Prominent Internal Possessors

Edited by
ANDRÁS BÁRÁNY, OLIVER BOND,
AND IRINA NIKOLAEVA

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Prominent possessor indexing in Gurindji

OLIVER BOND, FELICITY MEAKINS, AND RACHEL NORDLINGER

3.1 Introduction

The indexation of arguments with pronominal clitics is common in Pama–Nyungan languages, including the Ngumpin–Yapa languages of Northern Australia, where pronominal clitics index the morphosyntactic features of subjects, objects, and oblique arguments (Tsunoda 1981; Simpson 1991; Nash 1996; Meakins and Nordlinger 2014; Meakins 2015; amongst others). Like incorporated pronouns, the pronominal clitics in these languages are sufficiently referential to be the only expression of a clause argument, but clitics can also co-occur with a nominal expression of an argument, and thus redundantly co-specify properties of an argument much like more canonical instances of agreement (Meakins and Nordlinger 2014; Meakins 2015).

The distribution of pronominal clitics in the Ngumpin languages in particular is striking from both a typological and theoretical perspective, because the bound forms that index the morphosyntactic features of predicate arguments can also index non-terms, including phrase-internal dependents of a core argument, namely, possessors (Meakins and Nordlinger 2017). This point is illustrated in (1) with data from Gurindji (Pama–Nyungan, Ngumpin–Yapa), spoken in the Victoria River District of the Northern Territory of Australia.²

² All Gurindji examples will be referenced with the following information: speaker (two letter initials), recording ID, start time of the utterance in a recording (where known); for example, VW: FM18.8514: 03:31min. The ‘FM’ recordings were made by Felicity Meakins and the ‘McN’ recordings were made by Norm and Helen McNair. The Gurindji speakers were Violet Wadjil (VW), Biddy Wavell (BWH), Ronnie Wavell (RWH), Toppy Dodd (TD), Fischer Nyarrmari (PN), and Dundy Dambayani (DD). If they have been previously published, a reference to the relevant publication is also included.


In (1a) the subject clitic -lu indexes the third person augmented intransitive subject of the predicate (S). In (1b) the same clitic indexes the transitive subject (A), while the first person minimal object (O) is expressed by the clitic -yi.² In (1c), where the intransitive subject is a possessive phrase (PSP), -lu indexes the morphosyntactic features of the subject NP, while -biŋ indexes the possessor (PSR) internal to the subject NP. Case agreement between the possessor and possessum demonstrates that they both belong to the same NP. This is not obvious from looking at (1c) alone, since the adnominal possessor is in its dative case form and nominative is a morphologically unmarked case in Gurindji. However, consider (2), where the possessive phrase is the subject of a transitive clause, and is thus marked for ergative case. Here the possessor occurs in its dative form, just as in (1c), but this time, it also bears the case just like the head of the phrase (see Section 3.2.3 for further discussion of case agreement).

(2) [Ngayīnyבפ兠 karu-ngku iroŋ ngu-ŋi-buŋŋi ka-na-na 1min.dat-erg child-erg aux=1min-o=3augls take-ippf-prs kajirri-wu milirit old.woman-dat[acc] walking.stick[acc] ‘The children of mine take the old woman’s walking stick.’ (VW: FM18.8514: 3:52min)

Possession constructions of this type—first described in detail in Meakins and Nordlinger (2017)—are intriguing from a theoretical point of view, because, as with other instances of possessor prominence, the possessor is not a clause-level argument, but it nevertheless controls predicate agreement (i.e. the morphosyntactic features of the possessor are indexed by a pronominal clitic that usually indexes clausal arguments). This is unexpected in models of agreement where possible...
domains for agreement are subject to constraints on locality. Possessive constructions of this kind have been referred to as examples of ‘possessor dissection’ by Meakins and Nordlinger (2017), and given their NP-internal nature, they also conform to the definition of prominent internal possessors (PIPs) proposed by Nikolaeva, Bárány, and Bond (this volume, ch.1).

A further challenge to theoretical modelling of the data is seen in examples of multiple possessor indexing, where two possessors (one of the subject and the other of an oblique adjunct NP) are both indexed at the same time, giving rise to examples such as (3):

(3) [ Nguynyŋuŋku, juā karu-ngku ] 1MIN.DAT-ERG child-ERG
 nuanced 1MIN.DAT-OBJ =3AXG.3S =3MIN.OBL=3OBJ
 ka-nya ngarin [ nyunun-muku ngumparni-wu ] 1MIN
 bring-PST meat[ ACC ] 3MIN.DAT-DAT husband-DAT

'The children of mine took the meat for her husband.'

(4) [ Nguynyŋuŋku ] ngu=m-ŋuŋku 1MIN.1S
 winkung karninya eye[ NOM ] acche be-PST

'My eyes were aching.'

We propose that examples of this type are not only semantically different from constructions with phrase-internal alienable possessors, but they are also structurally different. Such possessors are neither internal to the phrase of the possessed entity nor have a distinct grammatical function from the possessed. This is therefore neither internal nor external possession in a syntactic sense, but a third type we call APPOSITIONAL POSSESSION (see Section 3.4.1 for further discussion).

In the rest of the chapter we explore the properties of possessor indexing in Gurindji with a view to providing a formal analysis of the agreement patterns observed in examples like (2), (3), and (4). In Section 3.2, we provide some essential background on Gurindji possessive constructions, including how possessive phrases are formed, how they are distributed in syntax, and how possessors are indexed by pronominal clitics. In Section 3.3 we consider a potential formal analysis proposed for similar phenomena, demonstrating why it is not sufficient to account for the Gurindji data. A novel analysis is presented in Section 3.4. Conclusions are presented in Section 3.5.

3.2 Gurindji possessive constructions

We propose that Gurindji has three different possession constructions (Section 3.2.1), formally distinguished by differences in the distribution of adnominal and grammatical case-marking, on the one hand (Section 3.2.1), and their indexation possibilities, on the other (Section 3.2.2)."
Nominals also distinguish up to six spatial cases (locative, allative, ablative, source, perative, and terminative). Like the dative, these cases can be used to indicate oblique arguments as well as adjuncts. Example (4) shows the proprietive, allative, and a possessive use of the dative.

(5) Yulu-wu kurruri-jawung Nangari-wu nyamun-rla that-DAT car-PROP Nangari-DAT rel=3OBL
ngu=runlu ya-ni Jinjarrak-irrri
aux=1PL.EXCLS go-PST Wave.Hill-ALL
‘We went to Wave Hill with a car which is that Nangari’s.’
(BWH: FM07_0028: 1:11min)

As we discuss in Section 3.2.3, the distribution of case-marking is a very important diagnostic for establishing the integrity of noun phrases, which may be discontinuous in terms of word order, but clearly phrasal units as far as grammatical functions are concerned. Given the non-configurational nature of Ngumpin languages, it is difficult to discern reliable diagnostics for grammatical functions independently of case-marking and indexing. Consequently, case-marking will be a primary diagnostic for demonstrating that PIPs are internal to another nominal, rather than a clause-level constituent.

3.2.2 Indexation of terms and non-terms

Besides their case-marking, another indicator of the grammatical function of a nominal in the clause is indexation by pronominal clitics. In the languages of Australia, the indexation of verbal arguments with pronominal clitics is widespread and frequently encountered (Dixon 2002). In many cases, the distribution of the pronominal clitics closely resembles agreement (albeit a non-canonical type), because the clitics frequently co-occur with the controller they index. For instance, in Gurindji clitics indexing clausal arguments are sometimes the only expression of a particular argument in a clause, but they also co-occur with NPs that corefer to a particular grammatical function of a predicate, as in (6).

