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The possessive classifiers in Raga, Vanuatu: an investigation of their use and function in natural speech

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Abstract

This article reports on the investigation of possessive constructions as they are used in a corpus of spontaneous speech collected in 2015-2017 from speakers of Raga, the Oceanic vernacular of north Pentecost, in Vanuatu. The article reveals that one specialised classifier has fallen out of use but that Raga speakers show no intergenerational variation in their use of the markers of possession and that no significant shift occurs from bound nouns to their free alternatives. The article also demonstrates that only a small number of the indirectly possessed nouns show fluidity in actual speech. Finally, complementing previous descriptions, the study provides a contextualised discussion of each Raga classifier, and in particular the valued possession classifier.

Keywords

Possession, Classifiers, Natural speech, Vanuatu, Raga, Pentecost

1 Introduction

In Oceanic languages the expression of possessive relations involves a complex grammatical system. Possessive relations cover a wide range of possessor-possessed relations encoded differently in the noun phrase, depending on the nature of the possessor, the possessed, and the relation between the two nouns. For some categories of nouns, the relation encoded by the possessive construction is embedded in the possessed noun: ‘mother’ implies a relation to children, ‘hand’ supposes the existence of a body, ‘substitute’ suggests a relation with something or someone that is being replaced, ‘thought’ implies thinking beings. The nouns expressing kinship, part of a whole, location and a person’s attributes fall into these categories and the Oceanic languages of the Melanesian islands tend to encode these relations of inalienable possession with a possessive suffix attached directly to the possessed noun. Other types of possessive relations are indirectly possessed, as is the case for true ownership, and the possessive suffix is attached to a possessive particle linking the possessor and the possessed. This possessive particle encodes the relationship between the possessor and possessed nouns, and for this reason it is referred to as a possessive classifier. A further distinction is made in the possessive construction which depends on whether the possessor is

overtly referenced by a noun (complex constructions), or solely by the possessive pronoun (simplex constructions).

The structure to express possessive meanings in Oceanic languages and the concepts mentioned in the brief overview above have been the object of numerous studies, which we owe to Lichtenberk[1] (1983, 1985, 2009a, 2009b, 2013; Lichtenberk, Vaid, & Chen, 2011) and many other linguists (e.g. Bril, 2013; Donohue & Schapper, 2008; Franjieh, 2012; Lynch, 1996; Pawley & Sayaba, 1990).

With around 6500 speakers, Raga is one of the largest vernacular languages of Vanuatu. The language is primarily spoken in the northern part of the island of Pentecost, in north-central Vanuatu, with large speech communities also found in the neighbouring islands of Ambae and Maewo, and in the two main urban centers of the country (in Port-Vila, the capital city, on Efate island, and Luganville, on Espiritu Santo island).

The most recent descriptive analysis of this Oceanic language is the work of Vari-Bogiri (2011). In her grammatical description of Raga, Vari-Bogiri surveys the direct and indirect possessive constructions within the noun phrase, lists and illustrates the five possessive classifiers that she has encountered, then discusses the nouns that can enter in different types of possessive constructions. Vari-Bogiri offers that some Raga nouns may enter in both direct and indirect constructions, while other nouns that only appear in indirect constructions may appear in constructions with different classifiers. She illustrates her latter argument with the indirectly possessed noun *niu* 'coconut', which can enter in construction with four different classifiers depending on whether the possessive meaning is to establish that the possessor grew the coconut, when the noun is possessed with the valued possession classifier *bila-*, or that the possessor intends to eat the coconut (*ga-*, edible possession), drink it (*ma-*, drinkable possession) or sell it (*no-*, general possession) (Vari-Bogiri, 2011, p. 105-122). In a previous paper, Vari-Bogiri listed the semantic domains of the nouns possessed in constructions with the valued possessive classifier *bila-* and discussed the cultural reasons for the use of this classifier with the kin term *vwavwa* 'most females in the father's clan' (2007).

The present corpus-based study made it possible to extend Vari-Bogiri's research by first assessing whether we see a change across the generations of Raga speakers in their encoding of possessive meanings. Previous studies in Oceanic languages have reported the disappearance of specialised possession markers (Dotte, 2013, pp. 295-301; Lichtenberk, 2013; Ozanne-Rivierre, 1976, p. 189) and a shift from direct to indirect possession (Meyerhoff, Barth, & Schnell, 2017). The present investigation of the classifiers as they are used in natural speech offered an opportunity to examine whether the young Raga speakers departed from the older speakers in their use of the possessive classifiers and in their use of direct and indirect possession. Secondly, Vari-Bogiri had mentioned the 'fluidity' of Raga nouns, a concept defined by Lichtenberk as 'the possibility of one and the same noun occurring in the possessum position of more than one type of possessive construction, depending on the type of possessor-possessum relation' (Lichtenberk, 2013), and this study could quantify the actual 'fluidity' of Raga indirectly possessed nouns in natural speech. Finally, the diversity of the contexts in which the classifiers were used allowed for a thorough description of their semantic domains.

This paper first gives an overview of the syntax of Raga possessive system, before moving to the inalienable possession and the categories of bound nouns in Raga. This is followed by an exploration of Raga indirect constructions as they naturally occur in this corpus. The paper surveys the 'fluid' nouns that appeared in constructions with different possessive classifiers and investigates the possibility of intergenerational variation in the encoding of alienable possession. The section on indirect possession includes a detailed discussion of the three classifiers observed in this corpus.

2 The syntax of Raga possession

As is the case for the vernacular languages of Vanuatu, Raga distinguishes between alienable and inalienable possession and encodes these relations respectively by indirect and direct grammatical structures. Both grammatical constructions are illustrated in example (1): direct possession is marked directly on the possessum (*nitu-* 'child') by a suffixed pronoun (*-ku* '1sg') referring to the possessor (I, the speaker) and, similarly, indirect possession is marked by a suffixed pronoun (*-da*) referring to the possessor (1pl.INCL), but rather than being suffixed directly to the possessum the pronoun is suffixed to a possessive classifier (*no-*, general possession) which precedes the possessum (*avoana* 'language').

(1) *Ira* ***nitu-ku*** *ra-m* *avo* *la* ***no-da*** ***avoana***
PL **child-1SG** 3PL-PROG speak LOC **CLF.GENL-1PL.INCL** **language**

n̄an *ata* *Raga*[2]
only from Raga

'My children only speak our language of Raga. [MFD2-005-M28 6:15][3]

The suffixed possessive inflection is the same for both direct and indirect possession. Its paradigm is given in Table 1.

Table 1. Raga pronominal possessor suffix paradigm

		SINGULAR	DUAL	PLURAL
1	INCL.		*-daru*	*-da*
	EXCL.	*-ku, -ḡu, -k*	*-maru*	*-mai*
2		*-mwa, -m*	*-miru*	*-miu*
3		*-na, -n*	*-ra*	*-ra*

The pronominal possessor suffix whose paradigm is given in Table 1 marks the person and number of the possessor, however there are two possible analyses for the suffix *-n:* the possessive suffix *-n* refers to a third person possessor not overtly expressed in the possessive construction (2) or the suffix *-n* is a possessive marker linking possessum and possessor when the possessor is expressed by a noun phrase in the possessive construction. In the latter case the suffix *-n* does not mark the number of the overt possessor, which may be plural (3) or singular (4). I will use the 'construct' label introduced by Lichtenberk (1985) for this marker (CST).

