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How referential is agreement? The interpretation of polysynthetic dis-agreement morphology in Ngalakgan.¹

With respect to argument affixes in polysynthetic languages, authors (e.g. Jelinek 1984, Simpson 1991, M. Baker 1996) have generally taken one of two positions. Either these affixes should be regarded as agreement markers, or as pronominal arguments ('anaphors'). In this paper I argue that there is a three-way division in the morpho-syntactic and referential behaviour of argument prefixes in Ngalakgan: bound anaphoric pronouns, agreement affixes, and a third category which cannot be properly characterised either as an agreement marker nor as an anaphor. I call this category 'pronominal generic affix'. Referentially, the generic affixes have affinities with incorporated generic nouns, and need not agree with a coreferential argument. In the case of Ngalakgan, the question of whether argument affixes constitute 'agreement' markers or 'anaphors' is unanswerable. We must instead ask to what extent such affixes ever constitute a referentially homogenous class.

1. Introduction

A defining characteristic of polysynthetic languages is the presence of verb affixes indexing (usually) up to two arguments of a transitive verb, and sometimes three arguments of a trivalent verb. Controversy has been long-standing over whether such affixes constitute arguments of the verb, or whether they merely agree with the nominal arguments, which may be covert (e.g. Jelinek 1984, M. Baker 1996, Simpson 1991, Evans 2000). In such discussions, it is usually the case that affixes are regarded as a group, with little or no attention paid to the differences between, for example, those indexing first and second persons as against third persons.²

My purpose in this paper is to show that affixes which constitute a class morphologically nevertheless must be examined for their morpho-syntactic and referential characteristics individually. Upon such an examination of the argument affixes of Ngalakgan, we find that they do indeed have distinct characteristics; these are examined in §2. Argument affixes differ in the degree to which they are obligatory in a clause (§2.1). They also differ in their ability to occur with co-referential external nominals (§2.1), as well as under the scope of 'indefiniteness'- or 'non-specificity'-introducing operators such as question words and negation (§2.2). In the case of the argument prefixes indexing referents from the two inanimate genders or noun classes (vegetable and neuter), argument prefixes differ in the degree to which they must strictly agree with a co-referential nominal (§2.3). Since the 'dis-agreement' phenomenon in Ngalakgan is interesting for theories of the function of bound agreement morphology, I

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²Bresnan and Mchombo (1987) differentiate between subject and object pronominal affixes in Chichewa.

examine it in some detail in §3. I conclude that the inanimate argument prefixes in Ngalakgan serve to delimit the extension of a noun independently of the nominal expression itself.

Such evidence points to a four-way division of argument affixes in Ngalakgan, and hence forces a reformulation of the question of whether argument affixes constitute arguments or agreement. Rather, we must ask ‘Which affixes constitute arguments, and which constitute agreement? And are there any unifying factors between languages?’ I suggest in conclusion that there are some discernible ‘universal’ tendencies of reference in pronominal paradigms.

In what follows I initially describe the characteristics and distribution of the argument affixes of Ngalakgan (§1.1), before moving on to examine their behaviour in ‘reference-delimiting’ constructions (§2).

1.1 The paradigm of argument prefixes in Ngalakgan

Ngalakgan is an Australian language spoken by a handful of old people in the middle Roper river area of southern Arnhem Land.³ It belongs to the Gunwinyguan (GN) family-level subgroup (Alpher, Evans, and Harvey 1999), perhaps the largest and best described of the non-Pama-Nyungan or ‘Northern’ languages, many of which, including Ngalakgan, are polysynthetic.

Ngalakgan verbs take prefixation for a maximum of two core arguments which I will term ‘subject’ and ‘object’.⁴ Table (1) sets out the person/number/noun class categories of Ngalakgan verb agreement, using the monovalent prefixes to intransitive verbs. Note that third person singular *animate* subjects are represented by \emptyset in the table.⁵

³The language was first described by Merlan (1983).

⁴In the case of trivalent verbs such as ‘give’, the object prefix is co-referent with the ‘dative’ object in English, for example ‘us’ in ‘he gave us some food’; see example (43) below.

⁵The standard orthography for Ngalakgan is as follows: short and mostly voiced stops are written *b, d, rd, j, g* syllable-initially, and *p, t, rt, tj, k* syllable-finally and represent bilabial, apico-alveolar, apico-postalveolar, lamino-postalveolar and velar articulations respectively. Accordingly *pb, td, rtd, tjj, kg* represent geminate (long, tense, and voiceless) versions of the same stops. Glottal stop is written *h*. Nasals corresponding to the stops are *m, n, rn, ny, ng*, laterals *l, rl*, tap *rr* and labio-velar, retroflex and palatal approximants *w, r, y*. The digraph *nk* represents an alveolar nasal followed by a velar stop [nk], whereas the homorganic cluster [ŋk] is written *ngg*. Clusters are simplified orthographically: *nj* and *ntj* represent homorganic and heterorganic clusters [ŋc], [nc] respectively. Postalveolar clusters (only [ŋ], [tʃ] are possible) are written *rnd, rtd*. The contrast between alveolar and post-alveolar apicals is neutralised in initial position in word-level morphemes (those separated by #, ‘-’ or ‘=’). Apicals in these positions are predictably postalveolar following a vowel (with or without an intervening glottal stop) and alveolar otherwise, subject to assimilation. These morpheme-initial apicals are written as alveolars *n, d, l*. Loanwords from Kriol or English are underlined in the examples *gu-di* ‘tea’.

Table (1): Intransitive prefixes

1st singular	<i>ngu-</i>	1st exclusive plural	<i>yirri-</i>
1st inclusive dual	<i>yi-</i>	1st inclusive plural	<i>ngurru-</i>
2nd singular	<i>nginy-</i>	2nd plural	<i>nurru-</i>
3rd non-plural	\emptyset -	3rd plural	<i>burru-</i>
NEUT	<i>gu-</i>		
VEG	<i>mu-</i>		

I will refer to these prefixes as ‘argument prefixes’; this is to be interpreted as ‘prefixes which index arguments’. Until the conclusion, I will not prejudice the analysis of these morphemes as pronominal arguments or agreement markers.

