passivized]

b. *A cake was baked Bill by John. [ApplP_{low}, *DO passivized]

(15) **Kinyarwanda (Low locative applicative)**

a. **Ishuûri** ry-oohere-j-w-é-ho *t* igitabo n’úúmwaalímu.
school SC-send-ASP-PASS-ASP-LOC book by.teacher

‘**The school** was sent the book by the teacher.’

b. ***Igitabo** cy-oohere-j-w-é-ho ishûûri *t* n’úúmwaalímu.
book SC-send-ASP-PASS-ASP-LOC school by.teacher

‘**The book** was sent to school by the teacher.’ (McGinnis 2001:3)

High applicatives, such as the benefactive applicative in Kinyarwanda, allow passivization of both the theme and the indirect object.

(16) **Kinyarwanda (High benefactive applicative)**

a. **Umukoôbwa**_k a-ra-andik-ir-w-a *t_k* íbárúwa
girl SP-Pres-write-Appl-Pass-Asp letter
n’ûmuhuûngu.
by.boy

‘**The girl** is having the letter written for her by the boy.’

- b. **Ibárúwa**_k i-ra-andik-ir-w-a umukoôbwa *t*_k
 letter SP-Pres-write-Appl-Pass-Asp girl
 n'ûmuhuûngu.
 by.boy
 'The letter is written for the girl by the boy.' (McGinnis 2001:2)

There are no known passive constructions in Nyangumarta, so this criteria cannot be used as a diagnostic. I do not discuss it in the following sections, but it would be interesting to explore further.

2.4 Secondary predication

Depictive secondary predicates can be predicated of subjects and objects, but not when the external argument is explicit (as in passives), nor of the indirect object in double object constructions (see Williams 1980 and Baker 1997).

- (17) a. John ate the *meat raw*.
 b. *John* wrote this letter *drunk*.
 c. **This letter* was written *drunk*.
 d. *I talked to *Sue drunk*.
 e. *John told *Mary* the news *drunk*.

Pykkänen (2002) rejects the small clause analysis of secondary predicates with control in Williams (1980), because under this analysis indirect objects should be possible controllers, even though they cannot have a secondary predicate (Koizuma 1994). Instead, she adopts a complex predicate analysis, where the depictive phase combines with the verb directly (Cormack and Smith, 1999; Yatsushiro, 1999; Geuder 2000). The semantics are such that transitive verbs and *vP* can combine by Predicate Modification with secondary predicates, but low applicatives cannot. High applied arguments should then always be available for depictive secondary predication.

Nyangumarta allows discontinuous modifiers, but it is unclear if they have the same restrictions as secondary predicates. Modifiers usually have the same case morphology as the head that they modify, and there are examples of ergative, absolutive, and dative secondary predications. I don't have enough data to see whether or not these can predicate objects with implied external arguments or the indirect object in the double object construction discussed in section (4) below.

3 Nyangumarta benefactives

Benefactives in Nyangumarta are marked with dative case morphology and trigger indirect object agreement on the verb.

- (18) a. Mirtawa-lu kampa-rna mayi.
 woman-ERG cook-NFUT food
 ‘The woman cooked the food.’ (Sharp 2004:360)
- b. **Partany-ku** kampa-rna-lu mayi mirtawa-lu.
 child-DAT cook-NFUT-3SGD vegetable.food woman-ERG
 ‘The woman cooked the food for the child.’ (Sharp 2004:360)

The benefactive construction in Nyangumarta patterns as a high applicative. Benefactives can be used with verbs which imply no transfer of possession, such as *kalku*-L ‘have, keep, take care of’¹. Other good verbs to test this with would be *warli*-L ‘hold’ and verbs which destroy the object such as *nga*-NY ‘eat’.

- (19) Kalku-lu janaku!
 keep-IMP 3PLD
 ‘Take care of it for them!’ (Sharp 2004:256, 7.40)
- (20) Wirla-rna-ngu.
 hit-NFUT-2SGD
 ‘S/he hit it for you.’ (Sharp 2004:68, 2.41)

The benefactive can occur with unergative verbs, such as *yarnta*-L ‘write (lit. spear)’ in (21) and *kurnta*-L ‘sing’ in (22). Since low applicatives cannot occur with unergatives, this is evidence that the benefactive is a high applicative.