(2) *Ra-m* *rivu* ***bila-n*** ***malogu.***
3PL-PROG plant **CLF.VAL-3SG** **kava**
'They are planting his/her kava.' (Vari-Bogiri, 2011, p.115)

(3) ***hou-n*** ***ira*** ***tama-ḡu*** *mai* ***ira*** ***sibi-ku***
descent.line-CST **PL** **father-1SG** CN **PL** **grandparent-1SG**
'the descent line of my fathers and grandparents' [MFD2-005-M28 4:10]

(4) *Nigel kea,* ***iha-n*** ***lan̄i*** *vwate.*
Nigel 3SG **name-CST** **wind** DET
'Nigel, it's the name of a cyclone.' [MFD1-003-M02 0:26]

The four possible Raga possessive constructions are summarised in Table 2. In the complex construction the possessor is referenced overtly, whereas in the simplex form the possessor is referenced by the pronominal possessor suffix. The nominal possessum is followed by the suffixed classifier, except in the simplex indirect construction where it is preceded by the suffixed classifier.

Table 2. Raga possessive constructions

	DIRECT	INDIRECT
SIMPLEX	$N_{Possessum}$-$PRO_{Possessor}$ *natu-na* child-3sg 'her child'	Cl-$PRO_{Possessor}$ $N_{Possessum}$ *bila-n malogu* CLF.VAL-3sg kava 'his kava'
COMPLEX	$N_{Possessum}$-CST $N_{Possessor}$ *natu-n Margaret* child-CST Margaret 'Margaret's child'	$N_{Possessum}$ Cl-CST $N_{Possessor}$ *malogu bila-n ratahigi* kava CLF.VAL-CST chief 'the chief's kava'

3 Direct possession

My entire corpus, a total of 137 narratives by 58 speakers, was recorded in north Pentecost[4] in the years 2015-2017 and consists of a mix of rehearsed and spontaneous speech. The traditional stories, learnt and repeated since childhood, make for just under a third of my data. The spontaneous data comprises interviews conducted by a native speaker, reports of everyday events, stories prompted by storyboards, and accounts of frightening experiences, such as withstanding a cyclone.

Possessive classifiers were to be the focus of this paper therefore direct constructions were not systematically coded and extracted from this corpus. Rather I kept an inventory of the nouns that were often encountered and concentrated on those nouns that were found in both direct and indirect constructions to investigate the possibility of a shift from the bound nouns to their free alternatives.

Vari-Bogiri (2011, pp. 105-112) gave a detailed description of direct possession in Raga. Raga encodes the relations of inalienable possession with a direct possessive construction: (1) *nitu-ku* 'my child' and (3) *tama-ḡu* 'my father' and *sibi-ku* 'my grandparent' illustrate the encoding of kinship relations by a direct construction, while for (3) *hou-n* 'their descent line' and (4) *iha-n* 'its name' the relation encoded is a possessor's attribute, their descent line or name.

The direct constructions feature a broad range of possessed nouns. The relationships directly encoded on the possessum gave this inventory:

- Part of whole (28 different words)
- Kinship (16 words)
- Attribute/quality (15 words)
- Locative (10 words)
- Ownership (3 words)

No investigation was carried out on possible correlations between types of possessive constructions and the formal class of the noun possessum. An occurrence was noted however of a lexeme, *binihi* 'think, idea', whose nominal bare stem appears in several tokens of direct possession, whereas its suffixed gerundive appears in indirect possessives, with no semantic distinction detected from the context between the two nouns: *no-raru binihi-va* 'CLF.GENL-3du think-GER, their idea' and *binihi-maru* 'idea-1du.EXCL, our idea'.

Some directly possessed nouns are Bislama loanwords: in (5), the part of a whole *kava-* 'roof' is a phonological and morphological adaptation of the Bislama *kapa* 'metal'. *Waia-n* 'wire-CST' and *kilasi-n* 'glass-CST' are two other examples of a directly possessed Bislama loanword found in my corpus. The affixation of Raga morphology only occurs with loans that are phonologically integrated as well. These words accounted for 4% (the three words listed above) of the 72 directly possessed nouns that I surveyed.

(5) ***Kava-na*** *nu* *mwalue.*
roof-3SG 3SG.PRF leave
'Its (the church) roof blew away.' [MFD1-003-F07 5:14]

Of interest also are nouns which appear in both direct and indirect constructions, for example *tano* 'ground', *rovoga* 'work', *gamali* 'nakamal, common house', *imwa* 'house', *nunu* 'reflection, image', *bwana* 'large mat', *bari* 'small mat', *mwele* 'cycad', *iboi* 'song'. *Tano* 'ground' and *rovoga* 'work' provide several tokens so I will only comment on these two nouns. *Tano* occurs predominantly in direct construction (N=39) and in another four indirect possessive constructions. Vari-Bogiri (2011, p. 110) has remarked that when used in direct possession *tano* takes the meaning of 'place', or 'home', but in two examples of indirect possession (6 and 7) this semantic distinction is not, or no longer, so clear-cut. The indirectly possessed *tano* refers to a community's place (6), or an area where plants grow (7), overlapping with Vari-Bogiri's examples meaning 'home':

(6) *Ra-m* *hudali-au* *lol* ***no-da*** ***tano.***
3PL-PROG ask-1SG.OBJ LOC **CLF.GENL-1PL.INCL** **place**
'They ask me, in our place.' (talking about his status of authority)
[MFD2-005-M28 10:48]

(7) ***tano*** ***no-ra*** *ririvuana*
place **CLF.GENL-3PL** plant
'the place of plants' [MFD1-002-M08 4:47]

The word for 'work' *rovoga* occurs in 17 direct and 22 indirect constructions. Similarly to what was observed for *tano* 'ground, home', the semantic distinction in the relations encoded by either construction with the possessum *rovoga* 'work' is blurred. Both types of constructions denote principally a relation that is attributive (N=28), designating a type of work, such as work in the gardens, for the church, the local hydro-station, the service of God (8), the preparation of rituals (9), or in the tourism industry. But all instances (N=10) of the relation possessum-possessor denoting the work done by the possessor are encoded by the

general possession classifier *no-*, as exemplified in (10). When the possessor takes the role of performing the 'work', the relation possessor-possessed is marked indirectly by the general possession classifier. This suggests that, at least for this possessum, the agency of the possessor over the possessum is marked by indirect possession. This distinction brings to mind Lynch's hypothesis that 'surface possessive constructions derive from underlying constructions containing verbs' (Lynch, 1973, p. 81), the possessor/underlying subject being marked differently in the possessive construction depending on its agency and control over the possessum/underlying object.