Transitive prefixes in some cases are clearly segmentable into two component prefixes from Table (1), as in *yirr-mi-* (1pS-VEG), *ngurr-bu-* (12pS-3p-), particularly those where one argument is a SAP and the other is 3rd person.⁶ The order of elements in prefixes is determined by referential hierarchy such that SAP > 3pl > 3nonpl (where ‘>’ means ‘occurs before’). SAP objects are distinguished from SAP subjects with object allomorphs ending in an apical nasal *-N*: *yirrirn-bi-na+n* (1pO-3p-see+PR) ‘they see us (excl.)’ vs *yirr-bi-nan* (1pS-3p-see+PR) ‘we (excl.) see them’.

I regard transitive prefixes as synchronically analyzable into subject and object morphs partly because of the behaviour of speakers. In artificially slow speech, speakers divide words into their constituent morphemes. An example is given here.

- (1) *yirrirn-bi-bak-wotj+ma* slow speech: [jírɪŋ][^][bí:][^][bák][^][wócma]
 1pO-3p-APPL-steal+[get]PR (normal speech: [jɪrɪŋbɪbakwócma])
 ‘they always steal from us’ [2/7/96:2A]

Note that speakers do not break words up into syllables or feet, rather, the word is divided into prosodic words according to the word-level morpheme breaks (see B. Baker 1999). There are numerous similar examples from the elicitation sessions. It is for this reason that I treat complex prefixes such as *yirrirn-bi-* as two separate morphemes (albeit subject to allomorphy and ordering rules) rather than as portmanteau prefixes.

Prefixes indexing two SAP arguments are unanalyzable synchronically (and speakers do not treat them as complex in artificially slow speech). These prefixes will be represented as portmanteaux with a gloss indicating subject on the left and object on the right, separated by a slash: *yini-* (2/1[pl]) ‘2nd person subject, 1st person object, one of which is plural’.

As with intransitive prefixes, the transitive prefix indexing 3rd person singular subject or object is \emptyset -. In the simple Present positive, Present negative and Future positive tenses, a verb where the only argument(s) are 3rd person non-plural must take a

⁶A list of abbreviations can be found at the end of the chapter.

prefix *gu-*.⁷ In a sense then, the prefix *gu-* indicates that the subject (and object) is 3rd person non-plural, just in those tenses/moods.

Apart from the \emptyset prefix for non-plural animates, and the plural argument prefix, there are two further prefixes indexing 3rd person arguments: the two *noun class* (NC) argument prefixes. The nouns of Ngalakgan are distributed without exception into four noun classes. Certain classes of nouns - terms for kinship categories such as *ge* 'child of a man' and age-grade categories like *bolo* 'old person' - can take MASC or FEM prefixes depending on the biological sex of the intended referent: *nu-ge* 'man's son', *ju-ge* 'man's daughter', *nu-bolo* 'old man', *ju-bolo* 'old woman'. Aside from these exceptional cases, all nouns are assigned lexically to one and only one noun class. The prefixes marking these classes, and a broad semantic characterisation of the membership is given in Table (2).

NC prefixes to nominals and nominal modifiers (demonstrative, adjective) show a three-way alternation: zero, 'short', and 'long' (the terms are from Merlan 1983). The overt forms are shown in Table 2. The long form prefixes are glossed DEF for 'definite' in this paper (the referential characteristics of the distinction are discussed elsewhere: B. Baker 2000).

Table (2): Noun class forms and domains

	gloss	indefinite	definite	domain
'animate' classes	MASC	<i>nu-</i>	<i>nu-gu-</i>	male humans; animals of any sex
	FEM	<i>ju-</i>	<i>ju-gu-</i>	female humans and female animals
'inanimate' classes	VEG	<i>mu-</i>	<i>mun-gu-</i>	(edible) flora
	NEUT	<i>gu-</i>	<i>gun-gu-</i>	other inanimate (body parts, topography, weather/celestial, manufactured objects)

Table 2 gives a rough characterisation of the semantic domains which are covered by the four classes.⁸ The membership of the two animate classes is overwhelmingly predictable, while that of the two inanimate classes must be lexically specified. Since virtually all terms for animals (including insects, fish, and reptiles) and for humans are in the MASC and FEM classes, these classes can be confidently assigned

⁷Inanimate arguments count as 3rd person non-plural for this rule. The *gu-* prefix is distinct from the homophonous prefix indexing Neuter arguments: *gu-gohje gu-ngolonggoh gu-gu-janga+n* (NEUT-there NEUT-river.redgum NP-NEUT-stand+PR) 'a River Redgum is there'.

⁸The terms 'Vegetable' and 'Neuter' are not strictly accurate, since flora species (edible or not) appear in both classes, while the Vegetable class also include many non-vegetable referents such as body parts (*mu-ralh* 'hair'), body products (*mu-jele* 'urine', *mu-gurraj* 'blood'), implements (*mu-jet* 'stone oven'), natural mineral products (*mu-bim* 'white ochre', *mu-gapbarndah* 'white clay'), terms for weather (*mu-makgurr* 'cold weather') and others. Nevertheless, as Evans (1998) points out, 'Vegetable' and 'Neuter' are more descriptive than the accepted terms 'class I', 'class II', 'class III', etc.

to a macro-category ‘animate’, in distinction to another macro-category which does not contain such terms.⁹

NC argument prefixes have some morphophonemic differences from the other argument prefixes. Only the NC prefixes have the same form for all three argument roles transitive subject (A), transitive object (O), and intransitive subject (S). All other person/number categories minimally distinguish A and O roles, aside from the zero morph indexing 3 non-plural as a kind of default. (In the latter case, of course, the question of allomorphy is inapplicable.) Some examples showing the ambivalence of the NEUT and VEG prefixes are presented in (2). (2a) shows the VEG prefix *mu-* in O function, (2b) in S function, and (2c) in A function.

