The expression of possession in Wumpurrarni English, Tennant Creek

SAMANTHA DISBRAY
UNIVERSITY OF MELBOURNE

JANE SIMPSON
UNIVERSITY OF SYDNEY

We discuss the expression of possession in Wumpurrarni English (WE), a variety spoken in the Tennant Creek area of the Northern Territory. We illustrate this from a data-set of 319 utterances containing possessive constructions (drawn from 14 video-recordings of conversations between care-givers and children). We show how the WE constructions relate to those of the source languages, Warumungu, Standard Australian English (SAE), and the creole that developed in northern Australia late in the nineteenth century. The interaction between these sources in the development of WE is complex. Three notable features are examined: the use of a possessor clitic whose form is taken from Warumungu, but whose syntactic behaviour is taken from the SAE Genitive clitic, the use of a post-nominal possessor as in Warumungu, and the extension of the possessor clitic to the possession of inalienable things such as body-parts. A body-part possessor construction appears with a wider range of verbs than in standard Australian English, but narrower than that in traditional Warumungu. We show the wide variation in the use of possessive constructions, and suggest that relevant factors are the speaker's age, code-switching, and the context of use.

1. Introduction[1]

This paper reports our initial findings about the expression of attributive[2] possession in the speech of some families of Warumungu affiliation living in Tennant Creek, a town 520 kilometres north of Alice Springs in the Northern Territory of Australia. We call this code 'Wumpurrarni English' (WE).[3] Section 2 considers the problems of defining a code in this dynamic speech community. Section 3 briefly presents the means of expressing possession in Wumpurrarni English (WE). We compare these with the means for expressing possessive constructions in the source languages for WE in Section 4. We then consider three areas in which WE constructions may have been influenced by Warumungu constructions as well as other source languages. These are: the use of a possessive clitic -*kayi* or -*ka* (Section 5), the possibility of post-nominal order in possessive constructions (Section 6, where we consider the effect of age and language, as well as of code-switching, and compare the relation of age to the use of *main* and *yos* as pre-nominal modifiers), and, finally, the types of construction used for inalienable possession in WE (Section 7).

2. Variation and the problem of language definition

Tennant Creek has a population of 2,983 (Australian Bureau of Statistics Estimate for June 2003[4]), many of whom identify as Aboriginal. The language situation is complex since people switch languages and registers frequently, and language shift from traditional languages to standard and creolised forms of English is well underway. Contact between Indigenous people and Europeans in the Tennant Creek area began in the late nineteenth century, as the Queensland pastoral industry spread from the east and settlements were founded to the north and south along the route of the overland telegraph line from Adelaide to Darwin. From the 1890s local people were dispossessed from traditional country, and worked for rations at cattle stations, missions and small mines. Indigenous children started to go to schools from the early 1940s on stations, settlements and later in the town. They were taught in English. Today most Warumungu people live in Tennant Creek; others live or spend extended periods at outstations in the region. They are exposed to standard Australian English (SAE) in school, in dealings with governments and businesses and on radio and television.[5]

The name 'Wumpurrarni English' refers to a range of styles on a continuum, with a variety close to standard Australian English at one end point and a basilectal creole at the other. It is also a continuum in terms of the degree to which

speakers insert Warumungu items into WE. It has much in common with the Kriol of the Ngukurr area (Sandefur and Sandefur 1979) (RRK), and the Kriol of the Fitzroy Valley area (Hudson 1985) (FVK), which are said to descend from a creole that developed in northern Australia in the late nineteenth century (Harris 1986, Munro 2004). We hypothesise that WE derives originally from the language situation of the late nineteenth century when the Warumungu learned English and this northern creole on the cattle stations of the Barkly Tablelands. The source languages for WE are Warumungu, SAE and the northern creole.

The data for this study consists of 319 utterances with expressions of possession from 14 transcripts of recordings made by Samantha Disbray and Betty (Nakkamarra) Morrison in Tennant Creek, for the Aboriginal Child Language Acquisition project. The recordings were made during three field trips between August 2003 and August 2004, in which interactions between caregivers and children were video recorded.

Video-recordings of interactions between members of the families of several generations show considerable variation in strategies for expressing possession, as in example (1). In the sequence of turns the mother is describing a picture from a book, which shows a baby bird finding its mother. The strategies for expressing possession include the Warumungu possessive suffix *-kayi* attached to a noun and to the WE pronoun *im*, and the English possessive suffix *-s*.[6]

(1)   Sequence of turns produced by adult woman to her child:[7]

*A1:   *dis*   im-kayi   **karnanti.**
        DET   3-POSS   mother
        This is his mother

*A1:   *dis-wan-iya-**kayi**   *dis-wan*   **maanjun-wan-kayi**   **julaka.**
        DET-NOM-here-POSS   DET-NOM.   small-NOM-POSS   bird
        This one here's, this bird belonging to the small one

*A1:   *dis-wa-s*   **karnanti.**
        DET-NOM-POSS   mother
        This one's mother

*A1:   **im-kayi**   *mami*   *dis-wan.*
        3-POSS   mother   DET-NOM
        His mother is this one. [SD006B:A1][8]

Determining what variety a person is using poses problems. Determining whether a speaker is code-switching between WE and Warumungu, or simply using WE, is not straightforward since WE has borrowed heavily from Warumungu. Full bilingual speakers code-switch between Warumungu and WE; semi and passive bilinguals style-switch, engaging a more acrolectal or more basilectal style of WE. We adopt a rule of thumb that if a speaker is not known to use full Warumungu sentences with verbs in them, then their use of Warumungu words in a sentence is insertion in WE, rather than code-switching to Warumungu.

Warumungu semi-speakers have access to a varying vocabulary of Warumungu items, largely nominals (including those denoting things, people and attributes), case marking suffixes, discourse markers and some verbs, which are generally used with WE tense and aspect marking. These speakers can switch to a register characterised by a range of inserted Warumungu items. It appears to function as an in-group register, marking Warumungu identity. It also appears as an instructive style, used in interaction between adults and children in the data collected for the ACLA project. In these contexts adults often use the Warumungu and WE equivalent seemingly by way of explanation, in a preceding or following turn, as in example (1). At the acrolectal end of the continuum of WE, speakers may insert a range of standard Australian English items, such as plural marking, third person marking on verbs and also the genitive 's. Instances of this style in the data are often in interaction with Non-Indigenous interlocutors and also in role play activities.[9] We return to code-switching and language choice in Section 6.

3. Wumpurrarni English

Bearing the continuum in mind, we give a brief overview of the characteristic possession strategies of WE.

WE shows a semantic contrast between the possession of alienable and inalienable things. Inalienable possession may be marked by treating the part and the whole as bearing the same grammatical function, in a construction sometimes described as apposition, e.g. *beibi fut* (foot of a particular doll), but also by having the possessor understood as coreferent to some argument of the sentence (the zero possessor construction of Meakins and O'Shannessy, this volume):

(2)   iya   **nyili**   bin   pok-im   <u>**jina**</u>,
        here   prickle   PAST   poke-TM   foot,
        Here a prickle stabbed him in the foot. [SD006B:A1]

Apart from these structures, alienable possession and possession generally can be expressed in three ways: by a suffix to the possessor, by a preposition *blanga* and by possessive forms of first and second person singular pronouns. These are given in Tables 1-3 below (Pronoun, Suffix, Preposition). While there are several ways of expressing possession in WE, they are not equally favoured. Other relevant factors are whether the possessor can occur pre- or post-nominally, whether it can appear on its own, and whether there is double marking, e.g. *mai kwarta main* 'my ear'. Only one instance of the latter appears in the 319 utterances analysed here.

A little over 50% of the tokens of possessors were WE first and second person possessive pronouns, as in Table 1.

Table 1: Wumpurrarni English: possessive pronouns

Possessive pronouns	pre-nominal	post-nominal	both	stand-alone
1st sg.	*mai* N		*mai* N *main*	n.a.
2nd sg.	*yo* N		*yo* N *yos*	
1st sg.	*main* N	N *main*	*mai* N *main*	*main*
2nd sg.	*yos* N	N *yos*	*yo* N *yos*	*yos*

There are 141 instances of a clitic attaching to possessors, *-ka(yi)*, which derives from a Warumungu Genitive suffix. Almost half of the *-ka(yi)* tokens were in questions, skewed by the book prompt used in some of the interactions.[10] There were 66 instances of *u-kayi*, as in *ukayi teil?* 'whose tail?', as opposed to 3 examples of apposition with *wat*, *wat teil*[11] 'whose tail?'.