(8) ***rovoga*** ***no-n*** *tama-da*
work **CLF.GENL-CST** father-1PL.INCL
'the service of God' [MFD1-005-M18 3:37]

(9) *Ta-m* *lol* ***rovoga-n*** ***lagiana.***
1PL.INCL-PROG make **work-CST** **wedding**
'We make the wedding preparations.' [MFD1-005-F16 7:3]

(10) ***no-da*** ***rovoga*** *huri* *imwatataro*
CLF.GENL-1PL.INCL **work** for church
'our work for the church' [MFD1-005-F14 5:05]

One further point of interest in Raga's direct possession concerns kinship terms. Raga is consistent in marking kinship relations with direct possession: all but one of the kinship terms are directly possessed. 'Most females in one's father's clan', *vwavwa*, is the notable exception and is indirectly marked by the valued possession classifier *bila-*, as we will see in more detail in the next section. Yet, my corpus revealed some instances of the vocative for 'mother' *mua* (N=5), 'father' *tata* (N=2), 'grandmother' *tuta* (N=6) and 'grandfather' *bibi* (N=5), used referentially in indirect possession. This is in variation with, respectively, the directly possessed *ratahi-* 'mother' (N=91), *tama-* 'father' (N=88) and *sibi* 'grandparent' (N=9). Indirect constructions remain uncommon for 'mother' and 'father' (Table 3) but possessive constructions with the free nouns for grandparents are more frequent than with the bound noun *sibi-* 'grandparent'.

Table 3. The nouns designating parents and grandparents in direct and indirect possessive constructions

	DIRECTLY POSSESSED (N=188)	INDIRECTLY POSSESSED (N=18)
'mother'	95% (N=91)	5% (N=5)
'father'	98% (N=88)	2% (N=2)
'grandmother'	45% (N=9)	30% (N=6)
'grandfather'		25% (N=5)

It was also noted that in an interview with a young woman one instance of the vocative *bena* 'uncle on mother's side' was used with the general classifier *no-* (*noḡu bena* 'my uncle') instead of the bound noun *tarabe-* 'uncle' (used 27 times in direct possession). In another interview, a middle-aged man used the free noun *bwatavwe* 'old woman', also in indirect construction with *no-*, instead of the bound noun *tasala-* 'wife' (N= 52).

The variation in possessive constructions encoding some kin relationships has been reported in other central-north Vanuatu languages: for Seke, a moribund language of central

Pentecost, Johnson (2014, pp. 109-111) lists the bound and free kinship terms that refer to parents and grandparents. Similarly for Sun̄wadia, the language spoken in the north of the island of Maewo, Henri (2011, p. 135) documents both alienable and inalienable terms for 'mother' and 'father' and Schnell (Meyerhoff et al., 2017) observes the same phenomenon, in Vera'a, a language spoken in the Banks Islands. In central Vanuatu, my own study of the Atchin variety of northeast Malekula (Duhamel, 2010, pp. 72-73) noted the variation between the bound and free nouns referring to 'mother' and 'father', and in northwest Malakula, Wessels (2013, pp. 81-82) has attributed indirect possessive constructions to 'superior' (i.e. higher in the lineage) kinship terms for the language spoken in Malua Bay. That some kinship terms, in particular 'mother' and 'father', may be encoded by free or bound nominal forms is therefore a well attested variable. This feature does not set Raga apart, and for the sake of comparability it is of interest to report on the frequency of use of each construction in natural speech (as per Table 3) and to give a breakdown of the categories of individuals who opt for one variant over the other, as follows.

The 18 tokens of indirect possession for parent and grandparent relationships are extracted from the speech of seven speakers. In their speech, this small number of speakers alternate between the two possessive constructions with 'mother' and 'father' as possessum, the directly possessed construction occurring the most frequently. The pattern is a sporadic alternation in the speech of a small group of individuals of both sexes. Two of the speakers who use the two constructions to refer to 'mother' and 'father' are husband and wife, but the five other speakers present no such tight social ties. Turning to the constructions with the terms for 'grandparents', of both or either sex, the indirectly possessed *bibi* 'grandfather' and *tuta* 'grandmother' are used more frequently than the directly possessed *sibi* 'grandparent'. Unlike the directly possessed noun, the vocative terms mark the gender of the grandparent, offering a plausible reason for speakers to select this variant. The bound noun *sibi* 'grandparent' is used to refer to a grand-parent whose gender is already established or to refer to both grandparents (*ira sibi-ku* 'my grandparents', *ira* 'PLURAL'). However, for six tokens the possessum consists of the two coordinated terms of address 'her grandmother and her grandfather' (11), when *ira sibina* 'her grandparents' would have conveyed the same meaning. The reason may be that, for each instance, the possessors were young children, who are precisely the people most likely to use vocative forms of address for grandparents. This is opposed to the tokens with the possessum *sibi-* 'grandparent' for which the possessors were adults, as in (3).

(11) *Nu* *maturu* *mai* ***no-n*** ***tuta***
3SG.PRF sleep with **CLF.GENL-3SG** **grandma**

mai ***no-n*** ***bibi.***
with **CLF.GENL-3SG** **granddad**

'She (young daughter) was sleeping with her grandparents.' [MFD1-003-F06 1:21]

Rather than a lexical replacement I would argue for a difference in connotations: the bound noun *sibi- 'grandparent'* is used in a context where the lineage with one's grandparents is foregrounded, whereas for the coordinated free terms the context is one of domesticity.

In conclusion to this section on Raga direct possession, the spontaneous speech surveyed in this section reveals very slight variation in the direct possessive constructions. The few variants observed are restricted to a small number of tokens and concern the sets of nouns for 'mother', 'father' and 'grandparents'. Raga presents two sets of nouns for 'mother' and 'father', each set featuring in either direct or indirect possessive constructions, with the

direct constructions displaying a much higher incidence. The number of tokens for 'grandparent' are split nearly equally between the direct and indirect constructions. The use of the indirect construction can be explained by the need for the speaker to indicate the gender of the possessum since, unlike the bound noun, the vocatives encode the gender of the referred grandparent. This contrasts with the variation patterns and systemic change reported by Barth in Matukar Panau's kinship terms (Meyerhoff et al., 2017), whereby most of the vocative kinship terms are also used referentially, in alternation with the bound nouns. In the Raga language, the evidence suggests that no such change is taking place for the kinship terms.

4 Indirect possession

Vari-Bogiri (2011, p. 112) proposes five possessive classifiers for Raga:

- *ga-* 'classifier for food'
- *ma-* 'classifier for drinks and sweets'
- *wa-* 'classifier for sugarcane'
- *bila* 'classifier for valuable possession'
- *no-* 'classifier for general possession'

Clause (12) illustrates the use of three classifiers in a single clause taken from a traditional story in which a woman gets ready to leave, collecting all her possessions:

(12)	*Mwa*	*lai*	***ga-n***	***damu***	***no-n***
	3SG.PROG	take	**CLF.FOOD-3SG**	**yam**	**CLF.GENL-3SG**

bwana	***bila-n***	***boe.***
mat	**CLF.VAL-3SG**	**pig**

'She takes her yam, her mat, her pig.' [MFD1-002-F11 4:45]

Three of these classifiers have been reconstructed for Proto Oceanic (Lynch, Ross, & Crowley, 2002, pp. 77-78): **ka-* for food possession , **m$^{(w)}$a-* for drink possession and **no-* for other kinds of possession. A 'possessive marker for animal or household property' **(m)pula* has been reconstructed for the languages of north Vanuatu displaying cognates of Raga *bila-* (Vari-Bogiri, 2011, p. 114). In Lolovoli, north-east Ambae (Hyslop, 2001, p. 178), Malua Bay, west Malekula (Wessels, 2013, p. 84) and north Ambrym (Franjieh, 2012, p. 317) it is the classifier for drink that is used for sugarcane possession, the fibre being chewed to drink the juice. But a 'chewable' possession classifier was described for the languages of north west Malekula other than Malua Bay: *jomo-* for the Tape language (Crowley, 2006b), *sama-* for Vënen Taut (Fox, 1979) and *sa-* for Nese (Crowley, 2006a). The classifier described for Raga sugarcane possession, *wa-*, does not seem to be a cognate of any of these three Malakulan classifiers.