- (2) a. *gohye mu-may ngu-mu-goh+na+n*
 here VEG-food 1sS-VEG-have+[see+]PR
 ‘I’ve got some vegetable food here.’ [2/9/97:1A]¹⁰
- b. *bo-wi mun-gu-dubal gu-mu-yerrert*
 river-LAT VEG-DEF-*Nauclea.orientalis* NP-VEG-grow
*langa riba im gro thet dubal, dubal tri*¹¹
 ‘Leichhardt trees grow by the river.’ [2/9/97:1B]
- c. *mu-malba-yih mu-ngorh-mi+ny ngun-mu-bohbo*
 VEG-ironwood-ERG VEG-fall-AUX+PP 1sO-VEG-hit.PP
 ‘It was an ironwood tree (*Erythrophleum chlorostachys*) that fell down and hit me.’ [2/9/97:1B]

2. The morpho-syntactic characteristics of argument prefixes

In this paper, I argue that the argument prefixes do not constitute a homogenous class in morpho-syntactic or referential terms (though they are homogenous morpho-phonologically and prosodically). The following sections examine the characteristics of argument prefixes with respect to the following parameters:

- (3) a. Obligatoriness
 b. Reference
 c. Agreement

⁹The only exceptions to this characterisation are the following. All terms for native bee species and their products are in VEG class. There is also a class of generic nouns which can be assigned to either NEUT or MASC class: *gu-/nu-gony* ‘(any) macropod’, *gu-/nu-jangu* ‘meat’, *gu-/nu-ray* ‘game’, *gu-/nu-gerrnge* ‘live body’, *gu-/nu-jeny* ‘(any) fish’. Apart from this, there are two terms which have truly anomalous class marking: *gu-jarla* ‘crayfish’, and *gu-maramara* ‘maggot’ (the latter example is from Merlan 1983).

¹⁰Examples taken from fieldnotes are glossed with a date, tape number and side (A or B). Examples taken from texts are glossed with the text abbreviation (KD, DP, DD, Txt 1/6/96) and (for large texts) the line number.

¹¹For some of the examples, I have included the speaker’s translation in Kriol. These translations are mainly included for the benefit of those who know the language, and for those people these translations give an insight into the speakers’ intuitions about Ngalakgan constructions.

‘Obligatoriness’ defines the degree to which argument prefixes are optional in any given clause, and conversely, the degree to which a co-referential independent nominal is permitted in the same clause. ‘Reference’ defines the degree to which argument prefixes are referential: Are their referents required to be definite, specific entities? Or can they be indefinite to various degrees? ‘Agreement’ defines the ability for argument prefixes to carry morpho-syntactic features which are distinct from, or ‘clashing’ with, those of a co-referential nominal expression.

The way that the space of prefixal reference is carved up by these parameters is schematised in Figure (1):

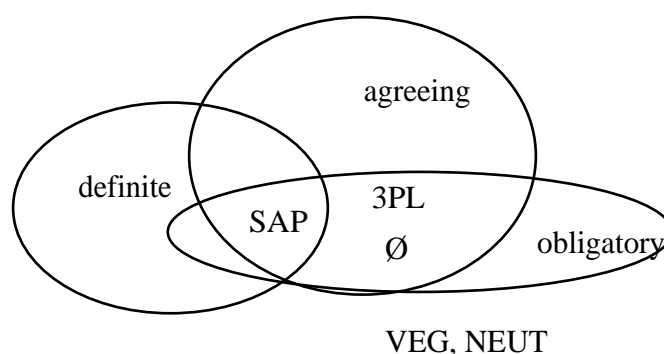


Figure (1): The intersection of three morpho-syntactic parameters with the space of prefix categories.

I address each of these parameters in turn, discussing the extent to which they are satisfied by the categories of argument prefixes proposed here: SAP, 3pl, and NC.

2.1 Obligatoriness

The argument prefixes differ in terms of obligatoriness. SAP argument prefixes are obligatory, as is the 3pl prefix when referring to humans; NC prefixes are optional. In (4), for example, there are two expressions of a first person subject, (a) with an argument prefix, and (b) with an independent pronoun. But (4b) is not a possible expression of the sense of (4a): an argument prefix is obligatory for the expression of SAP argument roles (word order does not determine the interpretation of argument-predicate relations in Ngalakgan).

- (4) a. *manapburn ngu-mang+iny*
 echidna 1sg-get+PC
 'I got an echidna.'
- b. **ngaykgah-yih, manapburn Ø-mang+iny*
 I-ERG echidna get+PC

3rd person plural prefixes are also obligatory, at least for human referents which are plural in sense. In this function of marking plurality for human arguments, the 3pl prefix cannot be omitted. In example (5), the sense of (a) cannot be expressed as in (b). Without a co-referential 3pl prefix, external nouns referring to humans and higher animates are interpreted as singular entities.

- (5) a. *matji marrawul burru-nanga+n, nu-gu-mirpbarra*
indeed hungry 3pS-sit+PR MASC-DEF-child(ren)
‘Because the **children** are hungry.’
- b. *matji marrawul Ø-nanga+n, nu-gu-mirpbarra*
indeed hungry 3sS-sit+PR MASC-DEF-child(ren)
‘Because the **child** is hungry.’

The reason for the obligatoriness of the 3pl prefix is probably because of the danger of ambiguity: for most referents, the *only* available number morphology is provided by the third person plural prefix to verbs. Only kinterms can regularly take a plural suffix *-pbulu*.

Some higher animate referents can also take the plural prefix. By ‘higher animate’ I mean those animates which are regarded as individuated referents by speakers. This includes minimally humans, but also dogs, kangaroos, and other large species including birds, as in (6).

- (6) *wah-wangginy burru-wulup nu-gu-jerrk*
ITER-one 3pS-swim MASC-DEF-bird
‘The birds are bathing one by one.’ [12/7/96]

Inanimates, and some lower animates, do not typically take the plural agreement prefix (Merlan 1983:89). Nevertheless, when explicitly quantified, as in example (7), lower animates such as terms for species of fish can still take plural agreement. Word reduplication as in (7), a strategy which is used infrequently, is the only means of explicitly indicating a count number for non-human animates apart from the two numeral quantifiers *wangginy* ‘one’ and *yapbanh* ‘two’, and the dual suffix *-pbirrah*.

- (7) *morlopborl=morlopborl=morlopborl ngu-bu-meh+me*
catfish=catfish=catfish 1sS-3p-RED+get.PP
- ngu-bu-wakgiri+wo jajabarngh-gah*
1sS-3p-return.with+[give]PP afternoon-LOC
ketfij ketfij ketfij ai bin bringimbek aftanundaim
‘I caught three catfish and brought them back in the afternoon.’ [27/6/96:1A]

We could therefore regard the prefix I have termed ‘3rd person plural’ instead as a prefix indexing ‘3rd person higher animate plural’. Or else we might hypothesise that Ngalakgan speakers regard inanimates and lower animates to be lacking in

individuation. Rather, we might propose that these kinds of referents are regarded collectively, rather like the way that we use Linnaean names (*‘Acacia difficilis’*, *‘Emydura australis’*) in English. I regard both of these interpretations as correct, though the reasons are not discussed in detail here (see B. Baker 2000). In any case, the fact is that inanimates, and some lower animates (such as shellfish and insects), lack any kind of explicit number distinction morphology.