- (21) Mili-mili-ngi yarnta-rna janaku muwarr paliny-ju.
 RED-paper-LOC spear-NFUT 3PLD word 3SG-ERG
 ‘He wrote it in a book for them.’ (Geytenbeek and Geytenbeek 1991)
- (22) Julurr kurnta-la-ji-npi-li
 corroboree sing-IMP-1SGD-2SGS-ANT
 ‘You might sing a corroboree song for me.’ (Geytenbeek and Geytenbeek 1991)

¹Verbs are cited followed by a hyphen and the verb class they belong to.

4 Nyangumarta double object constructions

Nyangumarta also exhibits a double object construction. It differs from the benefactive construction in that the indirect object DP is unmarked (instead of dative) and triggers accusative verbal agreement (instead of indirect object). This construction occurs with the verbs *mira-L* ‘relieve’, *jami-L* ‘withhold’, and *yu-/yi-NG* ‘give’.

The verb *mira-L* ‘relieve of’ has the schema *ERG relieves ABS of DAT* when the absolutive argument is not third person singular².

- (23) a. Wayilpila-lu mira-rni-yi nganinyi-a warrarn-ku.
 white.fellow-ERG relieve-NFUT-3PLS 1PL.EXCO-P_{HAVE} country-DAT
 ‘The white man has taken the land from us.’ (Sharp 2004:343, 10.112)
- b. Kunyma-na-kata-lu mira-rna-yi nganinyi-a
 tie.up-NMLZ-CHAR-ERG relieve-NFUT-3PLS 1PL.EXCO-P_{HAVE}
 yukurru-rrangu-ku nganarna.
 dog-PL-DAT 1PL.EXC
 ‘The policemen took our dogs from us.’ (Sharp 2004:343, 10.109)

Note that the dative theme only occurs with verb-final *-a*. In an analogous construction using the locative case, there is no verb-final *-a*.

- (24) Kunyma-rna-kata-lu mira-rna nganinyi yukurru-rrangu—ngu.
 tie.up-NFUT-CHAR-ERG relieve-NFUT 1PL.EXCO dog-PL-LOC
 ‘The policeman took away our dogs from us.’
 (Geytenbeek and Geytenbeek 1991)

The verb *jami-L* ‘withhold’ has the schema *ERG deprives ABS of DAT* when the absolutive argument is not third person singular.

- (25) Jami-lama-rna janinyi-a marrngu-rrangu ngajarri-rrangu
 withhold-FUT-1SGS 3PLO-P_{HAVE} person-PL stranger-PL
 kuyi-ku.
 meat-DAT
 ‘I deprived the strangers of meat / I didn’t give any meat to the strangers.’
 (Sharp 2004:344, 10.114)

²I ignore the problem of third person singular, which occurs as a dative or locative argument for all three verbs. There are not enough examples for me to make any generalizations.

The verb *yu-/yi*-NG ‘give’ is unusual in that both the indirect object and the direct object have absolutive case morphology. The schema is *ERG gives ABS(recipient) ABS(theme)* for non-third person singular recipients.

- (26) Kuyi yu-ngkuluma-rna pulinyi-a ngaju-lu pulany.
 meat give-FUT-1SGS 3DUO-P_{HAVE} 1SG-ERG 3DU
 ‘I will give those two some meat.’ (Sharp 2004:342, 10.105)

It can also occur with other transitive verbs, such as *kampa*-L ‘cook’. It is unfortunate that in this example the theme is not overt. I suspect it would have dative morphology like those discussed above.

- (27) Warrukarti-lu kampa-lami-nyi-a wika-nga.
 night-ERG cook-FUT-1SGO-P_{HAVE} fire-LOC
 ‘S/he will cook (the grasshoppers) for me on the fire tonight.’
 (Sharp 2004:123, 4.14)

Pylkkänen (2002) distinguishes two types of low applicatives. Both involve a transfer of possession relation between two individuals, but for low recipients the direction of transfer is *to* the possession of the indirect object, while in low source recipients the direction of transfer is *from* the indirect object. This analysis is different from that of Landau (1999), who argues that so-called ‘possessor datives’ are a different construction entirely from double object constructions. The English double object construction is a low recipient applicative. Other languages, like Korean, allow source indirect objects.