Three of these classifiers, *ga-* 'food possession', *bila-* 'valuable possession' and *no-* 'general possession', appeared in 505 possessive constructions in my corpus. The classifier for drinks, *ma-* did not appear in spontaneous speech but it was elicited. *Wa-*, the classifier marking exclusively sugarcane possessum, did not occur in the recordings and in elicitation an older speaker proposed the food classifier *ga-* instead for sugarcane possession.

The disappearance of specialised possession markers in favour of a general possession marker has been noted in Iaai, the Kanak language of the island of Ouvéa (Dotte, 2013, pp.

295-301; Ozanne-Rivierre, 1976, p. 189). Dotte suggests that some classifiers became obsolete owing to the loss of cultural knowledge and traditional practices, as in the case of the classifier *dâân* which encodes the possession of spears and sharp objects (Dotte, 2013, p. 301). Lichtenberk had also observed this morphological reduction in the marking of alienable possession in a group of languages, including Toqabaqita (Lichtenberk, 2013). In the case of Raga's unique classifier for sugarcane possession, one could hypothesise that the consumption of sugarcane was assimilated to the consumption of food, resulting in a change in preferred classifier. But without psycholinguistic data on how the speakers see these classifiers, we can only speculate on the possible reanalysis of the consumption of sugarcane to an 'eating' event.

4.1 Classifiers – the exploration of the variable

From my corpus of 137 narratives by 58 speakers, I extracted all the occurrences of indirect possession and obtained a total of 505 tokens of possessive classifiers, sourced from 107 texts and 57 different speakers.

Table 4 displays the number of narratives and associated word count by types of narratives for the 107 files which presented indirect possessive constructions. The graph in Figure 1 displays the number of tokens for each classifier by narrative type.

Table 4. Text and word count by narrative type

NARRATIVE TYPES	TEXT COUNT	WORD COUNT
Traditional stories	24	16102
Personal stories	18	9106
Natural disaster stories	21	11405
Interviews	44	16733
TOTAL	107	53346

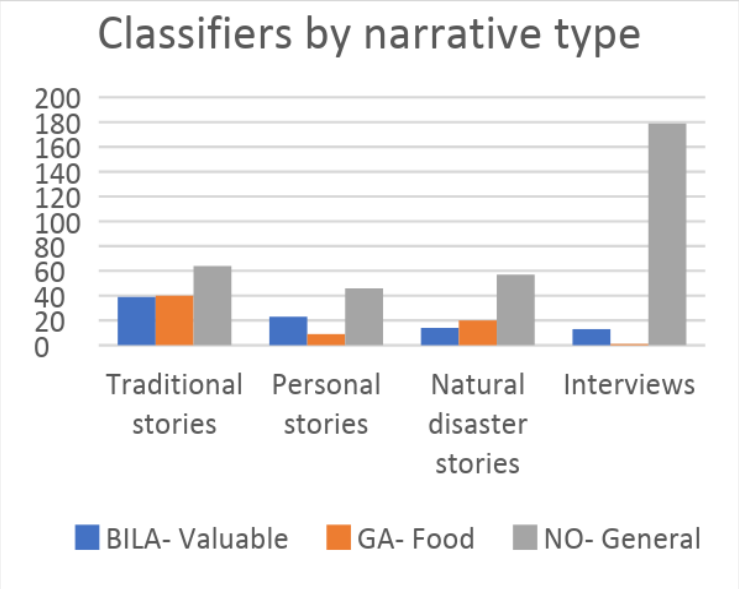

Figure 1. Tokens of classifiers by narrative type

Here are some observations from Figure 1:

- the general possession classifier *no-* occurs most frequently across all types of narratives
- the general possession classifier occurs with greatest frequency in the interviews
- the classifiers for drink possession *ma-* and sugarcane possessions *wa-* are missing in all files
- traditional stories offer a more even distribution of the three classifiers than the other types of narrative

In their interviews, speakers answer personal questions about their family, the languages they speak, their schooling and their activities in the community. The nouns associated with these topics mostly occurred in possessives with the general classifier *no-*, and the valuable classifier *bila-* appears when the interviewees talked about their gardens. The food classifier *ga-* appears mostly in traditional and natural disaster stories, when speakers talk about food-related matters, a subject touched on in many traditional stories and certainly a crucial matter in times of natural disasters. This pattern revealed that to uncover the factors underpinning the distribution of classifiers what needed to be investigated was the semantic class of the possessum, rather than the type of the narrative.

There is no available material on Raga semantic classes. The approach taken here is to review the possessed nouns, as they occur with classifiers, and assign them to an overarching semantic category. The list below exemplifies the discrete possessed nouns and the categories they feature in:

BELONGING : arrow, bag, basket, bow, coconut fibre (rope), mat, basket of belongings, ...

LANGUAGE: language, speech.

ANIMAL: bird, cat, hen, fish, pig, turtle, dog, porpoise.

PERSONAL ATTRIBUTE: ancestry line, authority, grade, idea, interview, totem, thoughts, power, opinion, life, sickness.

PLANT & CROP: banana, coconut tree, coconut, fruit, garden produce, kava, manioc, yam, kava, taro, plant, cycad, garden plant, leaf, spinach.

KIN: aunt, dad, grandfather, grandmother, grandparents, mum, uncle, wife.

UNSPECIFIED THING: thing, everything.

This approach has its failings, such as possible researcher bias (e.g. swayed by her L1 semantic categories). Asking the speakers about their semantic categories may be the object of a future project, or taking a cognitive approach such as Franjieh's study on north Ambrym's possessive classifiers (2012, pp. 284-354).

Franjieh has explored the prototypical members of the semantic categories of nouns and their correlation with possessive classifiers. He hypothesised that the prototypical members of a semantic class occur with only one classifier, while the peripheral members can occur with more than one classifier. This aspect of Franjieh's study uses the elicitation of lexical items (for a particular classifier) and the elicitation of classifiers (for a list of words), while measuring the reaction time of the participants. Despite the fact that the present study uses a different method, we may want to consider that the possessed nouns showing a high frequency of use with one of the two specialised classifiers, *bila-* 'valued possession' or *ga-* 'food possession', represent the prototypical members of the semantic classes correlated with each classifier. It is noteworthy then that in this Raga corpus the term which occurs the most frequently with the valued possession classifier is *vwavwa* 'most females in one's father's clan' (N=16), while for the food possession it is *ige* 'fish' (N=24), and that these two lexical items occur with no other classifier in our corpus. Moreover, it would be of interest to test the prototypicality of the lexical items revealed to be fluid nouns in our corpus (listed in Table 5),

since, according to Franjieh's hypothesis, these nouns would not be prototypical members of their semantic class.