Normally, NC argument prefixes are overt in co-reference to an inanimate argument.

- (8) a. *gu-ngolonggoh* *gu-gohje gu-gu-janga+n*
 NEUT-river.redgum NEUT-there NP-NEUT-stand+PR
 ‘A River Redgum is/some River Redgums are [standing] there.’
- b. *mu-darda* *ngurr-mu-ma+nginy*
 VEG-honey 12pS-VEG-grab+FUT
 ‘We collected some wild honey.’

But in contrast to the SAP prefixes, and the 3rd person plural prefix, NC prefixes are optional. For any verb having an inanimate argument the prefix indexing that argument may or may not occur, regardless of its argument role. In (9), the logical intransitive subject is *darh* ‘(any) tree’ which is NEUT class. The predicate *ngorh* ‘fall’ is zero-marked for this subject.¹²

- (9) *mu-yanah-ba* ***gun-gu-darh,*** *Ø-ngorh-mi+ny*
 VEG-what-INT NEUT-DEF-tree 3-fall-AUX+PP
 ‘What kind of tree was it that fell?’ [2/9/97:1B]

In (10), VEG class *mu-yawok* ‘cheeky yam’ (*Dioscorea bulbifera*) is the object of the transitive verb *jap+ga+* ‘soak in water’, but there is no NC argument prefix expressing this object.

- (10) *matji* ***mu-yawok*** *ngu-Ø-jap+ga+na+gan*
 because VEG-yam.sp 1sS-3-soak+[take+]FUT+PURP
wailjem, blanga jokim la woda
 ‘...so I can soak the wild yam [in water]’ [3/9/97:2A]

In (11), the VEG class noun *mu-rok* ‘pandanus’ is the ergative-marked subject of transitive *gulh-mi+* ‘jab’, but there is no VEG class prefix indexing this subject.

- (11) *yirrim-Ø-ngarriny-gulh-gulh-mer+iny* ***mu-rok-yih***
 1pO-hand-ITER-jab-AUX+PC VEG-pandanus-ERG
 ‘The pandanus was jabbing our hands.’ [DP: 7]

¹²In this example there is also an apparent feature ‘clash’ between the VEG class prefix on the question word *yanah* and the NEUT class noun *darh* that it questions. This phenomenon is discussed in §2.3 ff.

Again, the question of argument role (S, A or O) is irrelevant: inanimate prefixes are optional in any role.

I include here some brief remarks on independent pronouns. Independent pronouns are pragmatically highly-marked. They cannot occur in the same intonational phrase (IP) as a verb inflected with a co-referential SAP prefix.¹³ This means that the only expression of a first or second person argument possible *within* the IP containing the verb is that inhering in the argument prefixes. Therefore, I interpret independent pronouns as adjuncts. SAP pronominal prefixes fill the argument positions of the verb.¹⁴

In the case of 3rd person prefixes (including the inanimate prefixes), co-referential nouns *can* occur within the same IP, as in e.g. (6). *A priori* then, 3rd person prefixes appear to act as agreement markers when there is a co-referential nominal in the same IP.

In summary, SAP prefixes are obligatory, as is the 3rd person plural prefix in reference to humans. The prefixes for the two inanimate noun classes by contrast are optional. The 3rd person animate singular prefix is zero: it is not clear whether any generalisations can be made of this fact. In the following section, I show that all categories of argument prefixes can be co-referential to generic or ‘kind’ references, but only third person prefixes (3pl, NC, Ø) can have indefinite and non-specific readings, a possibility which is not open to SAP prefixes nor to anaphoric pronouns in English.

2.2 Interaction of argument prefixes with definiteness

Evans (this volume) observes that in Bininj Gun-wok (BGW), a language closely related to Ngalakgan, 3rd person argument prefixes can agree with referents which are indefinite, nonspecific, or nonreferential in various ways. This is Evans’ major evidence that argument prefixes are agreement markers, rather than anaphoric pronouns. The 3pl prefix and the NC prefixes in Ngalakgan can both index an indefinite, nonspecific or nonreferential argument. A brief exemplification is presented here. Since Evans (this volume) discusses this characteristic in detail, and Bininj Gun-wok and Ngalakgan are similar in this respect, I omit a fuller examination.

¹³This appears to be due to a restriction against *in situ* focus and topic in Ngalakgan. Items under the scope of focus or topic operators (which are null) are associated both with a distinctive intonation contour as well as a prosodic separation from the IP containing the matrix predicate, typically realised by potential for pause.

¹⁴Independent pronouns are so rare in natural speech that at this point I cannot tell if 3rd person pronouns are permitted in the same IP with a co-referential verb. The non-feminine, non-plural form *ninjarnih* occurs just twice (in adjoining turns) in the data, but it is difficult to interpret its function in these two cases. The 3rd plural form *burrkgah* and the feminine form *jinjah* occur not at all. It is possible that all independent pronouns must occur under a distinct intonation contour. Given their function - to put contrastive focus on an argument - this requirement is unsurprising.

2.2.1 Generic and habitual readings of argument prefixes

All three types of argument prefix - SAP, 3pl, and NC - are found in habitual and/or generic contexts. Example (12) shows the use of NC prefixes indexed to inanimate ‘kind’ referents.

- (12) a. ...*warnwarn*, *gurninyarra*
Terminalia grandiflora, *Ficus racemosa*
- b. *gu-baramulk*
 NEUT-*Cucumis melo*
- c. *gu-baramulk-yinji*, *gurnmarnh* *gu-mu-yerrert*, *gu-mu-yongo+n*
 NEUT-*Cucumis melo*-too, maybe NP-VEG-grow(PR)¹⁵, NP-VEG-lie+PR
thet baramulk tri im gro...la riba
 ‘*Terminalia*, cluster fig, and wild cucumber grow [there], they are [there] (sc. ‘by the river’ from previous context)...’
- d. *gu-wularra*, *mu-burrunburrin*
 NEUT-?Cucumis sp. VEG-*Denhamia obscura*
- e. *ngurrurndutj-yih* *gu-mu-ngu+n* *gurnmarnh* *gu-wularra*
 emu(MASC)-ERG NP-VEG-eat+PR maybe NEUT-?Cucumis sp.
 ‘Emus eat *Cucumis* and *Denhamia obscura*.’¹⁶ [2/9/97:1B]

Apart from examples of kind references indexing natural species, there are also examples in Ngalakgan of prefixes indexing human ‘kind’ references. In these cases, the 3pl prefix indexes the subject of a habitual verb.

