1. Direct and indirect possessor-indexing

Most Oceanic languages encode possession in two distinct ways, prototypically associated with inalienable and alienable relationships respectively. One, termed ‘direct possession’ in the Oceanist literature, involves direct possessor agreement suffixation of the possessum noun, shown for Kokota (Palmer n.d.a., 2002, f.c.) in (1).

(1)  
1. nene-\textit{gu} (ara)\textsuperscript{2}  
\hspace{1em} ART.SG leg-1SG.PSSR I  
\hspace{1em} ‘my leg’ (Kokota)

The other, termed ‘indirect possession’, involves agreement marking of one of a small closed set of forms that precede the possessum noun. Many Oceanic languages have exactly two indirect host forms in this closed set. In these languages the forms always function to distinguish items intended for consumption (as in (2)b.) from a residual category of general possessions (as in (2)a.), as is the case in Kokota:

(2) a.  
1. no-\textit{gu} suga (ara)  
\hspace{1em} ART.SG GENPOSS-1SG.PSSR house I  
\hspace{1em} ‘my house’ (Kokota)

b.  
1. ye-\textit{gu} kaku (ara)  
\hspace{1em} ART.SG CONSPOSS-1SG.PSSR banana I  
\hspace{1em} ‘my banana (which I intend to eat)’ (Kokota)

In some Oceanic languages only one indirect possessor-indexing host occurs, as in Torau (Palmer n.d.b.):

(3) a.  
1. \textit{enele-\textit{gu}}  
\hspace{1em} leg-1SG.PSSR  
\hspace{1em} ‘my leg’ (Torau)

b.  
1. a-\textit{gu-na} ruma  
\hspace{1em} POSS-1SG.PSSR-SG house  
\hspace{1em} ‘my house’ (Torau)

c.  
1. a-\textit{gu-na} aniani  
\hspace{1em} POSS-1SG.PSSR-SG food  
\hspace{1em} ‘my food item’ (Torau)

\textsuperscript{1} The support of AHRC grant B/RG/AN4375/APN19365 is gratefully acknowledged.
\textsuperscript{2} Abbreviations used in glosses are: 1 = 1st person; DRINKPOSS = ‘drinkable’ possessor-indexing host; PNLOC = locative proper noun; IEXC = 1\textsuperscript{st} person exclusive plural; EDPOSS = ‘edible’ possessor-indexing host; POSS = possessor-indexing host; 2 = 2\textsuperscript{nd} person; FOC = focal proclitic; PRES = present tense; 3 = 3\textsuperscript{rd} person; FUT = future tense; PSSR = possessor-indexing; ART = article; GENPOSS = general possessor-indexing host; RL = realis modality; CONSPOSS = ‘consumable’ possessor-indexing host; PERF = perfective aspect; SBRD = subordinator; DEM = demonstrative; PL = plural; SG = singular
In others three occur, in which case the consumable category is further differentiated into an edible category and a drinkable category, as in Standard Fijian (Geraghty 1983; Schütz 1985):

(4) a. na \textit{ulu-ŋgu} (yau)  
    ART leg-1SG.PSSR I  
    ‘my leg’ (Standard Fijian)

b. na \textit{ke-ŋgu} \textit{ma-rai}  
    ART EDPOSS-1SG.PSSR bread  
    ‘my bread’ (Standard Fijian)

c. na \textit{me-ŋgu} \textit{yaŋgona}  
    ART DRINKPOSS-1SG.PSSR kava  
    ‘my kava’ (Standard Fijian)

Most Oceanic languages have exactly one, two, three or four such host forms. (Ross 2005)

The issue at stake in this paper is the syntactic status of these ‘indirect’ possessor-indexing host forms, and the structure of the NPs in which they occur. This issue will be investigated with special reference to Kokota.

2. Traditional analysis

It has traditionally been assumed that these possessor-indexing hosts are classifiers, syntactically functioning as dependents modifying a head noun located to their right.

This analysis is somewhat problematic as many Oceanic languages, including Kokota, are left-headed, with NP modifiers following the head noun, not preceding it, as (5):

(5) a. \textit{(ira) mane tove=ro}  
    (ART.PL) man old=DEM  
    ‘those old men’ (Kokota)

b. \textit{(ira) mane dou=ro}  
    (ART.PL) man be.big=DEM  
    ‘those big men’ (Kokota)

c. \textit{(ira) mane vave=ro}  
    (ART.PL) man in-law=DEM  
    ‘those men [who are] in-laws’ (Kokota)

Lexical post-head modifiers in Kokota may be one of a very small closed class of adjectives, as in (5)a., a verb ((5)b.), or noun ((5)c.), and may be followed by a demonstrative. The NPs in (5) are left headed, within left headed DPs with an optional specifier \textit{ira} (a plural article).