(6) Ngu=yinangku=ma, nyila=ma kartipa=ma, karrarin-ta
aux=3AUG=REL 3AUG.O that=top whitefella=top from.west-LOC
nyisa-ngu-ni yarrulun-tu kjujarra-lu
intake=IPFV-PST young.man-ERP two-ERP
‘The two young men were watching the whitefellas from the west.’
(Meakin 2015: 135; RWH: EC98_0027)

The clitic pronouns in Gurindji index the person (1, 2, 3), number (MIN, UA, AUG), and clussity of their controller. There are two series of forms, one set used to index subjects and a second set used to index objects, obliques, and adjuncts, as shown in Table 3.2. Third person minimal subjects and objects—the core arguments—are not indexed by clitics; the third person minimal clitic –ra is only used to index oblique arguments and adjuncts. Given the distribution of clitics presented in Table 3.2, it should be clear that indexation by a subject clitic is taken to be a strong indicator of subjecthood, while indexation of a third person minimal phrase is an indicator of being neither a subject nor an object.

| TABLE 3.2 Form of pronominal clitics in Gurindji |
|-----------------|-----------------|-----------------|
| SUBJECT | OBJECT | OBQUIR/ADJUNCT |
| 1MIN | 1EXCL | =ywa | =yli |
| 1MIN | 1INC | =ra | =ngali |
| 2MIN | =e | =ngku |
| 3MIN | =ra |
| 1UA | 1EXCL | =ja, (=mawula) | =nguyirra |
| 1UA | 1INC | =riwula | =ngailwula |
| 2UA | =ngula | =ngulwula |
| 3UA | =ulu | =waliny |
| 1AUG | 1EXCL | =nulu | =ngantipa |
| 1AUG | 1INC | =lu | =ngulu |
| 2AUG | =nia | =nyjarra |
| 3AUG | =lu | =yina |

Meakin (2015) provides a detailed account of the distribution of Gurindji pronominal clitics, which is briefly summarized here. Bound pronouns are obligatory for first and second person arguments. Indexation of third person non-minimal referents and minimal third person oblique referents is conditional, and associated with topicality and animacy. Non-human objects are rarely indexed, while human referents are almost always cross-referenced. When a human referent is not indexed, it is deemed to lack human characteristics such as animacy, control, and empathy. Third person minimal subject and objects are never indexed by a clitic. Some indicative examples are provided in (7–10).

(7) Nyawa=ma, =ma-ngku=ra ma-lu yurrk yulu-wu na karu-wu that=top=1MIN,=S3MINO=3OBL talk-POT yarn that-DAT FOC child-DAT
‘I’m going to tell you a story about a child.’
(VW: FM12_34_18: 01:00min)

(8) Ngu=nulu=Theta, yuwa-na=na nyila=ma
aux=1AUG.EXCLS=3AUG.O put-IPFV-PRES that=top
kuruwarrany-waljila=Theta
cook.rock-POT=TOP
‘We put the cooking rocks (on the fire).’
(Meakin 2015: 149; VW: FM10_a148: 17:38min)

(9) Nya-ngku=Theta, na kartipa, ngjaa=Theta, =ngala,
look-TMP=1MINO=3AUGO FOC whitefella ADMON=3AUGO=1AUGO=INC.O
karti-pa-lu, paraj pu-ngku
whitefella=ERP find pierce-POT
‘Watch the whitefellas for me now, otherwise they might find us.’
(Meakin 2015: 153; RWH: EC98_0027)
The pronominal clitic generally marks a boundary (or transition) between information that is discourse-prominent (i.e., content that has special informational status) and other less prominent information, as shown in Figure 3.1.

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**Figure 3.1** The sequence of prominent information in Gurindji

In terms of the sequence of information in an utterance, first position is occupied by a prominent topic (if present), as in (7), or a prominent focal element, as in (14). Rarely, both a topic and a focal element are found together, as in (15). However, in each case discourse-prominent information precedes the auxiliary-hosting clitics, and less prominent information follows the clitics. The fact that topic and focus positions may or may not be filled explains variation between second position for the pronominal clitics.

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(14) **Ngana-lu guya ya-nil?**

Who do not want to go?” (McConvell 1996: 315)

The clitics are also frequently hosted by a semantically vacuous auxiliary ngu (sometimes described as a ‘catalyst’), as shown in (6) and (8), where ngu is clause-initial and the clitics follow their host.

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The grammatical function of clausal arguments is usually clearly distinguished by case. For instance, in most ditransitive constructions, the three nominal arguments occur in ergative, accusative, and dative case. However, only the subject and indirect object are cross-referenced by pronominal clitics. For example, in (16) there is no 3UA.O clitic cross-referencing the object ‘two women’.

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(16) **Hey lampara-marrany-jin-ma-0=0=ngku, hey father-in-law, kin-ERG-TOP=3MIN.S=3UA.O=2MIN.O give-PST**

Hey your father-in-law who is my son will give two girls to you” (Meakins 2015: 137; VW: FM10_1415: 1052min)

With a few verbs, secondary objects are also attested. Like direct objects, they always appear in unmarked, accusative case, so two accusative arguments are permitted within a single clause. As with indirect objects in ditransitive clauses, it is the secondary object that is cross-referenced by a pronominal clitic rather than the direct object.

In sum, there are two series of pronominal clitics in Gurindji that index subject and object arguments respectively. A third series (nearly entirely syncretic with the object series) indexes obliques. A further clitic —nyanta indicates the presence of an additional oblique. Subject clitics only ever index subjects and are never repurposed for indexing internal possessors.
The minimum number of clitics that occur with a predicate is zero. This is constrained by (i) the number of arguments a verb can have and (ii) the referential features of those arguments. For instance, a clause consisting of a transitive verb with third person minimal subject and a third person minimal object will not contain any clitics, as in (10). The minimum number of clitics possible in a single utterance is four, as in (3) (discussed in Sections 3.3 and 3.4). One of the few constructions in which this is possible involves prominent internal possessors.

3.2.3 Possessive construction types

We propose that Gurindji has three different possession constructions. Two of these constructions have internal possessors, and are differentiated primarily by their indexation properties. We refer to these as alienable possessor constructions (Section 3.2.3.1) and prominent alienable possessor constructions (also referred to as ‘possessor dissenion constructions’ in Meakins and Nordlinger 2017) (Section 3.2.3.2). We characterize the latter of these constructions as having a prominent internal possessor. We then contrast these with inalienable possessor constructions (Section 3.2.3.3) in which the inalienable possessor obligatorily controls indexation, but does not have an internal possessor in a conventional sense.

3.2.3.1 Alienable Possessor Constructions

Alienable possessor constructions in Gurindji are a type of internal possession construction. They are characterized by possessive phrases in which there is an asymmetry in the inflectional characteristics of the dependent possessor and the possessed entity, signalling a syntactic asymmetry in the internal structure of the phrase, as well as a semantic asymmetry between the possessor and the possessed.

In alienable possessor constructions the possessor resembles a modifier of the head noun used to delimit the set of individuals identified by the referring expression (cf. the use of prominent internal possessors described in Section 3.2.3.2).

Examples can be seen in (17–20). In (17), the possessor and possessed occur in the ergative (A), in (18) it is an unmarked nominative, in (19) an unmarked accusative (O), while in (20) they are dative (OBL). An example of a locative-marked possessive phrase can be seen in (18): 3

17. [jau-negu nyununy-ju] bangku nguy-yi-lulu yurrk yuwa-nil grandmother-ERG 2MIN.1DAT-ERG AUX=1MIN.O=3AUGS tell put-PST
‘Your grandmothers told me [the story].’ (VW: FM14.8205: 0:25:35)

18. Ngayiny=ma jauji=ma jau=ma-lu karrinya
1MIN.1DAT=TOP grandfather-TOP grandmother=TOP=3AUGS BE.PST
muru=nga=ma
this-LOC=TOP
‘My grandfather and grandmother lived down here.’
(VW: FM09_17_14: 4:31min)

In (19) the clitic referencing the 3AUG subject is absent. See Meakins (2015: 135–5) for discussion of the absence of bound pronouns when referring to non-Indigenous instigators of brutality.