- (13) *bigurr* ***burru***-*bordop-bordop-miny-gah*
 person 3pS-DUR-cross-AUX.PP-LOC
*thei bin olweis krosim, olpipul yuno? enibodi, thei bin olweis krosim that krik.*¹⁷
 ‘[that’s] where people used to cross’ [KD:171]

A similar example is presented in (14), again the 3pl prefix indexes a human ‘kind’ reference.

- (14) *mu-ngatjju* ***burr***-*bert* *gu-ngoy-kgah*
 VEG-cabbage.palm 3pS-roast NEUT-fire-LOC
 ‘They (people in general) roast cabbage palm in the fire’; ‘What people do with cabbage palm is to roast it in the fire.’ [7/9/97]

There are also uses of the SAP prefixes in habitual sentences that are similar to the kind references exemplified here, as in (15).

¹⁵In Ngalakgan, the largest and only fully productive class of verbs takes a meaningless auxiliary *mi+* inflected for past tenses and reflexive/reciprocal: *yerrert-mi+ny* ‘grow’-AUX+PP, *yerrert-mer+iny* ~ *miy+iny* ‘grow’-AUX+PC. The bare stem form, as in (12c) is interpreted as the simple present.

¹⁶Note that there are two instances here (12c, e) which show ‘disagreement’ between a noun and co-occurring verb for NC, see §2.3 ff.

¹⁷In this case the speaker has used Kriol *olweis* (< Eng ‘always’) together with past tense *bin*, to translate the habitual, indefinite interpretation of the Ngalakgan.

- (15) *gu-dirtda* *ngurr-yehye-gen* *je-nggorre-kgah*
 NEUT-nosepeg 12pS-put-REL nose-12pDAT-LOC
 ‘*Dirtda* is what [or ‘the thing that’] we put in our nose.’ [30/5/96:1A]

I return to the issue of which pronoun categories can be used in such sentences in §2.2.5.

2.2.2 ‘Presentational’ clauses

I have no clear examples of a presentational construction with a human referent as subject. Non-human, but animate, arguments in presentational contexts show *zero* verb agreement. In (16), it was clear from context that the reference here is to more than one fish, yet the verb carries only the NP prefix *gu-*, which is obligatory for *non-plural* subjects.

- (16) *jeny* *yeh-yerreh* *bo-kgah gu-yongo+n,*
 fish(MASC/NEUT) RED-down river-LOC NP-lie+PR

gurlagarl *gu-yongo+n* *yerreh* *bo-kgah*
 big NP-lie+PR down river-LOC
 ‘There are fish down in the river, big ones are down in the river.’ [2/9/97:1B]

Therefore, there is a contrast in the use of the 3pl prefix for non-humans according to whether they are definite (and usually they must be explicitly quantified), or indefinite. The indefinite use of 3pl is possible only for human referents (see §2.2.5 for the use of 3pl prefixes in other indefinite contexts).

Inanimate arguments are frequently the subjects of presentational predicates, (17) is an example.

- (17) *gohje-bugi* *gu-ngolonggoh* *gu-ngolkgo* *gu-gu-janga+n*
 there-just NEUT-E. *camaldulensis* NEUT-big NP-NEUT-stand+PR
 ‘A big river redgum stands there.’ (KD: 169)

2.2.3 NC prefixes indexing arguments of intensional verbs

It is well known that ‘intensional’ verbs such as ‘look for’, ‘want’, ‘ask for’ tend to take indefinite objects, which are ambiguous between non-specific and specific readings (see e.g. Lyons 1999:167-8). All the examples I have of these constructions in Ngalakgan take an indefinite and non-specific object. In the examples below, the verb *leh-* ‘search for’ is used with reference to wild honey (VEG class) in (18) and firewood (NEUT class) in (19). In both cases, this verb shows an overt NC prefix for the indefinite object:

- (18) *mu-darda* *ngu-mu-leh+ya*
 VEG-wild.honey 1sS-VEG-seeK+FUT
ai gana wokabat jugabeg
 ‘I’m going to look for wild honey.’ [13/3/95:2]
- (19) *alakgo* *ngu-gu-ma+nga,* *ngu-gu-leh+ya*
 later 1sS-NEUT-get+FUT 1sS-NEUT-seeK+FUT
 ‘Later I’ll go get some, I’ll look for some...[firewood]’ [13/3/95:2]

Another verb *baya+* ‘seek and (potentially) attain’ has much the same interpretation as *leh-* when referring to inanimates. It shows the same characteristics; in (20) taking an argument prefix for the VEG class object *mu-rok* ‘pandanus’:

- (20) *matjji* *jarndiyah* *ngurr-marninyh+ya+gan*
 indeed mat (MASC) 12pS-make+FUT+PURP
 ‘Because/if we want to make pandanus mats...’
- mu-rok* *ngurr-mu-baya+n,* *ngurr-mu-ma+nga,*
 VEG-pandanus 1sS-VEG-seeK.attain+PR, 12pS-VEG-get-FUT
laik gejim pendemis bla meigim jet mets
 ‘[then] we have to go and look for pandanus, we have to get some...’

In (21), an intensional context is set up using the modal future inflection of the transitive verb *na+* ‘to see/find’.¹⁸ The object is *manapburn* ‘echidna’. Even though echidnas, like macropods, are usually individuated and can take a plural argument prefix, in this case the reading is indefinite and non-specific; there is zero agreement for this object.

- (21) *ngurr-rorrongh+nga* *mirh-wi,* *gurnmarnh* *ngurr-Ø-na+na* *manapburn,*
 12pS-peep.at+FUT cave-LAT, maybe 12pS-see+FUT echidna
- ngurr-gatjja-ma+nga-gan,* *gurnmarnh* *marrawul* *ngurru-yongo+na*
 12pS-nothing-get+FUT-REL maybe hungry 12pS-sleep+FUT
if nathing wi nomo faindim enijing biif, wal wi silip anggri
 ‘We’ll look around in the caves, maybe we’ll find *Tachyglossus aculeatus* [echidna]. If we find nothing then we might have to sleep hungry.’ [2/9/97:1B]

Hence, we find a distinction between NC argument prefixes and the 3pl prefix when co-referential to an animate but non-human argument under the scope of some indefiniteness-introducing operator or predicate. NC prefixes are permitted under such conditions, but the 3pl prefix, as in the presentational examples in §2.2.2, is disfavoured.