Summary

The possibility that indirect possessor-indexing hosts in languages like Kokota are not classifiers that function syntactically as pre-head modifiers, as traditionally assumed, but instead are the syntactic head of the NP in which they occur, has never been properly tested. This paper begins to test that hypothesis by examining these hosts in Kokota in the light of criteria for headhood, and for classifiers status.
3. Indirect possessor-indexing hosts as classifiers

We agree with Lichtenberk’s (1983) argument that these hosts mark a relationship between possessor and possessum, but argue that the notion classifier here is particularly problematic.

3.1 Possessor-indexing hosts as encoders of relationships.

Lichtenberk (1983) argues that forms in Oceanic such as those under investigation here are relational classifiers. He argues that they do not classify the nouns with which they occur, but instead classify the relation that holds between the possessum and possessor.

Kokota behaves in a way which accords with Lichtenberk’s (1983) claim that indirect possessor-indexing forms mark the actual relationship between possessor and possessum, rather than classes or types of nouns or their referents. A single N in Kokota may be possessor-indexed using either indirect host, or indeed using direct possessor-indexing, depending on the semantic relationship between its referent and the referent of the possessor NP. In (6)a. the leg is in a part-whole relationship between its referent and the referent of the possessor NP. In (6)b. it is intended to be eaten, perhaps the leg of a chicken or pig that the possessor intends to eat; while in (6)c. it is a leg intended for some other purpose, such as the leg of a dismantled table intended to be used for firewood or as timber.

(6) a. nene-\text{gu} \\
\quad \text{leg-1SG.PSSR} \\
\quad \text{‘my leg (of my body)’ (Kokota)}

b. ye-\text{gu} \quad nene \\
\quad \text{CONSPOSS-1SG.PSSR \quad leg} \\
\quad \text{‘my leg (which I intend to eat)’ (Kokota)}

c. no-\text{gu} \quad nene \\
\quad \text{GENPOSS-1SG.PSSR \quad leg} \\
\quad \text{‘my leg (for some other purpose)’ (Kokota)}

So, the possessor-indexing host actually marks the nature of the relationship between the possessed noun and the possessor.

Even an independent physical entity may be possessed variably. In (7)a. the bird is referred to as an ordinary possession such as a pet. In (7)b. it is thought of as being intended for eating. This may refer to bird meat, or to a living bird that is intended to be killed and eaten. In (7)c. the bird is thought of as being in an inalienable relation to the place to which it is endemic.

(7) a. (ia) no-\text{gu} \quad memeha (ara) \\
\quad \text{ART.SG \quad GENPOSS-1SG.PSSR \quad bird \quad I} \\
\quad \text{‘my bird (as ordinary possession)’ (Kokota)}

b. (ia) ye-\text{gu} \quad memeha (ara) \\
\quad \text{ART.SG \quad CONSPOSS-1SG.PSSR \quad bird \quad I} \\
\quad \text{‘my bird (intended to be eaten)’, ‘my bird meat’ (Kokota)}

c. kaike \quad memeha-na \quad Australia \\
\quad \text{one \quad bird-3SG.PSSR \quad PNLOC} \\
\quad \text{‘an Australian bird’ (Kokota)}
However, Lichtenberk (1983) does not take his argument to its logical conclusion. If these forms refer to relations that hold between entities, and do not classify nouns or their referents, they do not conform to the standard notion of a classifier as classifying nouns. As possessor-indexing hosts in languages such as Kokota do not classify either nouns or their referents, either they are therefore not classifiers, or the term classifier must be redefined more broadly. If the term ‘classifier’ is redefined, then some other way needs to be found to distinguish between the classification of nouns or their referents, and relationships that hold between participants. This distinction would then place possessor-indexing hosts outside the definition of the narrow group of forms that classify nouns or nominal referents, a group that corresponds to the standard notion of ‘classifier’. Either way, Oceanic possessor-indexing hosts in languages such as Kokota do not satisfy the functional criteria for the standard notion of classifier.

Grinevald (2000:66) claims that ‘genitive classifiers’ (including those in Oceanic) are “usually bound to the mark of the possessor, while semantically classifying the possessed.” This is not in fact the case in Oceanic. Indirect possessor-indexing hosts have a tighter syntactic relationship with the possesum noun than the possessor NP, and classify the relationship between the possessor and possesum, not a possesum noun or its referent.