19. Long time you know kurju-kari nguy-yi-magwam ka-nya island-OTHER AUX=3AUG-LOC take-PST
[ pilying-piling-walji=ma nyulgi=ngali walji=ma=ma 1MIN.1DAT-PST AUX=3AUG-LOC2
mixed-race-PST AUX=3AUG=TOP IAU.ING.DAT=1MIN.1DAT=TOP
‘A long time ago (welfare officers) took our pilying-piling children to an island.’
(Meakins 2015: 153; VW: FM14.8205: 5:05min)

20. Alrait kutij nguy-wulun karrinya nguyiny=ku=ma inuk alright stand AUX=3AUGS BE.PST 1MIN.1DAT-DAT=TOP
jau-wu=ma=ma 1MIN.1DAT=DAT=TOP
grandmother-DAT=TOP
‘Alright, they [two little boys] stood with my grandmother.’
(Meakins 2015: 136; BWH: FM14.8206: 1:10min)

Gurindji alienable possessive constructions are characterized by the following case-marking properties:

(i) the grammatical case of the possessed head noun is determined by the grammatical function of the possessive phrase;
(ii) the possessor occurs in the abominative dative case, signalling its dependency on the head;
(iii) the possessor shows case agreement with the head, resulting in case-stacking on the possessor when the head is inflected for ergative, dative, locative, or one of the spatial cases.

An alienable possessive phrase can be embedded as the possessor of another possessed entity, as illustrated by (21). Here, =raa indexes the transitive subject (A), the object is not indexed (as expected with a third person minimal object), and =ra indexes the third person benefactive adjunct.

21. Nguy=rra=ma=kampa-wu [karji=kampa-wu nguyiny=yarrar ku 1MIN.1DAT=TOP cook-POT child-DAT 1MIN.1DAT-DAT
ngurukama=kampa-wu 3AUGS be.PST
head-DAT
‘I’m cooking it for my child’s head.’
(Meakins and Nordlinger 2017: 167; VW: FM07_001.16: 1:18min)

While the order of the possessor and possessed is not constrained syntactically, the possessor and possessed in Gurindji alienable possessive constructions are typically adjacent in constituent structure (as seen in all the examples in Section 3.2.3.1, but for a rare exception, see (22) for instance), and the recursive nature of alienable possessive constructions suggests that NPs in Gurindji do have a hierarchical internal structure.

22. Karji=kampa nguy-yi rarray yu-ma-nu nguyiny=raa
child AUX=3AUG-LOC run go-IPV-PRES 1MIN.1DAT
‘My child runs to me.’
(VW: FM18.5514: 1:48min)
Due to pragmatically determined word order and some flexibility with the positioning of the pronominal clitics, we consider case agreement to be the most convincing diagnostic for the existence of nominal phrases in Gurindji. While NPs are sometimes discontinuous, this can be captured in a framework like LFG (e.g. Brennan et al. 2016) by assuming that discontinuous elements of the same referential expression are distinct NP constituents at c-structure, but map to the same grammatical function at f-structure (e.g. Simpson 1991; Nordlinger 1998).

3.2.3.2 Prominent Alienable Possessor Constructions When a possessor internal to an alienable possession construction is sufficiently discourse-prominent, it can control agreement through clitic pronouns, much like clause-level arguments. This phenomenon, referred to as possessor disension by Meekins and Nordlinger (2017), is an example of internal possessor prominence.

An example containing a prominent internal possessor is provided in (23). In this construction, the subject 'the children of mine' is indexed on the verb by the third person augmented subject clitic ‘ril’, while the third person minimal object 'old man's car' is not indexed, as expected with objects of this type (see Table 3.2). What sets this type of example apart from regular alienable possessor constructions is that the pronominal possessor internal to the subject noun phrase is also indexed, by a first person minimal non-subject pronominal clitic ‘yi’.

(23) [Ngayinyiruwa jin karu-ngku jen nguyyleneri bilanre tawirrijp
imin.dat.erg child.erg aux=1min.0=3aug.5 pelt
pa-ni marula-wu kurrurij
hit-pst old.man.dat car
'The children of mine pelted the old man's car (with rocks).'
(Meekins and Nordlinger 2017: 160; VW: FM13_8194: 1:36min)

In examples with such possessor agreement, the possessor is usually first person, but prominent possessors with other combinations of referential features are also observed. Some further examples of PIPs in Gurindji are provided in (24) and (25). In (24), the intransitive subject 'the car of Jimmy and Biddy's' is not indexed by an agreement clitic because it is third person minimal. Agreement indexing the possessor of the subject indicates that there are two owners of the car. In a language where it is commonplace to elide accessible or shared information, agreement is not redundant here.

(24) Nguywulanjeri jen [Japalji-wu re kurrurijre na ya-ma-na wart,
au=3aug.0 subj-sec-daft nom | car|nom |
goi-pfven-prs return
jalang-ma
today=top
'The car of Jimmy and Biddy's came back today.'

(Meekins and Nordlinger 2017: 152; VW: FM09_14.18: 1:10:33min)

* Skin groups or subsections are an important part of the kinship system of Gurindji. In this example Japalji is one of eight subsection names used for males. People are often addressed and referred to by their subsection names rather than their personal names. For discussion of the subsections in Billura, see Meekins and Nordlinger (2016: 37–41). For an overview of the origin of subsections in northern Australia, see McConnell (1996).

In (25), ryina cross-references a possessor embedded within a locative-marked adjunct 'at the camp of theirs'. The entire possessor phrase is then cross-referenced by the third oblique pronoun ‘ril’a.

(25) Nguyw=ma-ryina=la-nku=la re
nguy-waru-jir laru karrinya na
au=1min.0=3aug.5=epen=3obl
imin-alone sit bes=pfv poc
nymaraulu,ter jen nguwa-ngka
3aug.dat-loc camp-loc
'I'm sitting down on my own at the camp of theirs.'

(Meekins and Nordlinger 2017: 155; VW: FM13_8196: 0:14:51min)

These examples all share the same grammatical traits as the alienable possessor constructions outlined in Section 3.2.3.1. In each case the possessor appears in the adnominal dative case, indicating that it is a semantic and structural dependent of another nominal. Furthermore, the possessor agrees in case with the possessed entity. This is most obvious in (25), where the possessor agrees in ergative case with the head noun, which itself bears the case assigned to this grammatical function. However, it is also clearly observable in (23), where the possessor agrees in case with the head of the locative adjunct. In (24) the same generalization holds, but there is no overt grammatical case-marking on the possessor or possessed because the NP is nominative.

When the possessor and possessed NPs are discontinuous, as in (26), case agreement is an essential diagnostic for demonstrating that the sub-elements belong to the same referential expression.

(26) Karu-wu re
nguy-ya-re=rala
ngayinyeru-re=kura
jiwa-wu
child-dat aux=1min.0=3obl imin.dat-dat boil-pot
'It will boil for the child of mine.'

(VD: FM07_801_12: 2:02:1min)

In (26), the inanimate third person subject of the clause is not indexed with an exponent on the verb since it is third person minimal (see Table 3.1). However, the beneficiary and the possessor internal to this NP are both indexed. While the clitic ‘ril’a indexes the discontinuous NP 'child of mine', the ‘yi’ clitic indexes the first person possessor.