In Tables 2 and 3, X stands for Possessor.

Table 2: Wumpurrarni English: suffix -kayi

Suffix	pre-nominal	post-nominal	both	stand-alone
noun	X-*ka(yi)* N	N X- *ka(yi)*	X-*kari* N *akinyi* Mr J.-*kari wife akinyi*[12]	X- *ka(yi)*
3rd singular and non-singular pronouns	Pronoun-*ka(yi)* e.g. *im-ka(yi)* N	N *im-ka(yi)*	no examples	*im-ka(yi)*

In the dataset there are only 3 forms of the widely spread Kriol preposition *blanga*, produced by one middle-aged speaker. In the context, these may have been basilectal forms used as babytalk, especially as one was realised with apparent babytalk enunciation as *bene*.

Table 3: Wumpurrami English: preposition blanga

blanga	pre-nominal	post-nominal	both	stand-alone
noun	*X *blanga* N	N *b(l)an(g)a* X		*X *b(l)an(g)a*
pronoun		%N *b(l)an(g)a* Pronoun	%N *b(l)an(g)a im-kayi*	*Pronoun *b(l)an(g)a*

% These forms were not attested in the data set, but were accepted by 3 older speakers (Disbray, field notes November 2004), *mutuka blanga mindubala* [us two's car], *Ukayi dadan mutuka? blanga imkayi, mutuka blanga imkayi,* [Whose is that car? His (car)][13]
* These forms were not attested in the data set, and were rejected by 3 older speakers (Disbray, field notes November 2004).

Apart from the structures listed in Tables 1-3, there were 7 tokens of English *'s* (from 2 adults and 1 school-aged child), and 15 Warumungu possessive pronouns (2 elderly speakers and 1 middle-aged speaker).

The range of possessive structures found in WE relates to the three source languages for WE. We discuss each in turn and show how it has contributed to the range of expressions of possession in modern WE.

4. Possession in the source languages

4.1 Possession in Fitzroy Valley Kriol, Roper River Kriol and Standard Australian English

The most obvious ancestor of modern WE is the creole that developed in northern Australia during the nineteenth century. Fragments are recorded in memoirs and court records. One such memoir writer was the stockworker, William Linklater, who travelled all over northern Australia, working and living with Aborigines, and using a code with them which has features of modern Roper River Kriol (RRK). He spent two years on Banka Banka station in Warumungu/ Warlmanpa country in the early 1900s. In his reminiscences (written long after the fact) he attributes the following comments to Warumungu women: "When their hair is washed it is particularly soft and lustrous, and the lubras on Banka Banka would beg to have it trimmed. 'Cutem hair belonga me along jissors.' " (Linklater and Tapp 1968:166)

The quotation suggests that he and Warumungu people on Banka Banka Station were using a variety with features that are still found in WE, such as the transitive marker -*im* and the preposition along, now more commonly *na*. It shows the possessive form *blanga* but conspicuously lacks the semantic alienability distinction of Warumungu and WE, and the special treatment for first person singular possessors in WE. We cannot read too much into this, since we have no gauge of how reliably Linklater remembered their speech. All we can say that if there was an alienability distinction, he was not aware of it.

Other descendants of the northern creole are also sources for comparison. The two best-documented modern varieties are Roper River Kriol (RRK) and Fitzroy Valley Kriol (FVK). In both, the semantic distinction of alienable and inalienable possession is maintained to some extent through the use of two constructions: a part-whole construction (Munro 2004's appositional construction) for inalienable possession, and forms derived from English prepositions such as *blanga* and *fo* for possession generally. The picture is blurred in RRK for pronominal possessors, first because there is a special form for first person singular possession (*mai, main*) and second because the normal second and third person singular Subject/Object pronouns can be used as the possessor for objects not normally thought of as inalienable (*im biligen* 'his billycan', Munro 2004). Table 4 shows how possession is expressed in RRK and FVK.

Of the non-appositional possession type, WE resembles RRK and FVK in having privileged marking for first person singular possession. For second person possession, WE resembles FVK but not RRK in using both *yo* and *yos* for possession, including pre-nominally.

Table 4: Possession in Fitzroy Valley Kriol (Hudson 1985) and Roper River Kriol (Munro, 2004)

Pre-nominal possessor	Post-nominal possessor	Stand-alone possessor
X *fo* N, *fo* X N	N *bla(nga)* X[14]	
	N *fo* X	
mai N, **main** N	N **main**[15]	
yu N, yus N		*mainwan, yuswan*
im N,[16] *is* N	*bla(nga)* im[17]	
X N *apposition*		

boldface italic: RRK and FVK; *italic*: FVK only; **bold**: RRK only

(3)   a   luk   yos   ears
        I   look.at   your   ears
I'll look at your ears. [SD021:S3]

Of the nominal non-appositional possession type, *blanga* and *fo* were used by older speakers in the early 1980s in Simpson's field recordings, and *blanga* occurs occasionally in Disbray's 2003-4 recordings. Munro (2004) attributes the use in RRK of prepositions rather than suffixing case-marking to the absence of case-marking in SAE. But of course the SAE Genitive enclitic 's could in principle act as a model for the development of a possessive suffix, and this has happened in WE—the form of the possessive phrasal enclitic *-kari ~ -kayi*, *~-ka* derives from the Warumungu genitive suffix *-kari*, but, as we will show in Section 5, the use resembles the English phrasal clitic.

Other differences include the fact that some WE speakers optionally place the possessor after the possessed item, whereas this appears to be rare in RRK, and the existence of the double possession marking in WE, which apparently is not attested for RRK and FVK.

The mixed languages Light Warlpiri and Gurindji Kriol (Charola 2002, Meakins and O'Shannessy, this volume, O'Shannessy 2005) show some influence from the northern creole, and use the possessive pronouns *yu* and *mai* or *main*. However, like Warumungu, both use a possessive suffix based on the Dative or Genitive of the traditional language.

4.2 Possession in traditional Warumungu

Traditional Warumungu resembles WE, RRK and FVK in that possession of alienable and inalienable things is expressed in different but overlapping ways, and in that inalienable possession is usually marked by apposition or by treating the part and the whole as bearing the same grammatical function. This is discussed further in Section 7.

Warumungu differs from RRK and FVK in that possession of alienable things (and sometimes inalienable things) is expressed by marking the possessor with the suffix *-kari* (all use possessive pronouns). The possessor may appear in pre- or post-nominal positions, in double-marking constructions and as stand-alone expressions, as shown in Table 5. The double-marking construction has been found in the speech of middle-aged speakers who grew up on the Barkly Tablelands, but not so far in older texts.

The three most obvious analogues to Warumungu constructions in WE are the use of the *-kari* suffix, the presence of post-nominal possessors and the expression of inalienable possession. The double-case marking construction is another analogue, but we do not have enough data to discuss this adequately. We discuss each in turn.

Table 5: Warumungu possessor forms

Pre-nominal possessor	Post-nominal possessor	Double-marking	Stand-alone
X-kari N	N X-kari	X-kari N akinyi (1 ex.) or N akinyi X-kari (1 ex)	X-kari
ajjinyi N, my angkinyi N, your sg. akinyi N, her/his/its	N ajjinyi, angkinyi...		ajjinyi, angkinyi...

5. The possessive -kari~-ka(yi) in Warumungu and WE

The most popular way of expressing possessor nominals in WE is with the suffix -kari and -kayi. It is used by speakers of all ages in our dataset.

The morphosyntax of this suffix shows clear differences between Wumpurrarni English and Warumungu. First, -kari ~-kayi attaches to all the pronouns (not just third person im) in WE, whereas in Warumungu there are separate possessive pronominals,[18] and -kari never attaches to pronouns; thus the Warumungu third person singular pronoun akinyi contrasts with the WE im-kayi. Second, -kari ~-kayi is affixed to the nominal head of a possessor noun-phrase only, as in examples (4) and (5) below (it is not *dat-kayi boy-kayi).