SAPs *can* be the objects of such verbs, but they can never have an indefinite interpretation in this case. SAP affixes can only have definite interpretations. This

¹⁸The default interpretation of the ‘future’ inflection of verbs in Ngalakgan is modal: ‘want to, might, have to, should’ are equivalents of the translations given by speakers (in Kriol: *garra, labda, maiti, gana,* and *andi*). In (21), the modal interpretation is reinforced by the uncertainty operator *gurnmarnh* ‘maybe’, as well as the speaker’s translation in Kriol using ‘if’.

restriction is a consequence of the meaning of SAP morphemes: SAPs are inherently anaphoric.

2.2.4 Argument prefixes under the scope of interrogative, negative, and indefinite operators

NC argument prefixes are commonly co-referential to nominals under the scope of a question word (22). In (22), the NC argument prefix *mu-* for VEG class is co-referential to a WH-word *mu-yanah* ‘what’ which is also marked for VEG class.

- (22) a. *mu-yanah_i ju-mu_i-jong+iny*
 VEG-what 2sS-VEG-chop+PC
 ‘What kind of [VEG class object, sc. ‘tree’] did you cut down?’ [2/9/97:2A]
- b. *mu-yanah_i ngurr-mu_i-nguna*
 VEG-what 12pS-VEG-eat+FUT
 ‘What are we going to eat?’ [11/9/97]

I take it that the questioned referent in such examples (from the speaker’s point of view at least) can only be characterised as indefinite and non-specific. That being the case, NC prefixes can therefore be co-referential to such entities.

In English, the determiners ‘any’ and ‘no’ also derive indefinite, non-specific readings of noun phrases (Lyons 1999:37). Ngalakgan has equivalent constructions, which include a negative suffix on the verb, and the use of the ‘definite’ prefix form on the quantified expression, as in (23).¹⁹ In this example, there is a NEUT argument prefix co-referential with the expression under the scope of the ‘any’ construction (here: *yang* ‘language’),

- (23) *ju-gu-goh+nani+kgorro, gun-gu-yang*
 2sS-NEUT-have+[see+]PRNEG NEUT-DEF-language
yu nomo gadim eni langgus
 ‘You don’t have any [traditional] language.’ [2/9/97:1A]

I have no examples of NC prefixes co-referential to a nominal under the scope of a polar interrogative operator. All examples are like those in (24), where the verb shows zero agreement for the questioned object.

- (24) a. *mu-may ju-goh+na+n?*
 VEG-veg.food 2sS-have+[see+]PR
 ‘Have you got any vegetable food (VEG)?’

¹⁹The reason for the definite prefix in this construction is discussed elsewhere (B. Baker 2000). I argue there that in these ‘any/no’ constructions, as well as when modified by the indefinite/interrogative pronouns, nouns are interpreted as partitive ‘kind’ references, i.e. *gun-gu-yang* is interpreted something like ‘[any] kind of language’ in this context.

- b. *gu-birn* *ju-goh+na+n?*
 NEUT-money 2sS-have+[see+]PR
 ‘Have you got any money (NEUT)?’

The 3pl prefix can be used in the same way to refer to indefinitely quantified human referents.

- (25) a. *bigurr-ji* ***burru***-*bolh-yongoni+kgorro*
 person-PRIV 3pS-track-lie+PRNEG
 ‘No one has been here.’ (Lit. ‘[it] is without people, their tracks are not lying [here].’) [2/9/97:1A]
- b. *rerre-kgah=rerre-kgah* *warlamanh* ***burru***-*nang+an*
 DIST=camp-LOC everybody 3pS-sit+PR
 ‘Everybody sits in their own camp.’ [3/9/97]
- c. *gorreh-gorreh* ***burru***-*man-nang+an*
 DIST-alone 3pS-group-sit+PR
 ‘Every group keeps to itself.’ [3/9/97]
- d. *nu-gu-malaborno* ***burru***-*mah,* *nu-gu-malaborno* ***burru***-*borde-bordewk*
 MASC-DEF-some 3pl-good MASC-DEF-some 3pl-INTENS-bad
 ‘Some [children] are good, some are very bad.’ [4/7/96]

The examples in section §2.2 have shown that both NC prefixes, and the 3pl prefix when in reference to human arguments, can index arguments which are indefinite, nonspecific, or nonreferential in various contexts.

2.2.5 Discussion of indefiniteness

In English, it is possible for pronouns to be co-referential to kind references whether singular, as in (26), or plural. It is also possible for SAP pronouns in English to refer to kinds, as in (26c), and the translation of (15), above.

- (26) a. *The echidna* lives in a hole, *it* has quills and (*it*) lays eggs.
 b. *Acacia* is native to Gondwanaland. In Australia, *it* is commonly called ‘wattle’.
 c. When *we* see an echidna, *we* always track *it*.

Since anaphoric pronouns in English can refer to ‘kinds’ (*pace* Evans, this volume), the fact that argument prefixes in Ngalakgan can also be referential to kinds does not mean that argument prefixes in Ngalakgan are not anaphors. In order to find contexts in which Ngalakgan and English contrast in their use of pronominal elements we must look to non-referential contexts, as in §2.2.

The use of both the NC prefixes and the 3pl prefix in indefinitely quantified conditions contrasts with English, as Evans (this volume) points out. In English, the equivalents of the examples in (25), using anaphoric pronouns as in (27), sound

ungrammatical or marked.²⁰ Hence Evans' argument against the interpretation of argument prefixes in Bininj Gun-wok as pronominal anaphors (cf. Rizzi 1986).

- (27) a. * 'Everybody, they sit by themselves.'
 b. ? 'Some children, they are good.'
 c. * 'You don't have it, any traditional language.'

Evans argues that argument prefixes should instead be interpreted as agreement markers when co-referent to a an external nominal expression, and that in that case, it is nominal expressions which instantiate the arguments of the clause.²¹ I have already noted the restriction against external nominal expressions of SAP arguments in Ngalakgan. In the following section, I show that NC prefixes need not agree with their co-referent arguments, and that, indeed, in some cases they are required *not* to agree.