Agreement with internal possessors in Gurindji is subject to prominence conditions in a similar way to other languages with PIPs (see Nikolaeva, Bráinya, and Bond, this volume, ch. 1). The first major factor is a semantic one alienability. Only alienably possessed nouns in Gurindji can be expressed using an internal possession construction, and therefore only the possessors of alienably possessed nouns can be indexed in this way (see Section 3.2.3.3 for discussion of apposition in inalienable possession). The second most important semantic factor is humanness, since agreement is restricted to alienable possessor constructions with human possessors. Meekins (2015) shows that humanness is an important condition on agreement in general for Gurindji and it is therefore unsurprising that this referential condition is operational with possessor agreement too.
Once these factors have been taken into account the next important condition on prominence is information structure. The PIP constructions are used to present a human possessor as the likely candidate in a set of possible possessors. This function is demonstrated in contexts where ownership is considered high-stakes, for example in vehicles, (24) and (27), claims about the ownership of land and its associated mythological creatures, (28), restricted foods, (29), and other valuable resources, (30). The use of the PIP construction singles out a person or group of people from a potential set of owners. In this respect, it represents a type of contrastive focus in that it either sets up a restricted set of alternatives (either explicitly or not) and puts forward one of the alternatives or expands a set of potential possessors (cf. similar observations made for PIPs in Maithili by Yada et al., this volume, ch. 2). Dik (1997: 331–2) refers to this type of focus as counter-presuppositional contrastive focus and proposes a number of subcategories. PIP constructions can be used for restricting focus, as in (29), where the speaker presumes that the hearer has a correct piece of information X, but also incorrectly believes Y to be the case; and also for expanding focus, as in (30), where the speaker presumes that the hearer has a correct piece of information, but knows another piece of information which is also correct. In both cases, one possessor option is highlighted over another.

(27) [Ngau=ma yinawa, walyuk ma na na maan] 

aux=1min.s=3aug.o wash do-ppv-prs

[ makin-tar-wu, Kurriari, kurriari prep] sleep-loc-dat Nangari-pl-dat car

'Tm washing the Nangari's car while they're asleep.' (VM: FM17_4442: 4:42min)

(28) Ngantipa=ma kurula-yarra-side-ta=ma [Namama dreaming] top

1aug.excl=top south-side,river-side-loc=top bee-redup dreaming

ngu=ngantipa prep [ ngantipa nganywalla=ma prep]

aux=1aug.excl 1aug.excl-dat=top

'Us mob are on the south side of the river. The Bee Dreaming belongs to us.'

(VW: LM07_01093: 2:13min)

(29) 'Kula=nta ngu lu yarlarurn=tu=ma janka ku=ma,' kuya.

ngu=2aug.s eat-pot young.man-erg=top woman-erg=top then

'You shouldn't eat it, young men and women,' she said.'

'Ngu-ngantipa ngantipa nganywalla-ku'

aux=1aug.excl 1aug.excl-dat adult.redup-erg

'It is ours, as adults.'

'ngu-ruulu nga lu kajjirri-ku kuya-ny.'

aux=1aug.excl.s eat-pot old.woman.redup thus-nmlz

'Only us older women can eat that type.'

(VW: FM09_8123: 1:09min)

(30) Ngumpit-kul-parlak nyawa=ma ngu=ngantipa nganywalla

man-dat-together this=top aux=1aug.excl 1aug.excl-dat

'This (white ochre) is ours, men together (with women).' (TD: FM06_811: 0:34min)

Like the other examples of possessor prominence, PIPs in Gurindji are dependent on the possessive NP, yet also cross-referenced at clause level. However, unlike other examples observed in the literature, the Ngumpin languages stand out typologically, since both the possessor and possessum are marked on the clause simultaneously, through distinct pronominal clitics. That is, two distinct agreement exponents index different elements of the same clause-level argument. Agreement of this kind is observed in other languages too—for instance in Maithili and other Indo-Aryan languages exhibiting similar ‘double agreement paradigms’ (see Yada et al., this volume, ch. 2).

3.2.3.3 Inalienable Possessor Constructions In inalienable possessor constructions the possessor and the possessum are construed as being in a part-whole relation. In Gurindji, inalienable possessor constructions are found when the possessum is a body part, shadow, or image. An example with an inalienable body part is shown in (31).

(31) [Nganywalla ngu=ma langa [milu] warranggun karrunya

1min nom aux=1min.s eye nom ache be-pst

'My eyes were aching.' (Meakins and Nordlinger 2017: 1:44min)

Besides their obvious semantic differences, inalienable possessor constructions differ formally from their alienable counterparts in three important ways:

(i) the possessor is never marked with the adnominal dative suffix, and thus only ever bears the case associated with the grammatical function of the possessive phrase;

(ii) possessors do not agree in case with the possessed entity (rather, they ‘share’ its case);

(iii) pronominal clitics index feature values of the possessor as if it were a clause-level argument, rather than indexing the values of the possessed.

The fact that inalienable possessors do not get marked by adnominal dative case indicates that that are not treated as a syntactic dependent of the phrase headed by the possessed entity. Instead, the possessor shares the same case as the possessed entity, as in (31), where both possessor and possessum have unmarked nominative case.

However, this is not case agreement of the type observed in alienable possessor constructions. Differences in the principles underlying the distribution of cases in alienable and inalienable possessor constructions are evident when possessive phrases containing an alienably possessed noun (e.g. ‘my child’) function as the inalienable possessor of another entity (e.g. ‘my child’s head’). This is exemplified by the stacked possessors in (32), repeated from (21).

(32) Ngau=ma nga=kampa [ku=ma, ngu nga=ngatima ku] head-dat

aux=1min.s=3.gbl cook-pot child-dat 1min.dat-dat

'Very cooking it for my child’s head.'

(Meakins and Nordlinger 2017: 167; VW: FM07_s01_ce: 1:18min)
The first important observation to make about (33) is that the complex possessive phrase is case-marked as dative because it is a benefactive oblique. If the benefactive phrase were ‘the child’s head’ instead, then we would get the same case on the inalienable possessor and possessed: [child-DAT] [head-DAT]. We argue that this happens because inalienable possessor constructions are appositional structures as indicated by the brackets above. Each component in the apposition NP needs to get the same case, so this is what you could call ‘case-sharing’.

If, on the other hand, the benefactive phrase were ‘my child’, we would get grammatical case (on the head of the phrase ‘child’), adnominal dative marking on the dependent possessor, and agreement in case on the possessor: [child-DAT][1MIN-DAT-DAT].

Combined, we get an inalienable possession construction ‘head of [my child]’ in which the possessor is an alienably possessed entity: [child-DAT][1MIN-DAT-DAT] [head-DAT]. So in this example the possessed ‘head’ gets dative because this is the grammatical case of the noun phrase. The inalienable possessor of ‘head’ is also dative because it must share the case of the possessed.

A case-agreement analysis for the inalienable possession construction would wrongly predict the occurrence of an additional dative suffix in (33) above. This is because under a case-agreement analysis, the case on ‘child’ above is case agreement (i.e. it agrees in case with ‘head-DAT’). Therefore, there would also be case agreement on the embedded possessor, agreeing with ‘head’ too: [[child-DAT][1MIN-DAT-DAT-DAT]] [head-DAT]. But such patterns are ungrammatical, providing support for analysing these possessive phrases as being syntactically distinct.

We take these facts as evidence that inalienable possessor constructions do not involve internal possession in a strict sense; the possessor is not embedded within another NP. Logically, then, if the possessor is not internal to the possessive NP, it must have some form of external representation. Yet, as we will show, inalienable possessor constructions in Gurindji also differ from most conceptions of external possession, since the possessor and possessed do not have distinct grammatical functions with the clause.