(4)   an i bin jamp dan fom da nes na, <u>fom dat boi kayi   takka</u>
                                                                hand
       and he jumped down from the nest, from that boy's hand.   [SD006B:A1]

(5)   All the Nakkamarra NAME that one-kari first my sister-kari NAMES
       [And now I'll list] all the daughters, NAME OF DAUGHTER, [those] of that one first, of my sister, MORE
       NAMES.   [JHS:HJN C6 ca. 1985] [recorded from woman in her mid-40s]

Compare these with the expression of possession in Warumungu in which agreement in case of the parts of a nominal phrase is normal, as in example (6), kamanti-kari wumpurrami-kari, where kari is affixed to both parts of the possessor noun phrase:

(6)   .. pari-nyi   ajul-jarni   pikka-pika   pulyulyurru   <u>karnanti-kari   wumppurrami-kari,</u>
       got-PastPun   333S-333O   children   red   mother-kari   black-kari
       They took the part-Aboriginal children of the Aboriginal mothers, [PND History text: written]

This strongly suggests that WE has taken the form -kari from Warumungu, but the syntactic behaviour as a phrasal clitic from SAE. This does not refute Munro's (2004) claim that creoles such as RRK did not adopt case-marking because of the lack of models for this in the superstrate, since the Genitive 's is a phrasal clitic, not a case suffix.

When this happened is uncertain. There is evidence that some older Warumungu speakers used a creole which, like RRK, did not use the Warumungu possessive -kayi.[19] In 1985 Jane Simpson recorded some discussion with a Warumungu woman who was then in her 80s, and who had lived most of her life with Warumungu and Warlmanpa people on Banka Banka Station north of Tennant Creek.[20] When talking to Simpson, she used Warumungu and a code which resembled RRK in including forms of blanga (examples 7, 9, 10), fo (example 10), and apposition of pronouns (examples 8, 9).

(7)   nyayi   alinya   wini   old man belong to <u>these two fellow</u> Jakkamarra now
       what   that   name
       What was the name of the father of these two, Jakkamarra?'

(8)   I don't know what <u>him name</u> now. [*I don't know what her name was*]

(9)   ..what <u>him name belong to man</u> I don't know [*I don't know what her European name was*]

(10)   I don't know who mob <u>belong to</u> that P. [NAME] now that one daddy <u>for them.</u>
        I don't know who the children were of P, who he was the father of [JHS: C7.3 25/1/85]16

At the same time younger people were using *-kari* in WE. In 1988 Jane Simpson recorded *him-kari* from a fluent Warumungu speaker in her 30s who had grown up at Ali Curung, a government settlement established to the south of Tennant Creek in the 1950s.

(11)   **Purluju**   him-kari   look   now!
        head   his   look.at now
        Look out for his head! [PND:notes.880624-880707.rtf]

It seems likely that the widespread use of *-kari* as a possessor marker in WE arose well after some Warumungu people acquired a creole as a second language. Whether this took place during the forced settlement of Warumungu people at Phillip Creek and later at Ali Curung (Warrabri), or on the cattle stations on the Barkly Tableland, or in the move to Tennant Creek from the late 1960s, requires more investigation of historical sources.

5.1   Changing functions of *-kari* in Warumungu

-kari appears to have expanded its uses from traditional Warumungu to modern Warumungu at probably about the same time as it was being adopted into WE. In traditional Warumungu, *-kari* has four main functions. It is used:

1. For alienable possession generally, but also for some normally inalienable things, such as kin terms and body parts when possession is emphasised. It is possible that this use is expanding (Section 7).

2. As associative in creating many words for new concepts: *wama-kari*: cold-*kari* 'fridge', *ngamuna-kari*: breast-*kari* 'bra' etc.

3. In the names of Aboriginal organisations, (formed since the early 1980s): *Julalikari* 'many-*kari*' (an organisation looking after many aspects of life in Tennant Creek), *Pulkapulkkakari* 'old.people-*kari*' (old people's home), *Papulu Apparrkari* 'house language *kari*'(language centre). These names have wide currency, and are distinctively Warumungu.

4. On the nominal complements of nominalised verbs, with *-alkki* on nominalised verbs, as in 'glasses' *miyili-kari nya-nj-alkki* glasses [eye-*kari* see-NOM-ASSOC].

By the mid 1980s *-kari* was gaining a fifth function, supplanting *-alkki* on nominalised verbs: *nyi-njji-kari* [sit-NOM-*kari* 'bicycle seat'], as opposed to an older speaker who produced for the same meaning *pirtti-kari* (*nyinjalkki*) [bottom-*kari* sit-NOM-ASSOC]. By 2002, *-kari* was the preferred form on nominalised verbs, e.g. *Jajjikari* [eat-NOM-*kari*] was agreed on by senior Warumungu people as the name for the cafe at the Nyinkkanyunyu culture centre in Tennant Creek.

The rise in the use of *-ka(yi)* in WE, and the extension of *-kari*'s functions in Warumungu are likely to be related events, and are certainly likely to have reinforced each other. We have no evidence of directionality, but an increase in the frequency of its appearance in Warumungu could have laid the groundwork for its adoption as a marker of Warumungu identity in WE.

6. Word order

The second similarity between WE and Warumungu concerns the order Possessor Possessed and Possessed Possessor. In RRK it appears that the Possessor Possessed order is by far the most common. It is also the most common order in WE and SAE.

(12) an   weya   yos   kuwarta?
      and   where   your   ear
      and where are your ears?   [SD042A:A6]

In Warumungu, however, both orders are found. And in WE the order can be reversed in the same utterance, with no apparent shift of meaning:

(13) yu   luk   iya,   weya   **jina**   im-ka?
      you   look   here   where   foot   he-POSS
      You look here, where's its foot? [SD042A:A6]

The range[22] of orders in structures expressing possession together with the number of tokens in our data are presented in Table 6, using the typology developed by Patrick McConvell (p.c. 2004), with further specification of person of pronoun. We have only included tokens which are most plausibly parsed as NPs.

Table 6: Summary of position of possessors and possessed in WE

Type	Item 1	Item 2	Item 3	Example	Tokens in corpus[23]
RD	Possessor[24] (pronoun)	Possessed		*das im kimbi*[25]	2
	Possessor (nominal)	Possessed		*na yu gata put a bandaid an na beibi fut*[26]	9
DOR	Possessed	PossPrep(-)	Possessor	*jala **beng** beibi*[27]	3
RSD	Possessor	(-)PossPost	Possessed	*Plisha-kayi beibi*[28]	67
DRS	Possessed	Possessor	(-) PossPost	*oni lil gel **nyunguna-kari***[29]	3
PD	PossPron	Possessed (*mai, yo*)		*ma penjil*[30]	48
PD	PossPron	(*main, yos*)		*yos **kuwarta***[31]	14
PD	PossPron	(3rd)		*im-ka **jina***[32]	25
DP	Possessed	PossPron (*main, yos*)		*ngurru main*[33]	13
DP	Possessed	(3rd)		*jina im-ka*[34]	3
PDP	PossPron	Possessed	PossPron	*mai buk main*	1

R=Possessor; D=Possessed; S=Possessive postposition; O=Possessive preposition; P=Possessive pronoun; **bold**=Warumungu forms; shading=Post-nominal possessor

The shaded areas in Table 6 show that the number of post-nominal possessors is not negligible. Factors linked to their appearance include a linguistic factor, (the choice of language), and a social factor, the age of the speaker. Both these factors relate to the use of Warumungu since the older a person is the more likely they are to speak Warumungu. We consider the linguistic factor first.

6.1 Relation of word order to choice of language

Unsurprisingly, the English 'Possessor Possessed' order is seen in the few utterances classified as English[35], such as those below.

[Mother in her 30s explaining to children how to use the toy blood pressure gauge.]

(14)   you have to pudum on raun someone's arm firs [*You have to put it round someone's arm first*] [SD022:A1]

[Mother in her 20s speaking to the researcher.]