Because they refer to and classify the relation between two participants, rather than the participants themselves, they are the functionally most important constituent in the phrase. This means that the possessor-indexing host is a ‘semantic head’ (Zwicky 1985:4): the relationship itself between the possessor and possesum is the most important information and the possesum noun further specifies this. Possessor-indexing hosts are therefore functionally consistent with being head.

The fact these possessor-indexing hosts mark the relationship between possessor and possesum mean that there are strong parallels as far as this dimension is concerned with Wilkins’ (2000) analysis of classifier constructions in Arrernte. Wilkins (2000:206-208) argues that the classifier construction in that language is more accurately represented as a ‘generic-specific construction’, in which forms traditionally described as classifiers are in fact generic nouns whose referents are specified in more detail by an accompanying noun. We argue that in the relevant Oceanic languages a more extreme form of this functional relationship exists. We argue that Standard Fijian, for example, has exactly three generic nouns, meaning respectively ‘possessed item’, ‘item intended to be eaten’, and ‘item intended to be drunk’. Kokota has exactly two, meaning respectively ‘possessed item’ and ‘item intended to be consumed’, while Torau has exactly one, meaning ‘possessed item’.

Summary

The possessor-indexing hosts are relational in the sense of Lichtenberk (1983), but this property could also be seen to put their status as ‘classifiers’ in question.
3.2 Possessor-indexing hosts and classifier criteria

There are a number of criteria which crop up in the literature on classifiers (eg. Dixon 1986, Grinevald 2000)

Key among these are that classifiers:

- do not classify all nouns (Dixon 1986:106; Grinevald 2000:62)
- comprise an open class of a largish number of items (Dixon 1986: 106; Grinevald 2000:62)
- function primarily to individuate referents (Grinevald 2000:74-76)
- only occur in NPs which are referential (an assumption implicit in most literature on classifiers, though rarely stated explicitly).

Possessor-indexing hosts in most Oceanic languages fail to conform to these criteria.

Exhaustive ‘classification’

In Oceanic languages like Kokota, either possessor-indexing host may occur with almost any common noun, subject to pragmatic or semantic compatibility. Grinevald (2000:66) claims that a ‘genitive classifier system’ “selects a limited set of nouns of the language for classification: they are nouns they appear to have high cultural significance”. They “select particularly essential objects of the environment to be obtained or owned to attend to one’s basic survival needs” (Grinevald 2000:78) Again this is not the case in Oceanic languages with indirect possessor-indexing hosts such as Kokota. In these languages, every common noun may be possessed, and if not participating in a direct possessive construction, must occur with an indirect possessor-indexing host, even if their referent is of absolutely no cultural significance whatsoever. Indeed, there is a tendency in Oceanic for items of high cultural significance to be directly possessor-indexing, and not employ an indirect host at all.

Closed class items

Oceanic indirect possessor-indexing hosts in most Oceanic languages belong to a very small closed class, consisting in languages such as Kokota of exactly two items, in languages such as Standard Fijian exactly three, and in languages such as Torau just a single item.

Individuation

Individuation is often seen as a key property of classifiers (see Grinevald 2000:74-76 and references there). The idea is that the nouns which undergo classification are concept nouns and that individuation is a process of making these nouns more concrete, typically in relation to quantification. Grinevald (2000: 75) illustrates this using English examples:

(8) Mass vs Count
    a lot of furniture many pieces of furniture

While the details of this differ cross-linguistically, a key point is that the concept noun (such as furniture) needs a classifier in order to be individuated in some way. This should primarily explain why there are gaps in noun classification, as there will be nouns which do not require individuation through classifiers.
It is clear that the possessor-indexing hosts under discussion do not fit this view of classifiers. Because they describe a relation between possessor and possessum, the classification does not involve a partition of nouns into ‘concept’ and ‘non-concept’, and the system, while allowing for nouns to enter into multiple classification relationships, has very few gaps.

*Non-referentiality*

In many Oceanic languages, possessor-indexing hosts may be used non-referentially, occurring without a more specific referent than ‘possessed item’ or ‘item intended to be consumed’, and without a referent identifiable from the discourse or discourse context. In (9), for example, the referents of the highlighted possessor-indexing hosts are generic, referring only to possessions and food, without any more specific referent intended by the speaker, and are newly introduced into the discourse, lacking antecedents or referents in the discourse context.