2.3 Disagreement

In (28a), speaker A asks speaker B for an identification of a specific spear from a known set. This example contains two instances of noun class *disagreement*. In (28a), the questioned generic noun *nu-gu-barrakgarlh* '(any kind of) spear or species used for spear shafts' is marked as MASC class, but the argument prefix co-referential with this argument is marked as NEUT class. The specific noun *mu-jukgul* '*Acacia holosericea*' is assigned to VEG class, but in (28c), the verb takes a NEUT class prefix co-referential with this argument:

- (28) a. *Yanah-ba nu-gu-barrakgarlh ju-gu-mehme?*
 what-INT MASC-DEF-spear 2sS-NEUT-get.PP
 A: 'Which spear did you get?'
 b. *jukgul, mu-jukgul*
 A. *holosericea* VEG-A. *holosericea*
 B: 'Acacia, an acacia one.'
 c. *mu-jukgul ju-gu-mehme?*
 VEG-A. *holosericea* 2sS-NEUT-get.PP
 A: '[Oh, it was] an acacia one that [spear] you got?' [11/9/97]

Note that the verb retains the NEUT marker in both cases while the class of its coreferential noun is MASC in one case and VEG in the other.

²⁰However, it is not clear that the reason for the strangeness of the examples in (27) is because of an incompatibility between anaphoric pronouns and indefinite quantification. The strangeness could instead be because of an incompatibility between, on the one hand, indefinite pronouns (e.g. 'everybody') and expressions, and, on the other, NPs in a dislocated, hence topical function. The function of such dislocations in English is to reiterate topics which are, by definition, referential. Contrast the strangeness of the examples in (27) with the seemingly natural examples in (25), which also contain co-referential indefinite pronouns and anaphors such as 'their' and 'itself'.

²¹Evans (this volume) does not rule out the possibility that argument prefixes in Bininj Gun-wok function as arguments at least some of the time (e.g. in the absence of co-referential nouns).

One's first reaction to such examples is that they must be speaker errors. The following example shows that this is not the case. In (29), speakers were asked 'What do emus eat?' Speaker B (the junior speaker) has a plant species in mind but can't remember the name. Speaker A suggests the name to her (at line 29a) with its lexically-specified NC prefix (NEUT). This is the term that Speaker B was looking for, and she concurs (in 29b), using NEUT class agreement on the verb 'eat'. Speaker A corrects her (at line 29c), repeating the verb but replacing her NEUT class verb prefix with VEG class.²² The way speaker B seems to interpret this is that she has placed the *noun* into the wrong class, and repeats the noun with a VEG class prefix (reflecting speaker A's prefix on the verb). Speaker A then repeats both noun (NEUT class) and verb (VEG class) together in line (e), making it quite clear to speaker B (and to us), what the correct form of the construction is in this case:

- (29) a. *gu-wularra?*
NEUT-?Cucumis sp.
A: 'Wularra?'
- b. *yo, gunhbirri-gunh gu-gu-ngu+n*
yes, that-SPEC NP-NEUT-eat+PR
B: 'Yes! it eats THOSE ONES [fruits].'
- c. *gu-mu-ngu+n*
NP-VEG-eat+PR
A: 'It eats it/them.'
- d. *mu-wularra*
VEG-?Cucumis sp.
B: 'Melons'
- e. *gu-wularra, gu-mu-ngu+n*
NEUT-?Cucumis sp. NP-VEG-eat+PR
A: 'It eats them, melons.'
- [10/9/97:1A]

This example demonstrates that instances of disagreement in Ngalakgan are not considered to be errors by speakers. In this case we have a grammaticality judgement from speakers. It indicates that, in some circumstances, verbs *must* disagree with a coreferent argument. At this stage, it is unclear exactly what those circumstances are.

Example (30) presents another instance of the same kind. Again, NEUT class marked nouns *gu-baramulk* and *gu-wularra* are co-referential with verbs marked for VEG class objects *gu-mu-ngun* 'it eats them (VEG class)'.

- (30) a. *yanipbi gu-baramulk, gu-mu-ngu+n,*
whatsit NEUT-Cucumis melo, NP-VEG-eat+PR
'Whatsit? wild cucumber it eats...'

²²Speaker A is senior to speaker B, and a first-language speaker of Ngalakgan. Speaker B is highly fluent in Ngalakgan but through years of under-use she has lost some proficiency. The intonation of this stretch of text indicated that Speaker A was actively correcting Speaker B, not merely interacting.

- b. *bo-wi nu-gohje gu-mu-jung-hgun*
river-LAT MASC-that NP-VEG-shade-REL
‘around the river where that one is in the shade,’
- c. *gu-baramulk, gu-wularra gu-mu-ngu+n*
NEUT-Cucumis melo NEUT-Cucumis sp. NP-VEG-eat+PR
‘wild cucumber, [and] wild melon it eats.’

In §3, I consider and reject an analysis of Ngalakgan disagreement under a proposal by Corbett (1983), whereby constituents can agree ‘semantically’ as well as [morpho-] ‘syntactically’. In §3.1, I find that more convincing parallels to Ngalakgan can be found in other Australian languages.

3 Why Ngalakgan disagreement is not ‘semantic’ agreement

The noun class disagreement behaviour shown by Ngalakgan in examples such as (28) is distinct from other noun class variation or disagreement patterns reported in the literature on Australian languages and languages elsewhere. Typically in Gunwinyguan languages, contrast between classes is neutralised in modifiers and verbs, so that these constituents display a smaller class system than that of nouns. The contrast between two inanimate classes may be neutralised in favour of one of them (in e.g. Gundjeihmi), or all non-feminine classes may be neutralised in favour of MASC agreement (in e.g. Jawoyn) (Evans 1997, Harvey 1997, who call this kind of pattern ‘superclassing’). Certain constructions in Ngalakgan *do* show this kind of neutralisation: demonstratives optionally neutralise to MASC agreement for all non-feminine head nouns (example 30b is an instance).

The superclassing phenomenon is rather different to the Ngalakgan disagreement phenomenon. Superclassing is an optional or obligatory process which reduces the total number of *agreement* classes. Disagreement does not reduce the number of agreeing elements: both VEG and NEUT argument prefixes can disagree with their co-referential nominal. On the contrary, disagreement *increases* the number of potential agreement classes to which a head class can be co-referential.