(15)   she shaved her eyebrows in da shower, wan said. [*She shaved one of her eyebrows in the shower*]
[SD044:Y2]

The language of the form denoting the possessed appears to be influential in determining the order of the possessor and possessed, as Figure 1 shows.
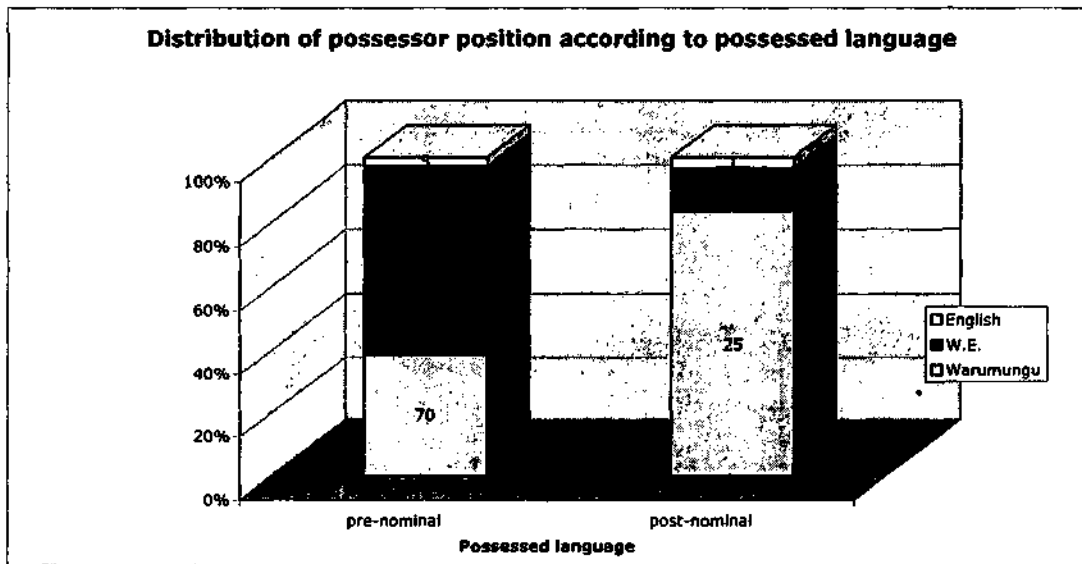

Figure 1: Distribution of possessor position according to possessed language[36]

The post-nominal order is most common when the possessed is expressed as a Warumungu nominal. Figure 2 shows that, while post-nominal position is almost equally as common with Warumungu possessors as pre-nominal position, it is also not uncommon with utterances with WE possessors.
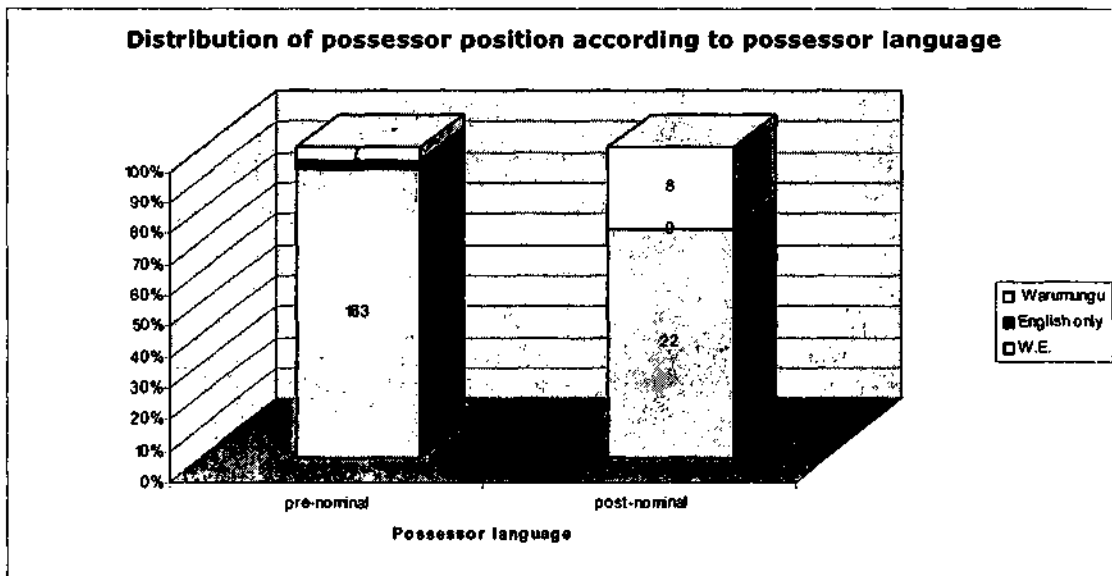

Figure 2: Distribution of possessor position according to possessor language

In all but four of the 30 examples of post-nominal possessive expressions, either the possessed, possessor or a combination of one or more of these and the verb, are Warumungu items. More Warumungu items occur as possessed than as possessors, perhaps given the high proportion of possessed body parts, (generated through activities such as play with toy medical kits, dolls and the 'Whose' books). Possessed items are generally nouns, whereas possessors include pronouns like *mai* and *yos*, which are commonly used in WE rather than their Warumungu counterparts *ajjinyi* and *angkinyi*.

In sum, Warumungu and WE possessors may appear pre- or post-nominally. The post-nominal possessor position is more common in WE if either the possessor or the possessed is expressed as a Warumungu word. It is possible that the order Possessed Possessor is influenced by code-switching (following a Warumungu nominal), as full Warumungu speakers use Possessed Possessor constructions in otherwise WE discourse, and these also appear in the WE of non-full bilinguals.

6.2 Language use and age

29 of the 30 examples of post nominal possessives come from speakers over the age of 30, and the remaining one comes from a speaker of a basilectal variety of WE in her mid 20s. Choice of variant and speaker age appear to be linked.

Our results on age are only preliminary, as we do not have a large number of speakers in each age-range. Table 7 shows the age ranges for speakers and the number of speakers in each section represented in the possessive utterance collection.

Table 7: Age ranges of speakers and number of speakers

	Number of speakers	Abbreviation for age range
Pre-school (0-5)	7	P
School-age (6-15)	13	S
Young adult (16-25)	2	Y
Adult (26-35)	4	A
Middle-age (36-50)	2	M
Older (51+)	4	O

Below, we illustrate the kinds of shifts in language and register that speakers of different ages engage in. The intention is to illustrate the situations of greater Warumungu use that might lead to greater use of postnominal possessors by older speakers.

Our speakers in the oldest age group are fluent speakers of Warumungu and WE, and have a strong command of a variety of English close to standard, and, as full bilingual (or multilinguals), are able to, and do frequently, code-switch between all three languages. Such code-switching is illustrated in example (16), part of a story told to children by a woman in her late 60s (O1):

(16)   SEQUENCE 1 [SD015:O1]20

*O1:   jeis-im   jeis-im
         chase-TM   chase-TM
         (they were) chasing (it)

*O1:   flaiwei na   turrupari-njina
         fly away.now.   tell-PastCont.
         (it) flew away,(he) tells (the other boy)

*O1:   wuu   nyili-ngki   paki-njina!
         Ouch   prickle-ERG   pierce.PastCont.
         ouch! he trod on a prickle

*O1: yu luk iya luk.

*O1:
da	wanppi-nyi	da,	walpu-njjan	ama	purluju.
there	fall-PastPun	there,	hit-PRES	3S	head

(he) fell, he's hitting (his) head

*O1:
wanppi-nyi,	luk,	edaik	i	gat-im!
fall-PastPun	look,	headache	3S	got-TM.

(he) fell, look, he's got a headache

(then referring to a child with a bandaided forehead)

*O1: i pal dan, **pawumpawu.**
         poor thing

(to researcher)

*O1: *she fell dan.*

The speaker uses some full Warumungu sentences, including Ergative marking (*nyilingki*) and null possessor body part syntax (*walpunjjan ama purluju*). When she code-switches, she sometimes uses Warumungu verbs (*flaiwei na turruparinjina*). She has command of English as well as WE (WE *i pal dan*, English: *she fell*).