4.1.1 Noun fluidity

A facet of this study was to examine where Raga possessive classifiers stand on the 'noun class or relation system' spectrum (Pawley & Sayaba, 1990), and whether Raga possessive classifiers involve a system of noun classes or draw from possessor-possessed semantic relations. The semantic category of a possessed noun correlates with the range of classifiers that can link the noun to its possessor, but the study also shows that in natural speech only a low proportion of Raga nouns enter in constructions with different classifiers. For Raga nouns, it was observed that 5% of the 158 distinct nouns indirectly possessed in this corpus occurred in the possessum position with different classifiers, suggesting that in actual usage Raga nouns show little fluidity. Table 5 lists the nouns that were observed to occur with more than one classifier in indirect possessive construction.

Table 5. Fluid nouns in actual usage

POSSESSUM	**GLOSS**	**GENERAL CL. NO-**	**FOOD CL. GA-**	**VALUABLE CL. BILA-**	**CATEGORY**
damu	'yam'		1	2	plant & crop
malogu	'kava'		1	6	plant & crop
bweta	'taro'		1	4	plant & crop
ririvuana	'plant'	1		1	plant & crop
bereti	'bread'	3	1		food
aragogona	'garden'	1		2	garden
ginau	'thing'	6	25	4	unspecified
vataginau	'everything'	3		3	unspecified

It is noteworthy that the most common lexeme is the semantically fluid 'thing' (N=41). Most of the other nouns refer to edibles. It is also notable that no noun referring to animals appears in this list, despite three classifiers being eligible to be used with animals (*no-* for general possession, *bila-* for valuable possession and *ga-* for food possession). Some animal nouns occur only once, but others (*boe* 'pig', *ige* 'fish') appear in several tokens though always with the same classifier, the valuable possession *bila-* for 'pig' and the food possession *ga-* for 'fish'.

4.1.2 Stable variable

The corpus of natural speech collected for Raga allowed for an investigation of interspeaker variation in the encoding of alienable possession. Intergenerational variation that could point to a change in progress was also considered.

Speakers under the age of 25 offered fewer stories than their elders. When interviewed (by a native speaker) they kept to brief answers. Consequently, fewer indirect possessive constructions were extracted for this age group. The speakers were divided into three age groups: the young speakers under 25 years of age, the middle age speakers of ages between 25 and 50, and those over 50 years old. The pattern of distribution across the three age groups (Figure 2) shows proportionally more tokens of the general possession classifier for the younger speakers. This may be due to the young speakers' choice of possessed words, since it was revealed that young speakers pattern similarly to their elders in their selection of a possessive classifier for individual possessed nouns. In particular, there was no shift in the young group from the specialised markers (for food or valuable items) to the general possession marker.

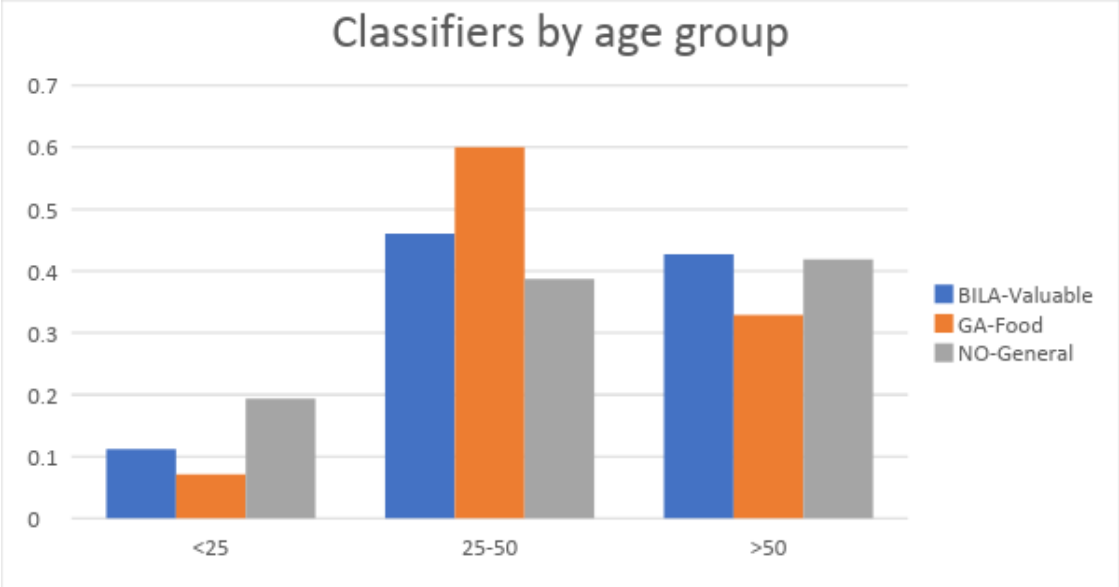

Figure 2. Tokens of classifiers by speakers age group

Statistical models were built to test the chances of observing one classifier versus the chances of observing another classifier, for the three classifiers that appeared in our data: *bila* 'valuable possession', *ga* 'food possession' and *no* 'general possession'.

Table 6 shows the best fit model[5] for each of the three sets of comparison, that is the model found to best explain the variance of the dependent variable for each pair. None of the best fit models include the independent variable age of speaker as the models including this factor fared worse than the models excluding it. This confirms that the speakers' age has no influence on the selection of a classifier. These tests also revealed that the variability tends to occur between the possessed nouns (as shown by the coefficients of determination).

Table 6. Best fit models for the three pairs of classifiers: bila 'valuable possession', ga 'food possession', no 'general possession'

PAIR OF CLASSIFIERS	INDEPENDENT VARIABLES				RANDOM EFFECT		TEST VS FULL MODEL	COEFFICIENTS OF DETERMINATION	
	AGE OF SP.	SEX OF SP.	TEXT TYPE	POSSD NOUN CAT.	POSSD NOUN	STD. DEV	X^2 P-VALUE	R^2M (EXCL.RE)	R^2C (INCL.RE)

1.*bila* to *ga*				✓	✓	3.4	0.097	97%	99%
2.*bila* to *no*				✓	✓	4.5	0.510	85%	97%
3.*ga* to *no*			✓		✓	15.9	0.277	1%	98%

4.2 NO- general possession

The marker *no-* establishes a broad range of relations between possessor and possessum. My corpus shows 346 such constructions. Just over half of the instances of possessive constructions with this marker occur in the interviews (N=179) and the nouns most frequently generally possessed included *rovoga* 'work' (N=25), *avoana* 'language' (N=24), *famili* the Bislama loanword for 'family' (N=15), and the terms for 'school, education': *sekulu*, *skul* and *hiḡehiḡe* (N=12). Another frequent occurrence of the general possession marker is its pronominal form *noda* /no^{n}da/ 'ours', (13) and (14), to designate the community language (N=30):

(13) *Tua-da* *geki* *Marie* *no-na* *na*
friend-1PL.INCL DEM Marie CLF.GENL-3SG DET

hiḡehiḡe *la* ***no-da.***
study LOC **CLF.GENL-1PL.INCL**

'Our friend Marie here, her study is on our language.' [MFD1-005-F16 0:29]

(14) *Avoana* *n̄an* *n̄oto* *nam* *av* *la* ***no-da,***
language only all 1SG.PROG speak LOC **CLF.GENL-1PL.INCL**

la *Bislamar.*
LOC Bislama

'I only speak fully in our language, (and) in Bislama.' [MFD1-005-F12 3:55]

Constructions with the possessive marker and no overt possessed noun are common in Raga and my corpus revealed several examples of this construction for *no-* and the food marker *ga-* as per example (25) and (26).