(28) **English**

- a. Bill sent the man the letter.
- b. John gave the girl the flower.

(29) **Korean**

Totuk-i Mary-hanthey panci-lul humchi-ess-ta.
 thief-NOM Mary-DAT ring-ACC steal-PAST-PLAIN

‘The thief stole a ring from Mary.’ (lit: the thief stole Mary a ring)

Interestingly, double object constructions in Nyangumarta are used for both directions of transfer. For the verb *mira*-L an object is removed from the possession of the indirect object, and for the verb *jami*-L an object is withheld from the rightful

possession by the indirect object. For the verb *yu-/yi*-NG ‘give’, the indirect object comes into the possession of the direct object by means of the transfer³.

If the double object construction in Nyangumarta can only be used in situations with a transfer of possession, then it should be impossible with static verbs and verbs of destruction. Unfortunately the sources do not have negative data on this point, but I predict that the following should be ungrammatical.

(30) **Predicted ungrammatical**

*Pulany-ju warli-rna pulu nganinyi-a nganarna kurtan-ku.
 3DU-ERG hold-NFUT 3DUS 1PL.EXCO-P_{HAVE} 1PL.EXC bag-DAT

‘They (two) held us the bag.’

(31) **Predicted ungrammatical**

*Mayi-ku nga-na-rna pulinyi-a
 vegetable.food-DAT eat-PST-1SG 3DUO-P_{HAVE}

‘I ate them the food..’

Syntactically, low applicatives should only be able to apply when there is a direct object. Unfortunately I do not have negative evidence, but I predict that the double object construction should be ungrammatical with unergatives, including unergatives with an implied object.

(32) **Predicted ungrammatical**

*Julurr kurnta-rna nganinyi-a
 corroboree sing-NFUT 1PL.EXCO-P_{HAVE}

‘He sang us a corroboree song.’

(33) **Predicted ungrammatical**

*Kampa-rna nganinyi
 cook-NFUT 1PL.EXCO-P_{HAVE}

#‘He cooked us (damper).’ (Shoul only mean ‘He cooked us (alive)’.)

All instances of the Nyangumarta double object construction involving *-a* are ones where the indirect object c-commands the theme. Harley (2002) argues that the applicative which introduces the indirect object in these cases is P_{HAVE}, the same element which is used in possession constructions. She claims that only languages which allow possessors to c-command possesses, either with P_{HAVE} or a verbal element like HAVE which bundles P_{HAVE} into a verb, will allow double object constructions where the goal c-commands the theme. Languages which lack P_{HAVE} do not

³‘Give’ is very unusual, as most verbs with recipients, paths, or locations have locative arguments.

allow possessors to c-command possessives, and only have double object constructions where themes c-command goals.

The double object construction in Nyangumarta discussed above is one in which the goal c-commands the theme. By hypothesis then, Nyangumarta should allow either a verb or a prepositional possessive construction in which goals c-command themes. This is indeed the case, as one way of denoting possession is with the verb *kalku*-L ‘have’ (which also can be used to mean ‘keep, take care of’).

- (34) Marlu yukurru kalku-rnu-n janiny?
 many dog keep-NFUT-2SGS 3PLO
 ‘Do you have many dogs?’ (O’Grady 1964:18)

- (35) Jurni-lu kalku-nul-pulinyi ngalyun-jirri.
 kestrel-ERG keep-REMPST-3DUO woman-DU
 ‘A Kestrel had two wives.’ (Dodd and McKelson 2007:80)

If the low applicative *-a* is P_{HAVE}, then we might expect to see it in other types of possessive structures, such as possessor datives. Since possessors must be animate, it also predicts that the indirect object of Nyangumarta double object constructions cannot be inanimate. I leave these and other predictions for next semester, however.

5 Inanimate dative agreement

There is a homophonous verb-final *-a* which is not used in double object constructions. Specific animate dative arguments show indirect object agreement on the verb. When the dative argument is non-specific or inanimate, then *-a* is used.