Middle-aged speakers have a good passive understanding of Warumungu, and use single Warumungu words (mostly nouns) and some bound morphemes and some verbs, in varieties of WE, which can be close to standard English. One of the women in our study is actively trying to use Warumungu words (nouns and pronouns mostly) to her grandchildren. Adults have varying levels of passive knowledge of Warumungu and use some nouns and bound morphemes in WE and English. Example (17) shows two women (A2 in our A category, and M1 in our M category) who grew up in the Barkly Tablelands. They are with 4-year-old P1, who is playing doctors with her younger sister. Their use of Warumungu is more limited to nouns and to certain case-endings, the Dative/Purposive *-ki* and the Locative/Allative *-kVna*. Null possessor body-part syntax is evident with body-parts expressing location or endpoint (*na kwarta-kana, na munkku kuna*[38]).

(17)   SEQUENCE 2 [SD021:A2]

*A2:
F.-ki	yu	du-im
Name.DAT	2S	do-TM

You do it to F. (listen to her chest)

*P1: laikajat
     like that

*M1:
i gat dat ding na	kwarta-kana,	na	luk!
LOC	ears-ALL[39]	FOC/LOC	ear-ALL

she's got that thing (the stethoscope) in (her) ears, look!

*P1: yu luk iya

*M1:
laikajat	na	yu	pud-um,	na	munkku	kuna
like.that	now	you	put-TM	LOC	stomach	ALL

Like that you put it, on (her) stomach

Younger adults generally have command of a smaller set of Warumungu words and the bound morphemes in their speech are restricted to a small number of very common forms. From preliminary investigations, children appear to master basilectal styles of Wumpurrarni English in their preschool years, and later, on entrance to school, begin to use forms closer to standard English. In examples (18) and (19) the variation in forms of third person possessive: *im*, *im-kayi*, and *'s*, show that children use and comprehend three forms. While here S1 uses SAE *'s* and RRK *im*,[40] and S2 and P2 use WE *kayi*, elsewhere S1 produces WE forms: A *brushim imkayi hair*. But apart from the use of *ka(yi)* and occasional use of some nouns, children's utterances contain very few Warumungu words.

(18)   SEQUENCE 3 [Tape ID: SD022:S1] 9 year old girl 1 (S1), 3 year old girl (P2), 9 Year old girl 2 (S2)

*S1:   das im kimbi.
        That's its nappy.

*P2:   na imkayi pant nadawan.
        No, its nappy's different.

(19)   SEQUENCE 3b (same participants)

*S2:   *show me, move over your baby*

*S1:   *thas Kimberly's*

*S2:   im Kimberly kayi baby

Figure 3[41] shows the distribution of features that relate to Warumungu (use of Warumungu words and of the post-nominal possessor construction) according to the age of the speaker. It is clear that most Warumungu features are used by middle-aged and elderly people, and that post-nominal possessors are only found in their speech.
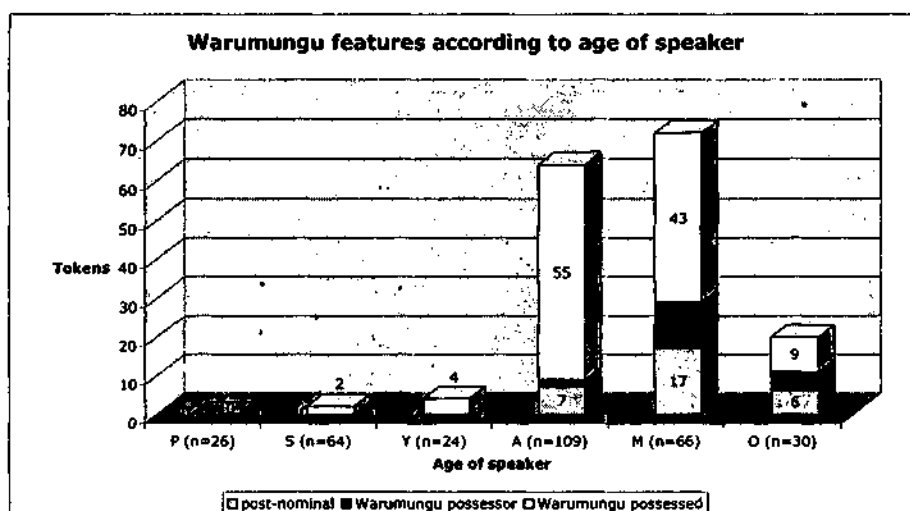

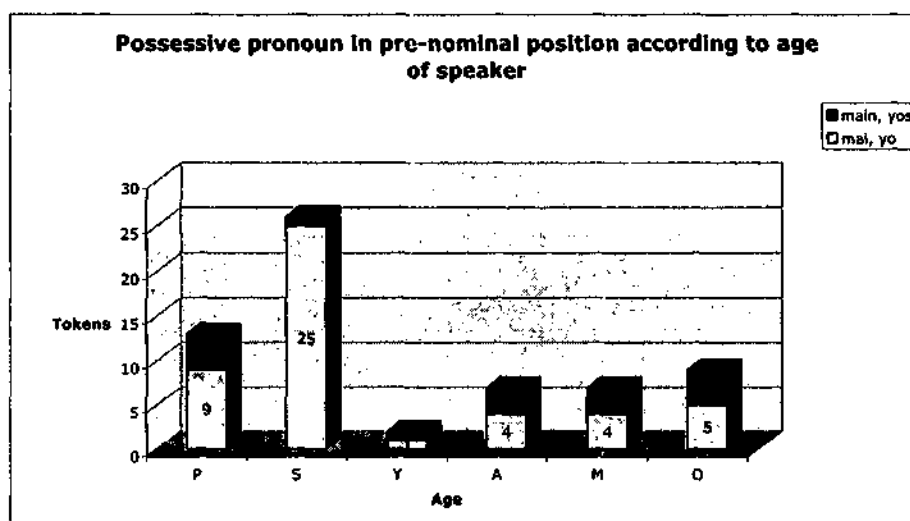*Figure 3: Warumungu features according to age of speaker*

Figure 4: Possessive pronoun in pre-nominal position according to age of speaker

6.3 *main* and *yos* as pre-nominal modifiers

Another feature apart from post-nominal possession which appears to be age-related, but which cannot be directly related to proficiency in Warumungu is the use of the WE forms *main* and *yos* as pre-nominal modifiers, for example, *yos ears*. As Figure 4 shows, these are attested in all age-groups, but are much less often used by the school-age students.

Thus, those WE forms which are furthest from SAE, (the post-nominal modifier, and the use of the *main* and *yos* as pre-nominal modifiers), are least common among school-age children, who presumably are most likely to be affected by exposure to SAE in the classroom, and who are likely to be the leaders in language change. At the same time, these children are using very few Warumungu words. The greater proportion of *main* and *yos* as pre-nominal modifiers among pre-school children possibly reflects the adult strategy of using a basilectal creole as babytalk mentioned in the discussion of blanga, but this needs further investigation.

7. Appositional and understood possession

The last construction we will discuss is the expression of inalienable possession. The importance of the semantic category of inalienable possession is well-documented in Australian languages (Hale 1981, Goddard, 1982, McGregor 1985, Laughren 1992, Hosokawa 1996, and other papers in Chappell and McGregor 1996). Munro (2004) has argued that apposition as a structure of expressing inalienable possession is carried over from substrate languages into RRK. Hence, we examine the expression of possession of body-parts (often taken as prototypically inalienably-possessed items) in the source languages before looking at WE.

In SAE, possession of alienable things normally requires an overt possessor: *my book is small*. Possession of inalienable things is often expressed in the same way: *my head hurts*. But with a small subset of verbs (mostly impact and concussion verbs) if the possessor or possessed acts as the object of that verb, a determiner can be used instead of the possessive pronoun, and the part is expressed with a preposition, as in *She punched/ looked him in the eye*, which we will call the 'body-part locative construction'.