We propose that inalienable possessor constructions involve an appositional structure that places the phenomenon somewhere between the clearest cases of internal and external possession. Gurindji thus presents evidence for a distinct syntactic construction: appositional possession.

The possessor in an inalienable possession construction is indexed by a clitic that is appropriate for the grammatical function of the whole phrase. Consider the example in (33b). Here, the possessor yapurrattu ‘emu’ does not occur in the dative form, but the possessor and possessed do share the same grammatical case (i.e. nominative). Crucially, the morphosyntactic properties of the possessor (not the whole possessive phrase) are indexed by the pronominal clitics, using a clitic from the subject series (not the non-subject series, as was the case in the PIPs discussed in

Section 3.2.3.2). Similarly, where jamana is an object in (33a), it is cross-referenced by an object pronoun -yina.

(33) a. Ngu=yina nya-nya-nil jamana aux=2ADG inteke-IPPV-PST foot(print)

b. Nyawa-mi ngu=lu ya-na-nil yiparrarru=ma jamana this=ONLy aux=2ADG go-IPPV-PST emu-TOP foot(print)

‘He was looking at their footprints. Here the emu tracks were going along.’

(PN: McNair 1979: KcC)

The example in (34), from the closely related variety Bilinarra, demonstrates that the inalienable possessor and the possessed may also occur in the ergative.

(34) Nyawa=ma ni baya-la nyundu-ulu gongomda-lu
this=TOP=2MIN.S bite-PBS 2MIN-ERG mouth-ERG

‘You’re biting it with your mouth (Lit. Your mouth is biting it).’

(Bilinarra; Meakins and Nordlinger 2014: 206; HW/AN: RN fieldnotes 1990: 03:023)

However, similar sentences in Gurindji are rejected by speakers, demonstrating that inalienable possessor constructions are strongly dispreferred as transitive subjects in Gurindji, if not completely ungrammatical.

The possessor is most commonly omitted from inalienable possessor constructions, such that the only indication of the possessor is the clitic indexing the argument, as seen in the following sequence in (35).

(35) a. Nyuntu ma-rta nguku!
2MIN get-IMP water
‘You get some water!’

b. ‘Lawara, ngu=ma jamana jangal!’
no aux=1MIN.S foot sore
‘No, my foot is sore!’

c. ‘Yuu.’ Kirri-kari-wu
‘Nyuntu nyuntu ma-rta!’
Yes woman OTHER-DAT 2MIN 2MIN get-IMP
‘OK.’ (He said) to another woman, ‘Well you get it!’

d. ‘Lawara, ngu=ma pung ngarlakal!’
no aux=1MIN.S ache head
‘No, I have a headache!’

e. ‘Yuu’ aa ‘Nyuntu nyuntu ma-rta!’
Yes aa 2MIN 2MIN get-IMP
‘OK,’ ah, ‘well you get it then!’

f. ‘Lawara, ngu=ma ngarp parntawurr!’
no aux=1MIN.S bad back
‘No, I have a bad back.’

(DD: McNair 1979: C2B)
At first sight, examples like those in (35) appear to resemble external possessor constructions (EPCs) commonly observed in other languages, including Australian ones (see Chappell and McGregor 1996b; Payne and Barshi 1999; Deal 2017). In EPCs, an NP bearing a possessor relation to another nominal headed by a noun or pronoun is syntactically encoded as a grammatical function of the verb and simultaneously understood as the possessor of one of its co-arguments, that is, a distinct clause-level argument.

The formation of EPCs has often been analysed as a ‘raising process’ in transformational theories of syntax in which a non-argument NP referring to the possessor of an entity (frequently a body part or inalienable possessee) is (syntactically) promoted (or ‘raised’?) to the status of a core argument. Previous syntactic analyses of external possessor constructions in LFG treat them as arising from argument-structure alternations between semantically related verb forms in which transitive argument structures alternate with an alternate argument structure in which the verb in question subcategorizes for an additional syntactic argument (Schock 2007; Ledrup 2009; Baker et al. 2010).

The contrast between internal possessor constructions and EPCs is demonstrated in (36) and (37), using data from Wubuy, a Gunwinyguan language (Australian: Northern Territory), as described by Baker et al. (2010).7 These examples both encode a possessive relation.8 The relevant distinction between (36) and (37) is seen in the encoding of the NP that is coreferential with the incorporated body part.

(36) Na-lanarr nga-gayawininyinung nga-ni-lanarr-wawayuwaa m.top-nail 1SG.GEN 1SG-3M-nail-cut.PC
   ‘I was cutting off my nails.’

   (Baker et al. 2010: 65)

   ‘He hit her in the upper back, in the back.’


In (36) the object ‘my nails’ consists of a head noun and a dependent pronominial in the genitive case. The possessor is internal to the object NP, which is indexed for person (3) and gender (M) on the verb by ni, thereby agreeing with the head of the possessive phrase ‘nails’. The first person subject is indicated on the verb by the prefix nga.

In the EPC in (37), the body part NP appears in the locative case and is prefixed by an oblique noun-class prefix, while the possessor is agreed with as the object in the verb. The crucial point here is that in the EPC in (37), the possessor (OBJECT) and the possessed (LOCATIVE) belong to distinct grammatical functions, whereas in (36) the two belong to the same grammatical function (OBJECT), with ‘nails’ as the head.

While, on the surface, Gurindji inalienable possessor constructions appear similar to Wubuy EPCs, the possessor and possessed never have distinct grammatical functions in true appositional possession. When the possessor is realized only as a clitic, we assume that the clitic is pronominal, rather than agreement, and thus an example of pronoun–noun apposition.

However, there are some examples where the correct analysis remains debatable. For instance, in (38) the clitic =yi indexes the possessor as if it were a direct object, whilst simultaneously indexing the dative-marked animale game as an oblique.

Although this is an inalienable possession construction, the agreement pattern resembles a prominent alienable possession construction or some sort of hybrid construction with external and internal representations of possessors.

(38) Karu-ngku ngui=yi_yung=tla nga warakap nya-nya [ ngui-yi_yung child-EBG AUX=1MIN.O=3OBL search intake-PST 1MIN-DAT
   wantan-ku_1p hand-DAT
   ‘The child searches for my hand.’

   (VW: FM14_a228: 12:32min)

For the time being, we simply acknowledge that such intermediary structures exist, even though it is not entirely clear how they relate to the rest of the data examined here.

3.3 Potential analysis

In the LFG literature, the types of syntactic analyses that have been proposed to account for morphosyntactic alternations between possession constructions have all involved changes in valence. These analyses are distinguished by the use of lexical rules (or a more general rule determined by linking theory) to account for differences in the mapping between grammatical functions and referential noun phrases.

A valence alternation is the cornerstone of Ritchie’s (2015, 2016, 2017) analysis of internal possessor agreement in Chimane, an isolate spoken in Bolivia (this volume, ch. 4). Valence alternations also feature in analyses of a number of other languages with internal possessors discussed by Nikolaeva, Bárany, and Bond (this volume, ch. 1). Here we provide an overview of the formal analyses applied to the Chimane data, before demonstrating the limitations on applying his analysis more widely.