If possessive constructions with *no-* may express ownership (15), they express many different types of relations whose meaning can only be deduced from the context. Such relations can be of one's association with an institution or a group, a religious institution (16) or one's family (17):

(15) *ira* *vavine* ***no-ra*** ***tan̄bunia***
PL woman **CLF.GENL-3PL** **basket.of.precious.possessions**

no-ra ***ginau*** *n̄otoñoto*
CLF.GENL-3PL **thing** all

'the women, their basket of precious possessions, all their things'
[MFD1-003- F01 1:03]

(16) *Ta-men* *van* *lol* ***no-da*** ***uloilua.***

1PL.INCL-IRR go LOC **CLF.GENL-1PL.INCL** **church**
'We go to our church.' [MFD2-005-F23 5:18]

(17) *Inau mai ira* ***no-ḡu*** ***famli*** *ga-m* *domare.*
1SG CN PL **CLF.GENL-1SG** **family** 1PL.EXCL-PROG get.up
'Me and my family all get up.' [MFD1-003-F16 1:22]

A student-teacher relation:

(18) ***No-mai*** ***vagahi*** *mwa* *veve-a* *be…*
CLF.GENL-1PL.EXCL **teacher** 3SG. PROG say-3SG.OBJ REL
'Our teacher says that.' [MFD1-003-F13 6:31]

Kinship:

(19) ***No-ḡu*** ***tata*** *mai* ***no-ḡu*** ***mua*** *ra-m* *lai-au…*
CLF.GENL-1SG **dad** CN **CLF.GENL-1SG** **mum** 3PL-PROG take-1SG.OBJ
'Dad and mum take me…' [MFD1-005-F08 8:54]

A song performer (and perhaps composer):

(20) ***Iboi*** ***no-na***[6] *Motari Tatavola be nu*
song **CLF.GENL-3SG** Motari Tatavola REL 3SG.PRF

talañlañai *nitu-na.*
sing.in.mourning child-3SG

'Her song, that Motari Tatavola sang in mourning of her child.' [MFD1-002-M19 7:38]

The duration of one's activity:

(21) *Na-m* *lai* ***no-ḡu*** ***taro*** *ḡaoḡao* *la* *gamali.*
1SG-PROG take **CLF.GENL-1SG** **time** constantly LOC nakamal
'I spend a lot of time in the nakamal.' [MFD1-005-M02 11:43]

As reported in the section on direct possession, some nouns can take the possessum position in both direct and indirect construction (such as r*ovoga* 'work', *tano* 'place, home', *kapa* 'cover, roof', a Bislama loanword) and when they appeared in indirect constructions it was exclusively with the general marker *no-*.

Several possessed nouns referring to valuable possession are generally possessed: *tañbunia* 'basket of belongings' for women to store the traditional currency consisting of the dyed mats, the dyed mats themselves, *bwana* 'large mat' and *bari* 'small mat', and *homu* 'native money, national currency'. It is tempting to rule out economic possessions, such as these nouns referring to currencies, from the semantic category of nouns possessed with the valuable classifier *bila-*, but the lack of real ownership of a currency may be the possible explanation, as I will discuss in the next section.

The generally possessed nouns are too numerous to be listed but it is notable that:

- No possessed noun referring to animals (N=50) enters in construction with the general possessive marker
- Only two nouns referring to plant and crop are generally possessed
- Nouns designating language, activity, people, location, attribute (personal or group), currency and some part-whole are generally possessed. So are many belongings (except traditional ornaments), a few kin terms, except *vwavwa* 'aunt, most females in one's father's clan', and some nouns referring to gardens.

4.3 BILA- valuable possession

Cognates of *bila-* are found in north Vanuatu languages and are described in turn as 'natural entities' classifier (Hyslop, 2001, pp. 178-180, for Lolovoli *bula*) and '[p]ossessive classifier referring to economical possessions, *esp*. plants and possessed animals' for Araki *pula* (François, 2008). In Apma, the Pentecost language closest to Raga, the *bila-* classifier is 'used with natural resources which have some value to society: resources that are – or were – alive or that have the quality of a living things' (Schneider, 2010, p. 145).

With 89 tokens, *bila-* is the second most commonly used classifier in my corpus. In agreement with Vari-Bogiri's analysis (2011, pp. 114-115) and her detailed explanation of the special role and obligations of one's *vwavwa* 'most females in one's father's clan' (Vari-Bogiri, 2007), all possessed nouns found in my corpus featuring the *bila-* classifier fell under the categories of (a) living entities, (b) natural resources, (c) things and people of special cultural or personal value.

The classifier is associated with a range of semantic classes (as listed by Vari-Bogiri, 2011, p. 217), some of which I found in my corpus: animal, plant, crop, food garden, adornment, father's sister. These diverse categories can be regrouped under the label 'valuable possessions' (Vari-Bogiri, 2011, pp. 112-118).

Ownership of items precious to their owner, for cultural or personal reasons, is frequently the relationship encoded by *bila-*. This relationship has been discerned by young children who use *bila-* in relation to television sets, whereas adults around them use the general possessor *no-* with such items of modern technology (as reported by Anthinia Temakon pers. comm.). Conversely, objects used as a medium of exchange have no genuine owners, and this absence of a true owner may be the reason why, as valuable as they may be, currency items do not appear in possessive constructions with *bila-*. The polysemic *homu* 'bead, money, necklace' appeared in (elicited) constructions with *bila-* when meaning 'necklace' but in constructions with *no-* when meaning 'money'.

As another example of ownership, *bila-* applies to ornaments that one has paid for the right to wear, thus marking a relation of ownership with objects of special significance to the owner/wearer. When such ornaments have no identifiable owner, they seem to lose their status of valuable possession and the general classifier then applies (22).

(22) *Geki* *lala* ***no-n*** ***ihei?***
DEM bracelet **CLF.GENL-CST** **who**
'Whose bracelet is this?' (Anthinia, 35 - of a bracelet found lying on a table)

Reciprocity may have bearing in how we can understand the relations established by *bila-* between a range of possessed nouns and their possessor: a garden feeds its owners/labourers in return for their work, a *vwavwa* looks after her nieces and nephews who reciprocate by showing her respect and compliance, a pet that is well cared for will show loyalty to its owner.

In my corpus the classifier occurred with possessed nouns referring to plants and crops (N=26), to animals (N=26) kept as pets (dog, cat, turtle, porpoise), for rituals (pig) or for food (hen); the kin term *vwavwa* 'most females in one's father's clan' (N=16); nouns referring to types of gardens (N=9), *loloara* 'private garden' and *aragogona* 'taboo garden, communal garden'; personal attributes (N=1): *garigarivi* 'totem' and with belongings such as ornaments: *bwatibani* 'traditional bracelet'.