The data on the northern creole from Linklater and Tapp (1968) points to the possibility of overt marking of possession of inalienable things, *hair belonga me* in the early 1900s. In RRK, the picture is somewhat confused since the subject/object pronouns *yo* (2)[42] and *im* (3) are also used generally as possessive pronouns, thus neutralising the expression of alienable and inalienable possession for these possessors. Munro has noted the existence of an apposition construction, but what the possessed can be is both more restricted than the traditional inalienable constructions (mostly kin terms), and less restricted (including houses). As for the body-part locative construction, we have not found a systematic investigation of this in FVK or RRK. However, as Meakins and O'Shannessy show (this volume), both Light Warlpiri and Gurindji Kriol have a similar construction, using locative case instead of the preposition 'on', and having no overt possession marker.

In traditional Warumungu the possession of things normally thought of inalienable such as body-parts is usually expressed by means of a part-whole construction common in Australian languages, or else by using the suffix *-kari* or possessive pronouns. In the 'part-whole' constructions, a part and a whole bear the same case-marking and grammatical function (sometimes called apposition).

(20)   Clinic-warinyi-njji   ama   karrpa-nta   <u>kartti   murnarri</u>   bandage-jji.
        health-worker-ERG   3S   bind-PRES   man   hand   bandage-ERG
        The health worker is binding the man's arm with a bandage. [SDJS notes: 25/7/03]

In example (20) both possessor and possessed are overt and adjacent. But the situation becomes more complex if the possessor is a pronoun and if the entity occupies Subject or Object position. Warumungu has no free pronouns for subject and object. Pronominal subjects and objects are normally realised as clitics in second position. Thus in examples (20) and (22), the possessed is expressed as an unmarked nominal, interpreted as having Absolutive case and acting as the subject jointly with the subject pronoun *ami* or *ama* which occurs in second position.

(21) Jina   <u>arni</u>   wangu   jawurr.ja-nta.
     foot   1S   bad   smell-PRES
     My feet smell bad. [I feet smell bad] [JS:BN:91.1]

(22) Wanppi-nyi   <u>ama</u>   <u>purluju</u>
     fall-PastPun   3S   head
     He fell on his head. [SD015:O1]

In example (23) the possessed is expressed as an unmarked nominal, interpreted as having Absolutive case and acting as the object jointly with the reflexive person -*mu* which occurs in second position.

(23) <u>Ngurru</u>   angu-<u>mu</u>   wirrimu-rra!
     nose   2S-self   wipe-IMPERATIVE
     Wipe your nose!   [SD015:O1]

An alternative way of expressing the same idea is without the reflexive, with a zero object. We could call this possession by inference.

(24) <u>Ngurru</u>   angi   wirrimu-rra!
     nose   2S   wipe-IMPERATIVE
     Wipe your nose! [confirmed to SD by RT and JJ September 2005]

However, paradigmatically, zero represents third person singular object. This can give the impression of there being no overt possessor when there is a third person object, as in example (25).

(25) Arni   ngini   <u>ngurru</u> · arnpa   janykurr.paki-nyi.
     I   as.for   nose   still   punch-PastPun
     And as for me I punched him right in the nose.

Forms such as *walpu-njjan ama purluju* (lit. hit he head) 'he hits his head' in example (16) above suggest a third strategy—possession by inference. When the possessor is an argument of the sentence, or perhaps is merely salient in the discourse, and the possessed is an argument or adjunct of the sentence, no overt marker of possession need be used, because the possession relation is inferred.

In traditional Warumungu, if there is a need to focus on the possessor, as opposed to the possessed, as in questioning, then explicit possessive forms may be used. Example (26) shows an appositional structure for the actual question, but a possessive pronoun *ajjinyi* used in the answer, instead of an accusative bound pronoun *ajju*.

(26) <u>Nyay(i)</u>   ama   *jina*   kanyi-nyi?
     who   3S   foot   tread- PastPun

     Ajjinyi.
     mine
     Whose foot did he tread on? Mine! [Recorded by K Hale 1959 p.32]

Thus the division between ways of expressing alienable and inalienable possession is not absolute in traditional Warumungu. Given the situation in which the three substrate languages can all use explicit possession markers for inalienably possessed things such as body-parts, it might be expected that the same would be true in WE, and this is what has happened. Figure 5 shows that, for 181 examples of possession of body-parts, explicit marking of possession through possessive pronouns or the clitic -*ka* (*yi*) has taken over as the preferred means.

These figures are skewed due to the 77 questions, and 19 answers with explicit possessor marking generated by the 'whose X' books elicitation tool (Section 1) which involved apparently detached body-parts. However, it is clear that only 24% of the total are expressed using the common Warumungu strategy of absence of an overt possessive marker for

inalienable possession such as body-parts. (This includes both apposition *beibi fut* 'the doll's foot' and zero possessor marking, discussed further below). The same preference for using an overt possessor suffix is found in Gurindji Kriol (Meakins and O'Shannessy, this volume).
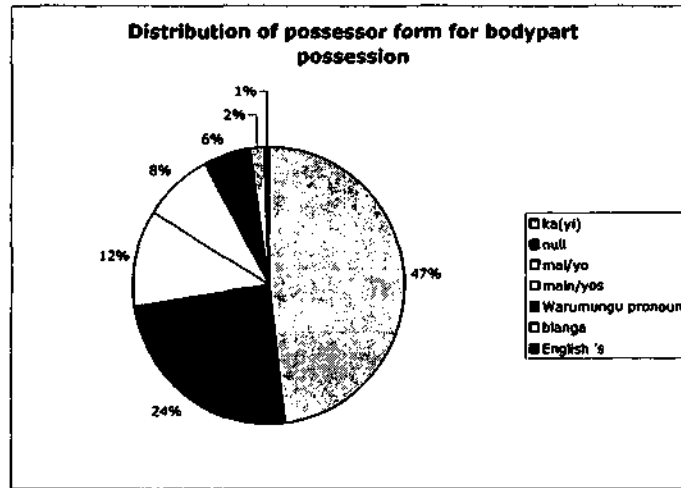

Figure 5: *Distribution of possessor form for body-part possession*

Our dataset is too limited to determine if the appositional structure in WE is basically restricted to inalienable possession.[43] Of the 11 likely examples, all but two involved typical inalienable things. Age did not seem to be a relevant factor, since while most were produced by adults or young adults, a pre-school child produced one example.

The examples in (27) show that, even when the possessed is a Warumungu word and the possessed is an inalienable body-part, a possessive pronoun may be used. This happens whether the possessive pronoun is coreferent with the subject (example 27a) or not (example 27b).

(27)   a.   weip-im   angkinyi   ngurru
              wipe-TM   *your*   *nose*   [SD015:O1]

       b   ye,   wintirri   bin   pok-im   <u>im-kayi</u>   <u>jina</u>
           yes, *stick*   PAST *poke*-TM *his*   *foot?* [SD006B:A1]

We have not identified the factors contributing to this variation, but we think that the choice of predicator, and the language of the predicator (is it closer to SAE or to WE) are factors worthy of careful examination.

What is striking, however, is that in sentences where the possessor or possessed acts as the object of a verb, there is a wide range of forms possible for expressing possession of body-parts, even with the same verb and the same speaker. Examples (28) and (29) show that individuals may use different forms with the same transitive verb, varying between SAE and Kriol forms, and between using null possessor, explicit possessor and demonstrative.

(28)   Variation with 'brush' [Nine-year-old, S1 Tape ID: SD022:S1]

       a.   A brushim <u>imkayi hair</u>. *I'm brushing its hair.*

       b.   Iya brushim <u>hair</u>, an gimi thiswan.
            Here brush its hair, and give me this one.

       c.   Baba N a brushim <u>im da hair</u> ini. A brushim <u>im da hair</u>.
            younger sibling N I'm brushing its hair, aren't I. I'm brushing its hair.

> d.   an am <u>brushin</u> <u>an da hair.</u>
> *I'm brushing its hair.*

(29)   Variation with 'wipe' [Adult woman who grew up in Tennant Creek, Tape ID: SD009:A3]

> a.   wana <u>weipim da nos</u>, deya? *Do you want to wipe your nose there?*
>
> b.   weip yo nos
>
> c.   kwik yu go deya yu luk, <u>weip nos iya</u>. *You go there look, wipe your nose.*
>
> d.   deya iya, <u>weipim nos</u> yaki. *There, here, wipe your yukky nose.*
>
> e.   sidan na, <u>weipim er nose</u>. *Sit down now, wipe her nose.*
>
> f.   <u>wap that nos deya</u>. *Wipe that nose there.*

Explicit possession marking is shown in (28a), imkayi hair with the WE possessive pronoun, and in (29b) and (29e) *weipim er nose, weip yo nos* with the SAE possessive pronouns, where possessive pronouns are used for both alienable and inalienable possession. The SAE possibility of using a demonstrative 'that' instead of a possessor in some circumstances is found in (28f), where the only likely WE feature is the use of the locative *deya*.