(9)  

\[
\text{teo boka mai au-na yai ade,} \\
\text{be.not be.able come exist-DEM weEXC here} \\
\text{‘We can't come and live here,} \\
\text{nafu-na n-a-ye zaho koko-di} \\
\text{base-3SG.PSSR RL-1.SBJ-PRES go.away leave-3PL.OBJ} \\
\text{because we would leave behind} \\
\text{ira ye-mai no-mai eu, huhurani} \\
\text{ART.PL CONSPPOSS-1EXC.PSSR GENPOSS-1EXC.PSSR EMPH PNLOC} \\
\text{our food and our things, at Huhurangi.} \\
\text{ta mai au-la yai ade,} \\
\text{SBRD come exist-COND weEXC here} \\
\text{If we come and live here,} \\
\text{a-ke mai siko yinai,} \\
\text{1.SBJ-PERF come steal FUT} \\
\text{we would come and eventually steal} \\
\text{ka=ira ye-di no-di eu mane} \\
\text{LOC=ART.PL GENPOSS-3PL.PSSR CONSPPOSS-3PL.PSSR EMPH person} \\
\text{from the food and things of the people} \\
\text{n-e-ke kusu au-de ade} \\
\text{RL-3.SBJ-PERF be.first exist-DEM here} \\
\text{who already live here.’ (Kokota)}
\]

If possessor-indexing hosts can be non-referential, as they are in (9), this precludes the possibility that they must be specific.

*Summary*

Possessor-indexing hosts in Oceanic languages such as Kokota fail to have a number of important properties typically associated with ‘classifiers’. The traditional assumption that these items are classifiers implicitly precluded their analysis as NP head, classifiers being
defined by Dixon (1986:108) in part as occurring “in syntactic construction with the head noun.” The failure of possessor-indexing hosts to meet the criteria for classifier status opens the possibility that they are the head of the constructions in which they occur.

4 Possessive forms as head

We argue that these indirect possessor-indexing hosts meet key criteria for headhood, specifically: obligatoriness, distributional equivalence, category determinance, and morphosyntactic locushood. (Zwicky 1985, 1993).

4.1 Obligatoriness

In Oceanic languages such as Kokota, indirect possessor-indexing hosts are obligatory, while the adjacent fully specified possesum noun is optional, as a comparison of (10)a.-b. shows.

(10) a. n-e ŋa-di mane i ye-gu kaku=ro
   RL-3.SBJ eat-3PL.OBJ s/he CONSPOSS-1SG.PSSR banana=DEM
   ‘He ate my bananas.’ (Kokota)

b. n-e ŋa-di mane i ye-gu=ro
   RL-3.SBJ eat-3PL.OBJ s/he CONSPOSS-1SG.PSSR=DEM
   ‘He ate my food.’ (Kokota)

c. n-e ŋa-di mane i malajau=ro
   RL-3.SBJ eat-3PL.OBJ s/he food=DEM
   ‘He ate that food.’ (Kokota)

In discussing obligatoriness and heads, Zwicky (1993:297) points out that while heads are the required element in a construction, it is possible to treat heads as elided. For example, Zwicky gives the Verb Phrase turkey in I ate chicken, and Kim turkey as grammatical but elliptical and missing the verb head ate. The crucial point is that the interpretation of the phrase is dependent on context and the ability to recover a missing head. This is why ate in Zwicky’s example is elided, rather than simply absent from the clause.

However, this does not apply to examples such as (10)b. Instead, the NP can be fully interpreted without recourse to a recoverable nominal referent. The lack of a referential noun in (10)b as opposed to (10)a is connected with the possibility that the referent need not be specific. This was demonstrated in (9), where the possessor-indexing hosts are non-referential, requiring that they be non-specific.

Summary

It cannot be claimed that in examples such as (10)b. the object NP is in fact the same as that in (10)a., with the nominal head elided because it is recoverable from the discourse, by having an anaphoric referent, or being present at the time of utterance. Section 3.2.3 demonstrated that possessor-indexing hosts may be non-referential. The data in (9) showed NPs with possessor-indexing hosts that are non-referential and therefore cannot require recourse to an elided referential noun for interpretation.
4.2 Category determinant

Because indirect possessor-indexing hosts are the only obligatory element in phrases in which they occur, they must logically be therefore the category determinants for those phrases.

4.3 Distributional equivalence

Indirect possessor-indexed hosts are distributionally equivalent to clearly lexical nouns in languages such as Kokota.

Distribution as sole form in object NP

Examples (10)b. and c. show comparable distribution as the sole overt form in an object NP.

Collocation with specifying bare N

In (10)a. the host occurs immediately followed by a bare N which specifies more precisely the nature of the referent, directly paralleling the modification of clearly lexical nouns as in (5)c., where the head noun is modified by a following single bare noun specifying in more detail the nature of the head’s referent.

Participation in incorporation

Possessor-indexing hosts in Kokota participate in incorporation in a way that parallels that of clearly lexical nouns.