The nouns in position of possessum with the valuable possession classifier and the semantic categories that they may fall into are given in Table 7 below:

Table 7. Nouns in the role of possessum with the valuable classifier

POSSESSUM	GLOSS	TOKENS	CATEGORY
vwavwa	'aunt'	16	kin
malogu	'kava'	6	plant & crop
niu	'coconut'	5	plant & crop
bweta	'taro'	4	plant & crop
damu	'yam'	2	plant & crop
ihi	'banana'	2	plant & crop
manioko	'manioc'	2	plant & crop
mwele	'cycad'	2	plant & crop
ririvuana	'garden plant'	1	plant & crop
vwaigai	'fruit'	1	plant & crop
rau	'leaf'	1	plant & crop
ginau	'thing'	4	unspecified
vataginau	'everything'	3	unspecified
boe	'pig'	8	animal
vwiriu	'dog'	5	animal
toa	'hen'	5	animal
livoala	'tusked pig'	4	animal
ḡio	'porpoise'	1	animal
avua	'turtle'	1	animal
busi	'cat'	1	animal
borogai	'banded rail'	1	animal
loloara	'garden'	6	garden
ute loloara	'garden place'	2	garden
aragogona	'communal garden'	1	garden
garigarivi	'totem'	1	personal attribute
bwatibani	'bracelet'	1	belonging

Differences were noticed in the frequency of use of *bila-* between age groups and speakers, but these were due to the topic of the narratives, or the lack of possessive constructions in the text: in the speech of young speakers all but one utterance with *bila-* occurred with the possessed noun *vwavwa* 'most females in one's father's clan'. Nouns that may take *bila-*, for example 'garden', were often mentioned in the interviews of young speakers but as part of an enumeration of their activities, and not in possessive constructions. Most speakers confined their use of the construction with *bila-* to one category of possessed nouns, animals, plants, gardens, or custom ornaments, depending on the topic, and it is only for two (prolific and versatile) male speakers in their early 60s that the classifier was used in relation to three categories of nouns.

When elicited, the valued possession classifier was offered similarly by speakers of all ages and genders. It was hypothesised that its distinctiveness would make *bila-* the

classifier most likely to disappear in young Raga speakers, but the evidence refutes that hypothesis. In this corpus, the nouns listed above featured consistently in possessive constructions with *bila-* except for one token: *aragogona*[7] 'taboo garden, common garden' appears once with the general classifier *no-* in the speech of a 60-year-old man. In the construction *aragogona no-n Philip Vile* 'the taboo/communal garden of Philip Vile', this speaker meant that the possessum communal garden had been initially decided and designed by its possessor. The relation between possessor and possessum in this construction is not the one encoded by *bila-* of the person who owns and works the garden, hence the use of the general classifier *no-*.

Vari-Bogiri noted that the classifier was used with possessed nouns referring to 'recently introduced items such as radio, watch, guitar' (2011, p. 115). The surveyed data only partially confirmed her observation: *gai n̄utu* 'mobile phone' the compound noun created in Raga to avoid using the Bislama word (*gai* 'instrument', *n̄utu* 'to whisper') was elicited with *bila-*, but the Bislama loanword *fon* 'phone' was used with *no-*, both in the spontaneous speech of a 20 year-old male (23) and in elicitation.

(23) *Tata* *mwa* *hivo* ***no-n*** ***fon*** *mwa* *bano* *lol* *tahi.*
dad 3SG.PROG go.down **CLF.GENL-3SG** **phone** 3SG.PROG go LOC sea
'Dad went down, his phone fell into the sea.' [MFD1-003-M20 0:24]

In elicitations for 'watch' as a possessed noun, *bila-* was used when the timepiece was referred to with the Raga word *alo* 'sun', whereas it was the general classifier *no-* that was offered with the Bislama loanword *taem* for 'watch'. This suggests that the choice of the classifier rests on the origin of the noun possessum. However, the loanword *redio* 'radio' was elicited with *bila-* and, referring to a golden chain around my neck, constructions were elicited with the classifier *bila-* for the Raga possessed nouns *homu* 'necklace', *gao* 'rope', and the Bislama loanword *jen* 'chain'.

All speakers were consistent in using *bila-* with animals, whether in spontaneous speech or elicitation. For natural resources, possessive constructions shifted from *bila-* to the general classifier, the food classifier or the drink classifier, depending on the context of the utterance, or on the speaker's interpretation of a picture presented for elicitation. The picture of a bag of kava roots left on the beach for subsequent shipment elicited six general possession classifiers and one valued possession classifier. Taros in a kitchen, taros brought home from the garden by a group of boys, two girls holding a fruit, all these photos mostly elicited the food classifier *ga-* and one sole token of *bila-*. A photo of green coconuts on a table elicited mainly the drink classifier *ma-* but also the food classifier *ga-*, and the valuable classifier *bila-*. When the possessum falls in the category of natural resources (gardens, plants and crops) *bila-* appears to be the default classifier used in the possessive construction, but my corpus also reveals that in each utterance the speaker considered the intended use of the natural resources by its possessor.

4.4 GA- food possession

There were 70 tokens of the classifier for food possession in my corpus of spontaneous speech. The classifier for food possession was used in constructions with an overt possessum (N=38) with Raga words (such as *ige* 'fish', *batai* 'breadfruit', *loḡo* 'laplap', etc.) or nativised Bislama loanwords (i.e. *tini* 'tin food', *bereti* 'bread'). The classifier was also often used with *ginau* 'thing' (N=25) to refer to the possessor's food – or lack of food (24). There

is a word for food: *ginaganiana,* which occurred 23 times but only once in an indirect possessive construction, and with the food classifier.

(24) *Ah* ***ga-mai*** ***ginau*** *sigai.*
ah **CLF.FOOD-1PL.EXCL** **thing** NEG
'Ah, we had no food.' [MFD1-003-M10 6:35]

There were seven tokens of the food classifier with no overt possessum. These pronominal forms of the classifier established a relation between the suffixed possessor and a food item previously mentioned (25) or with unspecified food intended for the possessor (26).

(25) *'Na-v* *lai* *ihi* *ba* *ta-v* *gani-a' (…)*
1SG.FUT take banana CAUS 1PL.INCL-FUT eat-3SG.OBJ
'I will take (the) banana (bundle) so that we eat it' (…)

Mwa *harabora* ***ga-ra*** *vurihag̃e* ***ga-na.***
3SG. PROG divide **CLF.FOOD- 3PL** then **CLF.FOOD-3SG**
'She shares theirs (banana), then hers.' [MFD2-006-F08 6:47]

(26) *Ga-m* *kuki* ***ga-mai.***
1PL.EXCL-PROG cook **CLF.FOOD- 1PL.EXCL**
'We cooked (some) food for ourselves.' [MFD1-003-F13 3:22]

Table 8 gives nouns found in position of possessum with the food possession classifier:

Table 8. Nouns in the role of possessum with the food classifier

POSSESSUM	GLOSS	TOKENS	CATEGORY
ige	'fish'	24	animal
ginau	'thing'	25	unspecified
log̃o	'laplap'	5	food
makaroni	'noodles'	1	food
tini	'tin food'	1	food
bereti	'bread'	1	food
bigi	'meat'	1	food
bweta	'taro'	1	plant & crop
damu	'yam'	1	plant & crop
malogu	'kava'	1	plant & crop
sinu	'spinach'	1	plant & crop

Two tokens extracted from the recording of a 60-year-old speaker offer an illustration of the fluidity of the word *bereti* 'bread', a Bislama nativized loanword. The speaker first mentions his daily activity of preparing bread for the members of the community, and his relation to the possessum is encoded by the general classifier *no-* (27). He then mentions the group of people who buy the bread from him to eat, the relation between bread and bread-eaters being encoded with the classifier for food possession *ga-* (28).