In Chimane, transitive verbs agree in person and number with their object. When the object is third-person, the verb also realizes agreement in gender. Gender

7 Wubuy, also known as Nunggumpuy (Heath 1980, 1981, 1984) is spoken in the remote community of Numbulwar, Northern Territory, by around 60 1st speakers (Baker et al. 2010).
8 The examples are similar in that they both involve the productive nong incorporation of body parts, giving rise to a complex verb form denoting an event affecting a body part. Note, however, that EPCs in Wubuy can involve all sorts of normal alienable possession relations as well, in which case there would not be body parts or incorporation. See Baker et al. (2010) for examples.
agreement is also observed within NPs. For instance, in (39), the object phrase is un mu' Sergio's 'Sergio's hand'. The head of the phrase un 'hand' controls feminine agreement on the dependent possessor 'Sergio' (which itself is inherently masculine). The gender of the head is also relevant for controlling agreement on the verb, as indicated by the third person singular feminine object suffix. Note, however, that the gender of the determiner in the object noun phrase is controlled by the possessor, not the possessee.

(39) Juan tāj-je' un mu' Sergio-s.  
Juan(m) touch-CLF-3SG.F.O hand(f) the.m Sergio(m)-f  
'Juan touched Sergio's hand.'  
(Ritchie 2016: 625)

Under certain circumstances, a different agreement pattern prevails. In (40), the verb agrees with a masculine controller. Note that it is the inherent gender of the possessor internal to the object that is relevant here—changing the gender of the subject would not affect the agreement pattern.

(40) Juan tāj-je-bi-te un mu' Sergio-s.  
Juan(m) touch-CLF-APPL-3SG.M.O hand(f) the.m Sergio(m)-f  
'Juan touched Sergio's hand.'  
(Ritchie 2016: 623)

In Ritchie's (2016) analysis of Chimane possessive constructions apparent agreement with an internal possessor is argued to be possible because of a change in valence licensed by an applicative in -bi. He proposes that, rather than providing evidence for agreement with a prominent internal possessor, the Chimane facts suggest that the verb in sentences like (40) is agreeing with a topical object argument that is coreferential with the possessor of the possessive phrase. This 'proxy' object is sometimes overtly realized by a pronoun doubling the possessor, but is frequently only identifiable through agreement.

(41) Mi naji-bi-te ococo Juan-s'(-mu').  
you see CLF-APPL-3SG.M.O frog(f) Juan(m)-f(-him)  
'You saw Juan's frog.'  
(Ritchie 2016: 626)

Ritchie (2016: 626) proposes that if the doubling possessor in (41) is an overt proxy object, then this element should only occur in PIP constructions and not in the corresponding internal possession construction, where the object is expressed by a noun phrase. The crucial data are illustrated by the contrast between (41) and (42). According to Chimane speakers, the addition of the bound pronoun in (42) sounds strange or ungrammatical (Ritchie 2016: 626).

(42) Mi naji-tye' ococo Juan-s'(*-mu').  
you see CLF-3SG.F.O frog(f) Juan(m)-f(-him)  
'You saw Juan's frog.'  
(Ritchie 2016: 627)

The c-structure and f-structure provided by Ritchie (2016: 628) for the possessive construction in (41) is provided in (43).

In this account the clitic functions as a thematically restricted object (+1). The possessor within this phrase necessarily binds the reference of the clitic pronoun (CI in c-structure).

A summary of the valence change between the internal possession construction and the prominent internal possession construction is given in (44):

(44) a. (↑ PRED) = '{<SUBJ> (OBJ)}'  

b. (↑ PRED) = '{<SUBJ> (OBJ)}'  

(↑ OBJ POSS) = (↑ OBJ)

To summarize, then, in Chimane there is a change in valence signalled morphologically that results in the selection of a thematically restricted object (OBJ), rather than an unrestricted object (OBJ) or an oblique (OBL). One reason to believe that this is an important aspect of the analysis is that only possessors internal to possessive NPs bearing patient- or recipient-like semantic roles can control agreement (Ritchie 2015: 18). Full accounts of the analysis can be found in Ritchie (2015, 2016, 2017) and in Chapter 4 of this volume.

Given that prominent alienable possessors are clearly internal to the NP in Gurindji, one formal possibility would be to assume that predicates with prominent possessors differ from those without possessor agreement in terms of their argument structure, but that this argument slot is only ever indicated by agreement.

Following earlier LFG analyses including those by Schrock (2007) and Ledrup (2009), and that of Ritchie discussed above, we could assume a lexical rule in Gurindji that adds an OBL possessor to the argument structure of all verbs, and specifies that this OBL be identified with the POSS function of another grammatical function. However, as argued by Nordlinger (2014), where this analysis is first explored for the related language Bilkmarra, the Gurindji prominent alienable possessor construction differs from the possessive constructions discussed by these other researchers since

* Note that Camilleri and Sadler (2012) also discuss the possibility of adding this type of functional control equation to their analysis to account for the behaviour of possessive in contrast state constructions.
the 'external' possessor does not always modify the same argument of the verb, but may be identified with the SUBJ POSS, the OBJ POSS, the OBL POSS, etc. Thus, the functional control equation needs to be fairly broad, as in (45), where GF is used as a variable for any grammatical function.

(45) a. \(\langle 1 \text{ PRED} \rangle = \langle \ldots \rangle\)  
   b. \(\langle 1 \text{ PRED} \rangle = \langle \ldots \langle \text{OBL}_{\text{poss}} \rangle \rangle\)  
   \(\langle 1 \text{ OBL}_{\text{poss}} \rangle = \langle 1 \text{ GF POSS} \rangle\)  

The notation in (45) specifies that the grammatical function OBL_{poss} is the possessor of another grammatical function, such as SUBJ, OBJ, or OBL. Thus, it is shorthand for the following:

(46) \(\langle 1 \text{ OBL}_{\text{poss}} \rangle = \langle 1 \text{ [SUBJ | OBJ | OBL | ADJ] POSS} \rangle\)

For an example like (47), the verb 'pelt' would have the (derived) argument structure \(\langle \text{SUBJ}, \text{OBJ}, \text{OBL}_{\text{poss}} \rangle\):

(47) | Nganyuy_{pa}:ju  karu-ngku  j_{p}:n  ngu=y_{ner}=lu_{rep}  tawirrijp  pa-ni 1\text{MIN.DAT-ERG}  child-ERG  AUX=1\text{MIN.DAT}=3\text{AUG.S}  pelt  hit-PST  marluka-wu  kururrj.  old.man-DAT  car  
   The children of mine pelted the old man's car (with rocks).  
   (VW: FM13_2194: 95619)

The corresponding f-structure under an analysis of this kind is presented in (48).

(48)  
   \[\begin{array}{ll}
   \langle \text{PRED} \rangle & = \langle \text{pelt(SUBJ, OBJ, OBL}_{\text{poss}})\rangle \\
   \langle \text{TENSE} \rangle & = \langle \text{PET} \rangle \\
   \langle \text{SUBJ} \rangle & = \langle \text{POS} \rangle [\langle "my" \rangle ] 1 \\
   \langle \text{OBJ} \rangle & = \langle \text{PRED} \rangle [\langle "children" \rangle ] 1 \\
   \langle \text{OBL}_{\text{poss}} \rangle & = \langle \text{old man's car} \rangle 1
   \end{array}\]

However, as argued by Nordlinger (2014) and Meakins and Nordlinger (2017) for Billinna, this analysis is not feasible for Gurindji since we can have more than one prominent internal possessor in a single clause:

(49)  
   \[\begin{array}{ll}
   \langle \text{Nganyuy}_{pa}:ju  \rangle  \text{karu-ngku  j}_{p}:n  \text{ ngu=y}_{ner}=lu_{rep}  \text{ tawirrijp  pa-ni} 1\text{MIN.DAT-ERG}  \text{child-ERG}  \text{ AUX=1}\text{MIN.DAT}=3\text{AUG.S}=3\text{OBL}=3\text{OBL}  \text{ ka-nya}  \text{ngarir}  \text{ nyaru}={}_{\text{nyar}}{\text{mu}_{\text{pa}}:k} \text{ ngurpa-wu  l}_{\text{k}w} \text{ bring-PST}  \text{meat 3MIN.DAT-DAT}  \text{husband-DAT}  \\
   \text{The children of mine take the meat for her husband.}  \\
   \text{(Meakins and Nordlinger 2017: 168; VW: FM13_8195: 4:38min)}
   \end{array}\]

Thus, any analysis that assumes that the possessor in the PIP constructions is a clause-level grammatical function such as OBL_{poss} is untenable, since the LFG condition of Function-Argument Biuniqueness (e.g. Breuman et al. 2016) requires that every argument in the argument structure be mapped to a unique grammatical function in the f-structure. This means that the f-structure associated with (49) could not be that in (50), since the presence of two OBL_{poss} grammatical functions in the clause f-structure would be disallowed.