Example (28d) *an am brushim an da hair* appears to be a locative construction, like the SAE 'body-part on the' construction. But 'brush X on the hair' doesn't seem acceptable in SAE as the repeated action of brushing someone's hair.[44] The 'body-part on the' construction is attested with 'brush' and some other body-parts: *brush her on the back/lips/ breasts/cheek/shoulder/head/arm/groin* (Google search 31/10/04). However, the contexts of these utterances suggest that the brushing movement is a single action. If so, then *brushim an da hair* (which is a repeated action) is an innovative extension of the locative construction to verbs other than those used in SAE. More work is needed to determine if the innovation extends beyond this child S1 more generally in WE, and to see what the range of verbs allowing this constructions in WE is.

Example (28b) *brushim hair* reflects the Warumungu part-whole construction. The object is understood to be third person singular. The same is probably true of (28c), except that the object is now explicit, *im*, and the SAE determiner *da* is used, as also in (29a).

The superficially similar (29c) *weipim nos yaki* (addressed to a child) and (28d) represent the second part-whole strategy illustrated for Warumungu in example (24), which expresses possession by inference. Example (30) is another example in the WE data:

30.
I	bin	it-im-bat	purluju
he	PAST	hit-TM-PROG	head

    He hit his head. [SD006B:A1]

It remains to be discovered however, whether this strategy is restricted to inalienably possessed things.

In sum, WE, like Gurindji Kriol and Light Warlpiri, is moving toward using explicit possessor marking for body-parts. There are models for this in all three source languages for WE. The semantic category of inalienable possession is still manifested in appositional structures. It also appears to be relevant for a construction expressing the possessors of objects of verbs. While this construction resembles in part the SAE locative construction, the class of verbs involved is wider.

8. Conclusion

In this paper we have discussed several features of the expression of possession in WE and attempted to relate them to the three source languages, Warumungu, SAE and the northern creole, while paying attention to the complexity of the multilingual and multi-register situations in which our data was recorded. Our findings must be treated with caution, since the dataset is small. However, five points stand out.

• The possessive *-ka* (*yi*) in WE shows the influence of two sources; its form comes from Warumungu. But unlike the Warumungu *-kari*, it is not an agreement affix marked on every part of the NP. It seems to occur on the final word of an NP, thus behaving syntactically like the genitive phrasal clitic *'s* of English.

• Pre-nominal position for the possessor is more popular than post-nominal position in WE, as is the case in RRK and SAE. However post-nominal position, which is common in Warumungu, is more common in WE when either the possessor or the possessed is a Warumungu form. It is also most often produced by older speakers, who know Warumungu better. It use thus may be linked to code-switching. However this needs testing over much more extensive data sets.

• Age appears also to be related to the use of *main* and *yos* as pre-nominal modifiers, which are much less commonly used by school-age students. Here, proficiency in Warumungu is less likely to be a factor determining the use of these forms.

• The expression of the semantic category of inalienable possession in WE appears to be more restricted than in Warumungu. While some appositional structures are found, explicit possession constructions are widely used for typically inalienable possessions such as body-parts. This is in line with what is happening in Gurindji Kriol (Meakins and O'Shannessy, this volume). However, appositional possessor object constructions appear with a wider range of verbs than in SAE.

• There is a lot of variation as to the expression of possession in this data. Age and code-switching are factors, and those WE forms which are furthest from SAE, (the post-nominal possessor position, the use of the *main* and *yos* as pre-nominal modifiers), are least common among school-age children. But a full analysis of what influences choice of structure remains to be undertaken.

Notes

1. For helpful discussion we thank the families recorded, our fellow participants in the Aboriginal Child Language Acquisition Project (ACLA: http://www.linguistics.unimelb.edu.au/research/projects/acla/index.html), especially Betty Morrison, Felicity Meakins, Patrick McConvell, and Carmel O'Shannessy, the participants in the 'Language contact, hybrids and new varieties: Emergent possessive constructions' workshop held 3-4 September 2004 at the School of Languages, Cultures and Linguistics, Monash University, and especially the two anonymous referees. This research was funded by the Australian Research Council (ARC Discovery grant DP0343189 "How mixed language input affects child language development: case studies from Central Australia".) and the University of Sydney.

2. See Meakins and O'Shannessy, this volume, and also Heine (1997, 2002).

3. *Wumpurrami* is 'black' in Warumungu and its meaning has been extended by Warumungu people to refer to Aboriginal people.

4. Source: Regional Population Growth, Australia and New Zealand, 2002–03 (ABS cat. no. 3218.0) and Population by Age and Sex (ABS cat. no. 3235.0-8.55.001), ABS Online database accessed 26/10/04.

5. WE speakers are, and have been, exposed to non-standard Englishes and interlanguages spoken by second language learners of English. While the influence of non-standard rural English is important, we do not consider it in this paper, since SAE and non-standard rural English do not differ much in the expression of possession.

6. *Italics*: acceptable in standard Australian English. **Bold-face**: forms found in traditional Warumungu.

7. Abbreviations used in this paper are largely standard, with some used by Munro in her description of Roper River Kriol (2000, 2004). See separate list at the end of the paper.

8. These numbers refer to the tape number of Disbray's recordings, currently archived on a mass storage system at the Australian National University, or to Simpson's field recordings, archived at the Australian Institute of Aboriginal and Torres Strait Islander Studies.

9. Play sessions with a toy medical kit elicited acrolecctal WE, as children role played being health professionals.

10. This book showed the picture of a body part such as a tail on its own, and required the reader to guess what animal the tail belonged to.

11. Possession of body parts is discussed further in Section 3.

12. This construction is ambiguous between Warumungu and WE, because it involves the Warumungu personal pronoun *akinyi* 3rd singular possessive which is not normally used in WE, and because it was recorded in an otherwise WE sentence, and fits a doubling pattern found in WE.

13. *mutuka blanga imkayi* can be seen as double marking, or as *blanga* governing the appearance of *kayi* on the personal pronoun.

14. Munro shows that these can be stacked:

bat	ola	hos	bla	mindubala	bla	werk	la	bush
CONJ	COLL	horse	P/P	1du.ex	P/P	work	G/L	bush

dei	bin	la	bik	sdokgemp		mop
3pl	PST	G/L	big	stock.camp	GRP	

But all our horses for working in the bush, they were at the big stock-camp. (S078) [Munro's 174]

15. Munro found only one instance of N Pronoun in her data, and suggests that this is an emphatic use.

ol	yu	bois	garra	baj–im–ap	hosis	main–na
COLL	2sg	men	OBL	collect/gather–TM–DIR	horses	POSS–EM

All you men have to/must round up my horses.   (A130) [Munro's 173]

16. Examples from Munro, Table 38: *im biligen* 'his billycan', *yu gabarra* 'your head'.

17. Examples from Munro, Table 38: *bos bla melabat* 'our boss', *drak b(l)an(g)a im* 'his truck'. Example from Hudson (1985:76): *gel bla mi* 'my girl'.

18. Warumungu possessive pronouns are mostly formed by attaching *–nyi* or *–nginyi* to Object forms of pronouns. We suspect that *-kayi* normally attaches to the end of an NP in WE, as English *-s* does, rather than to the nominal head, but we don't have the critical evidence of whether WE speakers accept forms like *fom boi dat-kayi takka*, or *fom boi-kayi dat takka*.

19. However, this does not preclude the use of *–kayi* having developed earlier elsewhere, for example on the Barkly Tablelands.

20. Her mother Kitty was almost certainly the Katie described in Linklater (1940), Linklater and Tapp (1968).

21. The spelling is that used in Simpson's transcription, which used English spelling.

22. We do not have the data to determine whether, for example, in the cases of doubling there is a preference as to which of the orders is given first, or whether there is a difference as to whether the Possessed or Possessor is the new information.