(27) *Na-n* *to* *na-n* *lol* ***no-g̃u*** ***bereti.***

1SG-PRF stay 1SG-PRF make **CLF.GENL-1SG** **bread**
'I started making my bread.' [MFD1-003-M07 0:37]

(28) *Ra-m* *mai* *ra-m* *bol* *vuvuri* ***ga-ra*** ***bereti.***
3PL-PROG come 3PL-PROG buy then **CLF.FOOD-3PL** **bread**
'They come to buy bread for them to eat.' [MFD1-003-M07 0:44]

4.5 MA- drink possession

The classifier for drink possession did not appear in my corpus. There were talks of drinking (kava and water) but no possessive construction came into play. The mass noun for water (*wai*) is not commonly used in possessive constructions, except when it is used in the compound *wai aruaru* 'hot water, tea' or when it refers to the village's water supply, in which case it comes with the general possession classifier *no-* (29).

(29) *Ta-men* *lol* *rovoga-n* ***no-da*** ***wai.***
1PL.INCL-IRR make work-CST **CLF.GENL-1PL.INCL** **water**
'We are about to work on our water supply.' [MFD1-005-F13 4:46]

The drink classifier has been elicited from a picture showing a cup of tea, and in six out of seven, speakers used the drink classifier to refer to 'his/her tea'. When presented with a photo of a green coconut (*niu)* on the table, four speakers used *ma-* (*niu ma-n Marie* 'Marie's coconut to drink'), two used *ga-* (*niu ga-n Marie* 'Marie's coconut to eat') and one *bila-* (*niu bila-n Marie* 'Marie's personal coconut'*).*

4.6 WA – sugarcane possession

There was no mention of this classifier in my corpus of spontaneous speech, the classifier did not appear in any text I had access to, and I had overlooked trying to elicit the term as a possessum. However, according to two speakers, an elderly woman and a woman in her mid-thirties, it appears that this classifier, uniquely used for sugarcane possession, has fallen out of use and been replaced by the food classifier. In two separate conversations, both speakers proposed the food possession classifier *ga-* for sugarcane possession. The younger speaker gave me this example (30) when explaining to me that sugarcane is chewed (*gas* 'to bite'*)* and not eaten, since the fibres are spat out.

(30) *Na-m* *gās* ***ga-ku*** ***toi.***
1SG-PROG bite **CLF.FOOD-1SG** **sugarcane**
'I eat my sugarcane.'

Vari-Bogiri (2011, p. 114) provides an example with *wa-* classifier but the source of this example is difficult to establish (2011, p. 23). It is however possible that the classifier is still being used by pockets of speakers.

5 Conclusion

This survey discovered no apparent time, intergenerational evidence of variation and change in speakers' use of the possessive classifiers. The unique classifier for sugarcane possession

has fallen out of use and been replaced by the food possession marker, and the status of the drinkable possession classifier could not be assessed since it was elicited but not used in spontaneous speech. All three other classifiers previously described are productively used by all speakers.

When a noun is in possessum position, its semantic class has bearing on the possessive construction and classifier it selects. By and large, kinship, part of a whole and location NPs are directly possessed, and this includes some lexical terms borrowed from the national language, Bislama. Owned objects, animals, plants and crops are indirectly possessed. Semantic classes present exceptions in their selection of a type of construction: one kinship term is indirectly possessed with the valuable possession marker *bila-* while possessed items that one would consider valuable are not found in constructions with the valuable possessive marker; nouns referring to personal attributes may appear in direct or indirect constructions, and the selection criteria may be along nominal formal classification.

This study established that we do not see a shift from direct to indirect possession, and that direct possession is a productive system in Raga, with loanwords in possessum position morphologically adapted to Raga direct possessives. The overall stability of the variable across generations and the maintenance of its direct possessive system adds to the Raga language's conservatism. Concerning possessive constructions, this aspect of conservatism correlates with the adherence to traditional social structures that was observed by this author in north Pentecost, in agreement with Aikhenvald's comment (2013, p. 47) that '[m]eanings encoded within possessive structures often reflect the relationships within a society, and change if the society changes.'

This corpus of natural speech presented an opportunity to quantify the actual fluidity of Raga nouns. It was revealed that if, on account on their semantic category, some nouns can select from a range of classifiers when in possessum position, these nouns rarely occur with different classifiers, confirming what was speculated by Pawley and Sayaba (1990). The reasons may be multiple, but it is striking that even in the development of a long narrative, speakers settle for one semantic aspect of a possessed noun.

Notes

1. Frank supervised my descriptive work on the language of Atchin, Vanuatu (Duhamel, 2010) and prior to that I attended his course on functional grammar and typology. I only knew Frank in the context of academia, but I want to salute the kindness and availability that he never failed to show in his guidance of my first fieldwork and data analysis. It was also Frank who encouraged me to apply for the doctoral position I am currently holding with the Wellsprings of Linguistic Diversity project. His colleagues of many years are better placed to recount the breadth and depth of his scholarship in Oceanic linguistics, but I wish to acknowledge that under Frank's supervision I felt well prepared and motivated to continue with documentation work on the lesser-known languages of the Pacific region.
2. Raga orthography: g stands for /ɣ/, g̃ for /ᵑg/, ñ for /ŋ/.
3. Except where mentioned, all examples are from my recordings collected in north Pentecost in 2015-2017. These recordings are archived with PARADISEC under the collections labelled MFD1 and MFD2 at http://www.paradisec.org.au/collections/.
4. I would like to thank the Wellsprings of Linguistic Diversity Laureate project awarded by The Australian Research Council to Professor Nicholas Evans of the Australian National University for giving me the opportunity to carry out extensive fieldwork on Pentecost island, Vanuatu.
5. The model used for this categorical dependent variable was the binomial generalised linear mixed-effect model (GLMM), which allows for including fixed effects and random effects in the statistical tests. The tests were run in the R package lme4 (R Core Team, 2013).
6. This is an unusual construction. *No-n iboi* 'her song' was the expected construction, but the left-dislocation of the topic, the object of the verb *talañlañai* 'sing.in.mourning', may call for the possessum *iboi* 'song' to precede the possessive marker.
7. *Aragogona (ara* 'fence', *gogona* 'taboo'*)*. The location, allocation, planting and harvesting of these communal gardens are decided by community leaders during a traditional ceremony and their regulations are strictly enforced.

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