(50)  
   \[\begin{array}{ll}
   \langle \text{PRED} \rangle & = \langle \text{take(SUBJ, OBJ, OBL}_{\text{poss}})\rangle \\
   \langle \text{TENSE} \rangle & = \langle \text{PET} \rangle \\
   \langle \text{SUBJ} \rangle & = \langle \text{POS} \rangle [\langle "my" \rangle ] 1 \\
   \langle \text{OBJ} \rangle & = \langle \text{PRED} \rangle [\langle "meat" \rangle ] 1 \\
   \langle \text{OBL}_{\text{poss}} \rangle & = \langle \text{POS} \rangle [\langle "her" \rangle ] 2 \\
   \langle \#\text{OBL}_{\text{poss}} \rangle & = \langle \text{PRED} \rangle [\langle "husband" \rangle ] 2 \\
   \langle \#\text{OBL}_{\text{poss}} \rangle & = \langle 1 \rangle \\
   \langle \#\text{OBL}_{\text{poss}} \rangle & = \langle 2 \rangle
   \end{array}\]

Rather, we seem to have a construction type in which clause-level pronominal clitics agree with embedded possessors without any raising: the clause-level bound pronouns can simply cross-reference arguments and adjuncts, as well as possessors that are embedded within these. We show how this can be captured in LFG in Section 3.4 below.

3.4 Analysis

Our analysis of possessor agreement in Gurindji has at its core a syntactic distinction between those possessors that are appositional to their possesee (Section 3.4.1) and those in which the possessor is internal to a phrase headed by the possessed entity (Section 3.4.2). Here we present a partial analysis of these constructions, focusing on the syntactic part of the solution.

3.4.1 Appositional possessors

We have argued that inalienable possessor constructions in Gurindji are not internal nor bona fide examples of external possession, because the possessor and possesee are not distinct arguments or adjuncts—they always share the same case and have the same grammatical function. To support this view, we have shown that case sharing is distinct from case agreement, based on the behaviour of inalienable possessors in possessor-stacking constructions (Section 3.2.3.3).
In inalienable possessor constructions, there is no increase or change in valence (i.e. when compared to otherwise identical structures without a possessor), and no hierarchical structure within the noun phrase (i.e. no embedding at c-structure or f-structure). Instead the two noun phrases are juxtaposed co-heads with the same grammatical function.

Syntactic juxtaposition of noun phrases through apposition is frequently encountered in Australian languages, particularly in coordination and expressions in which one of the juxtaposed NPs refers to a member of a set denoted by another NP, such as generic-specific constructions and inclusory constructions (Sadler and Nordlinger 2010). In such cases the juxtaposed nominals share a single grammatical function within the clause, just as in Gurindji inalienable possession. Thus, we propose that Gurindji inalienable possessor constructions can be successfully modelled using the analysis of Sadler and Nordlinger (2010) for other NP juxtapositions in Australian languages.

Sadler and Nordlinger (2010) propose that juxtaposed nominals that share a grammatical function should be treated as set-valued grammatical functions at f-structure, a structure already utilized in LFG for the analysis of coordination and other appositional structures. They argue that the range of juxtaposed constructions with similar analyses at f-structure are then distinguished in the semantic structure accounting for the differences in meaning and function. To see how this analysis could extend to Gurindji inalienable possessor constructions, consider (51), repeated from (51), and the corresponding f-structure in (52). In this example the person and number of the (semantic) possessor are indexed with a pronominal clitic, and the possessor and possessed share the same grammatical function (subject) as indicated by their case.

51. [Nguy\textsubscript{a}ru\textsubscript{a}] ngu\textsubscript{-rna\textsubscript{a}} [mila\textsubscript{a}] warragun karrrinya
1MIN [NOM] AUE\textsubscript{=1MIN.S} EYE [NOM] ache be\textsubscript{PST}

'My eyes were aching.'

(Meakins and Nordlinger 2017: 144)

52. 

```
<table>
<thead>
<tr>
<th>TENSE</th>
<th>PST</th>
</tr>
</thead>
<tbody>
<tr>
<td>INDEX</td>
<td>PERS 3</td>
</tr>
<tr>
<td>NUM UA</td>
<td></td>
</tr>
</tbody>
</table>
```

Note that in this analysis, only one element of the set (the possessor) has the same INDEX features as the set itself. This makes part-whole constructions similar to the inclusory constructions discussed by Sadler and Nordlinger (2010), and distinct from both standard appositional constructions (where the INDEX of the set and the set members must all be the same), and coordination constructions (where the INDEX of the set is resolved from the interaction of those of the set members).

The status of the possessor and possessed as co-heads in (52) naturally accounts for why they share the same case: grammatical functions are distributive features in f-structure sets (see Dalrymple and Kaplan 2000; Dalrymple 2001), which means that all members of the set must realize the same grammatical function, and therefore share the same case. The same principle can be co-opted to account for the absence of dative case-marking on the possessor: there is no structural asymmetry motivating the presence of the adnominal dative. In syntax, at least, there is no possessor grammatical function in the phrase.

Since there is no structural asymmetry, a complete account must further specify why agreement targets are always controlled by the index features of the semantic possessors in these constructions, and never by the possessed entities. We assume this can be captured through the annotations associated with each member of the construction, as discussed by Sadler and Nordlinger (2010) for inclusory constructions, but we leave this aspect of the analysis for further work.

A full formalization of the semantics underlying these constructions is also beyond the scope of this treatment, but we recognize that a semantic analysis built around an asymmetry in the animacy of the possessor (animate) and possessed (inanimate) would be sufficient to account for the data we have encountered.

Our final word on apposition concerns the question of why only a subset of possessive constructions (those we have been calling inalienable) behave in this way. This reflects the semantics of part-whole relations and possibly identity relations. In Gurindji, only body parts and identity relations (i.e. with photographic images) can be treated in this way, demonstrating that certain entities are seen as being one and the same. Work by Sadler and Nordlinger (2010) and Heringa (2011) demonstrates that all kinds of partial ordering relations (see Hirschberg 1991) are possible in appositions, including type-subtype, entity–attribute, part–whole, and identity relations. Appositional possession is thus motivated by semantics, and we suspect that instances of possessor agreement in other languages with ‘semantic possessors’ of this type might also be fruitfully analysed as appositional in nature.

3.4.2 Prominent internal possessors

Agreement with prominent internal possessors occurs in Gurindji prominent alienable possessor constructions. Here we propose a simple, but partial formal solution to agreement with possessors by allowing possessors internal to other grammatical functions to control clitics.

First, consider (53), which provides the lexical entry for r\textsubscript{a}na. This notation specifies that the structure containing the clitic r\textsubscript{a}na has a first person minimal
pronoun subject. The restriction to subjects is an important part of its specification: (↑ SUBJ) = ↓

(53) $\text{=na}:
\begin{align*}
(↑ \text{SUBJ}) &= ↓ \\
(↓ \text{PRED}) &= \text{‘PRO’} \\
(↓ \text{PERS}) &= 1 \\
(↓ \text{NUM}) &= \text{MIN}
\end{align*}

While clitics in the subject series only index subjects, the clitics that index objects can also index obliques and possessors (including the possessor of a subject).