For example, in sentences where the benefactive is inanimate, as for *ngurra-ku* ‘camp-DAT’ below, then the verbal agreement is *-a* (compare to (18) above).

- (36) Kulpa-nya-marninyju wika ma-na-yirni-a ngurra-ku.
 arrive-NMLZ-as fire get-NFUT-1PL.EXCS-INAND camp-DAT
 ‘Before getting back we got firewood for camp.’ (Sharp 2004:390, 11.68)

There are a range of other uses of the dative, including purposive goals of motion verbs, and the objects of transitive verbs like ‘search for’ and ‘wait for’, as well as intransitive verbs like ‘like’. In all cases, inanimate and non-specific animate objects trigger *-a* on the verb, while specific animate objects trigger the corresponding indirect object suffix.

(37) **Purposive goal**

- a. Pala-nga pirirri-jirri ya-na pula-lu **maja-murniny-ku.**
that-LOC man-DU go-NFUT 3DUS-3SGD boss-own-DAT
'And then the two men went for their boss.' (Sharp 2004:148, 4.137)
- b. ya-nal-pulu-a pala-ku **kuyi-ku**
go-REMPST-3DUS-OBV that-DAT-meat-DAT
'The two went [for meat].' (Dodd and McKelson 2007:76)

(38) **'Wait for' + DAT**

- a. Mima-rna-ya-lu pirirri-rrangu-lu **maruntu-ku.**
wait.for-NFUT-3PLS-3SGD man-PL-ERG goanna-DAT
'The men waited for the goanna.' (Sharp 2004:125, 4.25)
- b. Kulpa-nya pulu mima-rna pulu-a **wirlarra-ku.**
return-NFUT 3DUS wait.for-NFUT 3DUS-INAND moon-DAT
'Those two returned and waited for the moon (to come up).'
- (Sharp 2004:349, 10.130)

(39) **'Like' + DAT**

- a. Pirirri karri-nyi-lu **mirtawa-ku.**
man like-NFUT-3SGD woman-DAT
'The man likes his woman.' (Sharp 2004:354, 10.158)
- b. Pupuka karri-nyi-a **kuyi-ku.**
frog like-NFUT-INAND meat-DAT
'The frog likes meat.' (Sharp 2004:354, 10.157)

None of these are low applicatives. The purposive goals and emotive verbs occur with intransitive verbs, whereas we know that low applicatives may only occur with verbs with an internal object. None of the examples involve a transfer of possession relation, nor do they relate two individuals to one another. Furthermore, there is evidence from (23a) and (23b) that the applicative does not vary based on animacy like these datives. I conclude that the *-a* in these cases is not the same as P_{HAVE} *-a* used in double object constructions.

6 Conclusion

This paper is a first investigation of verb-final *-a* in Nyangumarta. I have argued that it is not a purposive marker, but is in fact two different homophonous suffixes. One of the suffixes is a low applicative which is used in double object constructions and

in certain possessive contexts. It patterns like the P_{HAVE} posited by Harley (2002). The second suffix is part of the verbal agreement paradigm an agrees with inanimate and non-specific animate dative arguments. Recognizing that instances of *-a* are not homogenous allows us to make testable predictions about the syntax and semantics of Nyangumarta datives and applicatives.

Appendix: Verbal agreement suffixes

The symbol V represents a vowel whose vowel quality is predictable and determined by rules of vowel harmony.

Person	Subject	Object	Indirect
1SG	-rnV	-nyV	-jV
1DU.INC	-li	ngalinyi	ngaliku
1DU.EXC	-layV	ngalayVnyi	ngalayVku
1PL.INC	-nyV	nganyjurrVnyi	nganyjurrVku
1PL.EXC	-yirnV	nganVnyi	nganVku
2SG	-n(pa)	-ntV	-ngu
2DU	nyumpulV	nyumpulVnyi	nyumpulVku
2PL	nyurrV	nyurrVnyi	nyurrVku
3SG	-Ø/-rrV ⁴	-Ø	-lu/-IV (anim), -a (inan)
3DU	pulV	pulVnyi	pulVku
3PL	-yV	janVnyi	janVku

Table 1: Nyangumarta verbal pronouns

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⁴This suffix is used in the Northern dialect only.

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