23. This table excludes stand-alone possessors, English *'s, her* or *his,* Warumungu possessive pronouns, null possessors and some ambiguous forms. *U* (who) is treated as a nominal.

24. This figure is not accurate since it does not include second person pronoun *yo.* We have not been able to decide definitively which of these represent 'you' and which 'your'.

25. 'That is his/its nappy.' The use of *im* here may indicate RRK rather than WE.

26. 'You should put a bandaid on the baby's foot'.

27. 'baby's mouth'

28. 'Felicia's baby'

29. 'Only Whatsername's little girl'

30. 'My pencil'

31. 'Your ear'

32. 'His/her foot'

33. 'My nose'

34. 'His/her foot'

35. The two possessor forms *(h)er* and *–s* are considered English, as pronouns are unmarked for gender in WE and RRK, and word final *–s,* whether as genitive *–s,* plural marker or 3rd person singular copula, is not a feature of WE and RRK. The utterances include other English elements and features of acrolectal WE. The phonology, semantics and syntax of possessor tokens *mai* and *yo,* while largely shared with English, are considered as part of the WE system, and in our analysis, where such forms are embedded in an otherwise WE utterance, are counted as WE.

36. This figure includes Warumungu possessive pronouns and the three instances of *blanga.* No distinction has been made as to whether the possessor is a noun or pronoun. One factor, however, should be noted. The question form in the data set is over represented due to the use of a picture book prop already mentioned. In almost all cases, regardless of possessor language, a prenominal question form was used, namely *ukayi N?* Thus the task emphasised the possessor, rather than the possessed.

37. In this sequence and the next two sequences, plain font=WE, bold=Warumungu, *italics*=English.

38. This form also illustrates an interesting property of the code-switching, namely doubling of the locative preposition *na* with the Allative suffix *kuna,* which parallels the double possessive marking.

39. In traditional Warumungu the ALLATIVE ending *–kVna* is used as a locative in transitive clauses.

40. Alternatively, *im* here could be an appositional structure extended to nappies.

41. The ages are as in Table 5: P(reschool), S(chool-age), Y(oung adult), A(dult), M(iddle-aged), O(ld). n is the number of utterances containing possessor constructions. Note that the numbers may overlap, since a postnominal construction may well contain a Warumungu possessor or possessed.

42. The difference between the subject/object pronoun *you* and the possessive pronoun *your* in SAE would not have been perceptually salient to most first language speakers of Australian indigenous languages when the creole was emerging (since most have only a single back round vowel), and probably contributed to the neutralisation.

43. Two possible examples are example (18) *das im kimbi* 'that's his nappy' (although this may show RRK influence), and from a child *Das e underpans* 'that's his underpants' [SD.23A.VID].

44. Similarly 'wipe' cannot take an object with a determiner possessor in standard English: *??I wiped him on the nose*. Google searching for "wipe(d/s) him/her/you/me/them/us on the" on 31/10/04 produced only one doubtful candidate for 'wipe', a compound 'towel-wipe' <http://www.aaronontheweb.com/rantsite/quotes.html>.

Abbreviations

ALL	Allative	OBL	obligatory (J. Munro)
ASSOC	associative	PastCont	Past continuative
COLL	collective (J. Munro, presumed)	PastPun	Past punctual
CONJ	conjunction (J. Munro)	POSS	possession (J. Munro)
DAT	Dative	P/P	possession/purpose (J. Munro)
DET	Determiner	PRES	present
ERG	Ergative	PROG	progressive
FOC	Focus	PST	past (J. Munro)
DIR	directional (J. Munro)	RRK	Roper River Kriol
EM	emphasis (J. Munro) [glossed as FOC here]	S	Subject
FVK	Fitzroy Valley Kriol	TM	transitive marker
G/L	goal/location (J. Munro)	WE	Wumpurrami English
GRP	group (J. Munro)	X	possessor
LOC	Locative	333	third person plural
N	nominal	1	first person singular
NOM	nominalising suffix on verbs and adjectives	1 du.ex.	first person dual exclusive (J. Munro)
O	Object	2	second person singular

References

Chappell, Hilary and William McGregor 1996. *The grammar of inalienability: a typological perspective on body part terms and the part-whole relation.* Berlin/New York: Mouton de Gruyter.

Charola, Erika 2002. Verb phrase structure in Gurindji Kriol. Honours thesis, University of Melbourne.

Goddard, Cliff 1982. Case systems and case marking in Australian languages: a new interpretation. *Australian Journal of Linguistics* 2:167-96.

Hale, Kenneth L. 1959. Warumunu notes: copy at Australian Institute of Aboriginal and Torres Strait Islander Studies.

Hale, Kenneth L. 1981. Preliminary remarks on the grammar of part-whole relations in Warlpiri. In Jim Hollyman and Andrew Pawley (eds), *Studies in Pacific languages and cultures: in honour of Bruce Biggs*, 333-44. Auckland: Linguistics Society of New Zealand.

Harris, John W. 1986. *Northern Territory Pidgins and the origin of Kriol.* Canberra: Pacific Linguistics.

Heine, Bernd 1997. *Possession: cognitive sources, forces, and grammaticalization.* (Cambridge studies in linguistics 83) Cambridge/New York: Cambridge University Press.

Heine, Bernd and Tania Kuteva 2002. *World lexicon of grammaticalization*. Cambridge/New York: Cambridge University Press.

Hosokawa, Komei 1996. My face am burning!: quasi-passive, body parts, and related issues in Yawuru grammar and cultural concepts. In Hilary Chappell and William McGregor (eds), q.v. 155-92. Berlin: Mouton de Gruyter.

Hudson, Joyce 1985. *Grammatical and semantic aspects of Fitzroy Valley Kriol*. Work Papers of SIL AAB, Series A Volume 8. Darwin: Summer Institute of Linguistics.

Hyman, Larry 1996. The syntax of body parts in Haya. In Hilary Chappell and William McGregor (eds), 865-90. Berlin: Mouton de Gruyter.

Laughren, Mary 1992. Secondary predication as a diagnostic of underlying structure in Pama-Nyungan languages. In Iggy M. Roca (ed.), *Thematic structure: its role in grammar* (Linguistic models Series), 199-246. Berlin/New York: Foris Publications.

Linklater, William [Miller] 1940. [no title] ms 37, 5717. Canberra: Australian Institute of Aboriginal and Torres Strait Islander Studies.

Linklater, William [Miller] and Lynda Tapp 1968. *Gather no moss*. Melbourne: Macmillan.

McGregor, Williams 1985. Body parts in Kuniyanti clause grammar. *Australian Journal of Linguistics* 5:209-32.

Munro, Jennifer M. 2000. Kriol on the move: a case of language spread and shift in Northern Australia. In Jeff Siegel (ed.), *Processes of language contact: studies from Australia and the South Pacific*, 245-70. Saint-Laurent, Quebec: Fides.

Munro, Jennifer M. 2004. Substrate language influence in Kriol: The application of transfer constraints to language contact in northern Australia. Unpublished PhD thesis, University of New England.

O'Shannessy, Carmel 2005. Light Warlpiri: a new language. *Australian Journal of Linguistics* (Special number edited by Margaret Florey and Patrick McConvell) 25(1):31-57.

Sandefur, John, and Joy Sandefur 1979. *Beginnings of a Ngukurr-Bamyili Creole dictionary*. Work Papers of SIL-AAB B. Darwin: SIL-AAB.

Samantha Disbray is a PhD candidate at the University of Melbourne and research assistant for the Aboriginal Child Language Acquisition Project. She is investigating discourse in Wumpurrami English in Tennant Creek. She has worked as an adult educator with Indigenous language workers at the Institute for Aboriginal Development and Batchelor Institute. She has published the Warumungu picture dictionary *(IAD Press, 2005).*

Jane Simpson is a Senior Lecturer in Linguistics at the University of Sydney. She has published a Learners Guide to Warumungu *(IAD Press, 2002) and other articles on Warumungu and Warlpiri syntax. She is working on the Aboriginal Child Language Acquisition project.*