To account for this in our analysis, object/oblique markers simply specify the option of encoding the possessor (POSS) of any grammatical function (GF) in addition to OBJ and OBL$_0$ in their lexical entry. Consequently, we assume that all OBJ/OBL$_0$ bound pronouns also carry the specification: (↑ GF POSS) = ↓, where GF is a variable that abstracts over any grammatical function (SUBJ, OBJ, OBL$_0$, ADJ).

The lexical entry for the first person minimal clitic $\text{=yi}$ is shown in (54):

(54) $\text{=yi}:
\begin{align*}
(↑ \text{OBJ}) &= ↓ \\
(↑ \text{OBL$_0$}) &= ↓ \\
(↑ \text{GF POSS}) &= ↓ \\
(↓ \text{PRED}) &= \text{‘PRO’} \\
(↓ \text{PERS}) &= 1 \\
(↓ \text{NUM}) &= \text{MIN}
\end{align*}

The GF POSS notation captures the fact that the POSS will be inside another grammatical function. So, any clitic indexing a possessor will be expressing SUBJ POSS, or OBJ POSS, or OBL$_0$ POSS, etc.

The GF variable is important because more than one possessor can be indexed at the same time within the same clause, as we saw in (49) above repeated here as (55). Here the possessor of the subject and the possessor of the benefactive oblique are both indexed by clitics, $\text{=yi}$ and $\text{=ra}$ simultaneously.

(55) $\begin{align*}
\text{Nginyinyu-yu,} & \text{kuru-ngku} \downarrow_1, 4n\text{g}\text{u-yul\text{yu},} \text{tu-nun}\text{=ra\text{=nya\text{yu},}} \\
\text{MIN\text{DAT\text{=ERG} \text{child\text{=ERG} \text{AUX\text{=MIN\text{=3AUG\text{=3OBL\text{=3OBL\text{=2}}}}}}}} \\
\text{ka-nya} & \text{ngarin \text{nya\text{yu\text{yu},} ku ngumparra\text{wu\text{wu} \text{MIN\text{=3MIN\text{DAT\text{=DAT} \text{husband\text{=DAT}}}}}}}} \\
\text{bring\text{=PST} \text{meat \text{3MIN\text{DAT\text{=DAT} \text{husband\text{=DAT}}}}}}
\end{align*}$

'The children of mine take the meat for her husband.'

When there are two prominent possessors within a single clause, as in (55), they will always be associated with distinct grammatical functions, as seen in the f-structure in (56). Within this clausal f-structure, the two POSS arguments are internal to different f-structures (i.e. of SUBJ and OBL$_0$), so there is no violation of Function-Argument Binuniqueness (cf. (50) above).

(56) $\begin{align*}
\text{TENSE} &= \text{PST} \\
\text{PRED} &= \text{‘take(SUBJ, OBJ, OBL$_0$)’} \\
\text{POSS} &= \text{1} \\
\text{NUM} &= \text{MIN} \\
\text{CASE} &= \text{DAT} \\
\text{PRED} &= \text{‘PRO’} \\
\text{PERS} &= 3 \\
\text{NUM} &= \text{MIN} \\
\text{CASE} &= \text{DAT} \\
\text{PRED} &= \text{‘husband’}
\end{align*}$

The external case agreement should allow for mapping of the clitic to the correct GF POSS when there are two in the same clause. However, the prediction is that there might be ambiguity in some examples.

The formal solution presented here for agreement with prominent internal possessors is necessarily incomplete, since the full picture concerning the distribution of agreement with possessors remains somewhat murky with respect to how the conditions on agreement should be modelled. But it is clear that possessor prominence in Gurindji is largely dependent on animacy—with human possessors being the most likely controllers—and on contrastive focus, where clarity on the nature of the possessive relation is particularly important.

Given that animacy and focus are conditions on agreement, and not morphosyntactic features, we assume that this is not dealt with at the level of syntax, but is constrained by (interfaces with) other components of structure (s-structure and i-structure) in a similar way to the formalization of differential object marking proposed by Dalrymple and Nikolaeva (2011).
3.5 Conclusion

Indexation of possessors in Gurindji is attested in two syntactically distinct constructions. In inalienable possessors constructions the possessor and the possession are syntactically juxtaposed and the possessor is neither internal nor external to the phrase headed by the possessum. In prominent alienable possessors constructions the possessor is demonstrably internal to the NP (cf. Meakins and Nordlinger 2017), yet nonetheless indexed at the clausal level. Since word order is pragmatically determined and contiguity of constituents is variable within the NP, the principle indicator of the internal nature of the possessor in this construction is that it must show case agreement with the head of the NP, like a dependent.

Crucially, we have shown that neither prominent alienable possessors nor inalienable possessors contain an external possessor with a clause-level grammatical function distinct from the possessed entity, despite the fact that the possessor in these constructions is indexed as if it were a clause-level argument. Instead, Gurindji can index appositional possessors and internal possessors under certain semantic and information-structural circumstances. Each of the constructions involving possessor indexing requires a different explanation.

Inalienable possessors control agreement as if they were the head of their phrase because of their part-whole semantics. Formally, possessor and possessed are treated as juxtaposed NPs in a similar way to other inclusory semantic relations whereby the index features of one member of a set (i.e. the whole rather than the part) are indexed on targets that are controlled by clause-level arguments.

Prominent alienable possessor constructions are most frequently encountered when a human possessor is contrastively focussed. Agreement with a non-local internal possessor is thus possible, providing it has sufficient discourse prominence.

While our formal syntactic proposal captures the morphosyntactic properties of these possessive constructions in Gurindji, this is only part of the story. A full explanation for the ability of possessors to control agreement is likely to lie beyond the normal constraints of syntactic agreement. It may well be that it is necessary to radically rethink the way that agreement controllers are modelled, such that constraints on locality are only influential in the most syntactized systems of indexation.

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4

Disjoint and reflexive prominent internal possessor constructions in Chimane

SANDY RITCHIE

4.1 Introduction

Possessor promotion is a family of strategies within grammatical systems for the encoding of possessors by morphological and/or syntactic means such that they are marked when they are semantically and/or information-structurally (IS) prominent (Heine 1997; Payne and Barshi 1999a; Herslund and Baron 2001; McGregor 2009; Dalrymple and Nikolaeva 2011, among others). Thus, formal prominence of possessors reflects their functional prominence. Typically, possessor promotion strategies are used in alternation with some default strategy to show that possessors are more prominent than (1) the possessed nouns with which they form possessive relationships and (2) the non-prominent possessors with which they alternate in discourse. They can also be used to show the relative semantic or IS prominence of possessors versus any other referents in a syntactic construction or longer stretch of discourse.

The strategies which have developed for promoting possessors have not received equal attention until now. Comparatively well understood are constructions in which the possessor is 'raised' or situated in a position outside the phrase headed by the possessed noun and bears a higher grammatical function (typically but not always the object function). This type of construction is variously termed 'possessor raising/ascription/promotion' or, more generally, 'external possession constructions' (Payne and Barshi 1999a), though as Deul (2013) notes, not all instances of external possession constructions involve raising. As the other chapters in this volume show, possessor promotion can also be achieved by less drastic alterations of morphosyntactic marking and positioning of possessors. Other strategies have been introduced to allow speakers to signal possessor prominence without the requirement for full-blown syntactic

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\(^{1}\) The research presented in this chapter is a revised version of some parts of my doctoral thesis (Ritchie 2015).