In Kokota incorporation the undergoer N occurs immediately adjacent to an intransitive form of a potentially transitive verb. In (11)a. there is no incorporation. This can be seen by the presence of object-indexing on the verb, and the word order VSO. Kokota has a pragmatically unmarked word order VSO. The order VOS also occurs when the subject is in a clause-final focus position. However, in this construction overt focus marking of the S is obligatory, as (11)b. illustrates.

(11) a. $n\-a$ ña-di ara kaku ide
   RL-1.SBJ eat-3PL.OBJ I banana DEM
   V S O
   ‘I’m eating these bananas.’ (Kokota)

   b. $n\-a$ ña-di kaku ide si-ara
   RL-1.SBJ eat-3PL.OBJ banana DEM FOC-I
   V O S
   ‘I’m taking these bananas.’ (Kokota)

In (12), however, the undergoer/object noun is incorporated. This can be seen by the lack of object-indexing on the verb, and the presence of the undergoer N between the verb root and the subject NP in a clause lacking focus marking of the subject required in a VOS clause.

(12) $n\-a$ ñau kaku ara
   RL-1.SBJ eat banana I
   V S
   ‘I’m eating bananas.’ (Kokota)
Unusually, Kokota allows incorporation of nouns referring to possessed entities:

(13) \textit{n-a ŋau ye-gu kaku}  
    RL-1S eat CP-1SGP banana  
    ‘I’m eating my bananas.’

Indirect possessor-indexed forms behave in the same way as clearly lexical nouns in that they may be incorporated without a specifying nominal:

(14) \textit{n-a ŋau ye-gu (ara)}  
    RL-1.SBJ eat CONSPOSS-1SG.PSSR I  
    ‘I’m eating my food.’ (Kokota)

The clause in (14) may be compared with (15):

(15) \textit{n-a ŋau malajau (ara)}  
    RL-1.SBJ eat food I  
    ‘I’m eating food.’ (Kokota)

This contrast directly parallels that seen with the unincorporated NPs in (10), with (13), (14) and (15) paralleling (10)a., b. and c. respectively. As in (10), the key semantic distinction here is between (14) and (15), where we claim the NPs have different heads, rather than between (14) and (15), where we claim that the NPs have the same heads.

4.4 Morphosyntactic locus

By hosting the possessor-indexing suffixes, these hosts are the morphosyntactic locus of the construct in which they occur, as they mark the relation between that construct and the external possessor.

Even given the possibility that the head need not always be the morphosyntactic locus cross-linguistically, we should bear in mind that viewing the possessor-indexing hosts as non-heads complicates the syntax of possession marking in the relevant languages. On the one hand we would need to make reference to the right edge of the phrase to place the possessor-indexing in the direct construction in (16)

(16) \[(ia) \ [nene-gu]\]

On the other hand, we could not easily do this for the indirect possessor-indexing in (17).

(17) \[(ia) \ [no-gu suga]\]

By interpreting the possessor-indexing host as head the morphosyntax of possessor-indexing can be seen to be consistent in (16) and (17). The indexing morphology simply attaches to the head.

Summary

Treating the possessor-indexing hosts as heads fits with them being morphosyntactic loci, and it makes it simple to state where possessor-indexing is located in the phrase.
5. Conclusion

We argue that possessor-indexing hosts in many Oceanic languages function as the syntactic head of the phrase in which they occur. This allows a simpler, unified analysis of the morphology and syntax of NPs in the relevant Oceanic languages. For example, in Kokota:

- NPs with and without indirect possessor-indexing hosts are left-headed;
- a single post-head position exists in which a bare N may occur specifying in detail the nature of the head - in NPs without possessor-indexing this may specify in more detail the nature of the referent of the head (as in (5)c.), while in NPs displaying possessor-indexing, it specifies in more detail the nature of the possessum (as in (2));
- possessor-indexing morphology attaches to the head of any NP expressing a possessed entity (as in (16) and (17)).

We argue that these possessor-indexing hosts are not classifiers that modify a possessum noun, as typically claimed, but are directly possessed generic nouns, and that the possessum noun fills an NP post-head modifier position, specifying the nature of the possessed entity.

This challenges traditional assumptions about the morphosyntactic behaviour and function of such forms in Oceanic. We also draw attention to aspects of the typology of classifiers which have not been clearly explicated in the existing literature, specifically a lack of clear distinction between forms which encode information about a nominal or its referent, and those which refer to a relationship that holds between entities, and the extent to which the latter category may be regarded as classifiers at all.

References


Palmer, Bill, n.d.a., Kokota field notes.
--- n.d.b., Torau field notes.