What is at issue in the disagreement examples in §2.3 is the lack-of-fit between the noun class of the noun, and the *function* or *use* to which it is being put in a particular circumstance. Generic terms such as ‘leaf’, ‘wood’, ‘spear’, ‘medicine’ and so on are very rarely used in Ngalakgan to directly modify species terms. In Ngalakgan, as in Australian languages in general, nouns such as *mu-jukgul* have variable extensions: *mu-jukgul* can refer to the tree species *Acacia holosericea*, either as an individual or as an ecozone, or *mu-jukgul* can refer to any part of the tree with no further modification of the noun, including items manufactured from its wood such as spear shafts. Generic terms such as *barrakgarlh* ‘spear (shaft)’ occasionally occur in *apposition* to species

terms, but are not required to appear in order for these terms to have such differing extensions, and are far less common than the equivalent construction in English. Constructions like ‘Acacia leaf’, ‘Acacia tree’, ‘Acacia grove’, with rare exceptions (see §4), simply do not occur in Ngalakgan.

Rather than using generic nouns to indicate the extension of a specific term (as in English), in Ngalakgan the form of the NC prefix on the verb can be used to indicate the extension of *mu-jukgul* in the clause: whether, for instance, it is a ‘(type of) spear shaft’ or a ‘(type of) tree’ that is being spoken about. In a sense then, the NC prefix to the verb ‘agrees with’ the extension of the noun, rather than its grammatical form. In (30), *gu-baramulk* refers to *Cucumis melo* qua ‘plant with edible fruit’ and hence the verb takes the argument prefix which is appropriate to the domain of edible plants: VEG class *mu-*. In (28), by contrast, *mu-jukgul* in this instance refers to *Acacia holosericea* in its capacity as a plant which is a source of heavy spear shafts. The NEUT class is most closely associated with inedible plant species and (especially) the implements derived from plant species, and that is the argument prefix used in this case. *Acacia holosericea* is also used for other purposes, and we expect that different NC argument prefixes might be used in these cases.

Can this use of the NC prefixes be said to be ‘agreement’, in the usual linguistic sense of the term?²³ It is appropriate at this point to discuss why the Ngalakgan pattern is different from other cases of morphosyntactic feature clash discussed in the literature. Corbett (1983) for instance, discusses a number of Slavic languages in this regard. In Czech (31), the noun *děvče* ‘girl’ inflects like a NEUT noun, and modifiers and predicates must be in NEUT form (e.g. *přišlo* ‘came (NEUT)’). However, an anaphoric pronoun which is co-referent with this noun may be either NEUT, or FEM as in (31) (from Corbett 1983:9).

- (31) a. *To děvče přišlo včera, ale já jsem*
 that girl(NEUT) came(NEUT) yesterday but I did
ji nenajmula
 her(FE) not.hire

Corbett refers to agreement of the kind we see between the noun *děvče* and the pronoun *ji* in (31) as ‘semantic agreement’: the pronoun is FEM because the noun *děvče* refers to a female, even though it is formally NEUT. Semantic agreement of this kind is opposed to ‘syntactic agreement’, requiring identity of the morpho-syntactic features relevant to agreement (as in the modifiers and predicates in 31). The reason for the disagreement in this case is fairly clear. In Czech, the noun *děvče* ‘girl’ *always* refers to a female, even though the form of the noun is NEUT.

²³As Corbett (1983:1) and Anderson (1992:103) have noted, it is by no means straightforward to define ‘agreement’.

But there is a difference between the Slavic examples discussed in Corbett (Corbett 1983) and the Ngalakgan disagreement phenomenon. In Russian, nouns such as *vrač* ‘doctor’, *can* have variable extensions (and hence agreement) depending on the sex of the referent (Corbett 1983:10). But in every case in the Slavic examples, there is only *one* extension of a noun which is relevant to the agreement behaviour of modifiers, pronouns and predicates. That is because the only semantically-relevant extension is *inherent* in the referent itself (masculinity, femininity). In Ngalakgan by contrast, the extension of a noun which is relevant to agreement is contingent on function or use (see below). Unlike the case in Slavic languages, semantic agreement in Ngalakgan is a context-dependent phenomenon, which is contingent on the particular extension of a term in discourse.

The discourse-dependent nature of disagreement in Ngalakgan can lead to the situation that there are usually at least two, and often many more, extensions which are relevant to agreement. The differences between Czech and Ngalakgan are presented in Table (3). At the bottom of the table we see the terms in question and the gender/noun class which is assigned to them in the lexicon: for *děvče* it is NEUT, for *jukgul* it is VEG. While *děvče* can only have the extension ‘female’, and hence the only possible ‘semantic’ agreement class for this noun is FEM, the term *jukgul* can have many possible extensions, depending on its function or use in a particular discourse context, and each of these has characteristic noun class assignments.²⁴

Table (3): Semantic agreement vs disagreement

	Czech	Ngalakgan					
Extension	‘young female’	‘soap’	‘medicine’	‘tree’	‘fish poison’	‘spear’	‘firewood’
Semantic Agree’t	FEM	VEG	NEUT	NEUT	VEG	NEUT	NEUT
Assign’t	NEUT	VEG					
Term	<i>děvče</i> ‘girl’	<i>jukgul</i> ‘ <i>Acacia holosericea</i> ’					

Therefore, I submit that the kind of ‘semantic’ agreement we see in Ngalakgan is of a different order to what we see in Czech and other Slavic languages. In the next

²⁴Some of these characteristic noun class assignments can be postulated on the basis of disagreement examples, others are extrapolated from gender assignment to nouns. For instance, the major ichthyoid and soap-producing trees, as well as the terms for ‘poison’ (*mu-marawirrina*) are all VEG class. All terms for fire and firewood (e.g. *gu-munhmunh* ‘tinder’, *gu-ngurnih* ‘firestick’), as well as the generic terms for tree/stick (*gu-darh*, *gu-jandah*), are NEUT, and loanwords referring to this domain are classed as NEUT also: *gu-jambakgu* ‘tobacco’, *gu-metjijitj* ‘matches’, *gu-beypba* ‘rolling papers’ (contrast *gu-got* ‘writing paper, book’; lit. ‘paperbark tree’). I have come across no indigenous term meaning ‘medicine’ so far, but the loanword is also NEUT class: *gu-merritjin*. At least one term for an important medicine plant *gulukgulun* (poss. *Melaleuca acacioides*) has been observed to change its noun class assignment (as well as its agreement) from VEG to NEUT when it was discussed in a processual text about making medicine from the plant.

section, I consider some more fruitful analogies to the Ngalakgan phenomenon, before proposing an analysis of the function of NC prefixes in §4.

3.1 Australian analogies: classifier systems and classifier constructions

Ngalakgan disagreement finds a more relevant analogy in other Australian languages, than the Slavic examples Corbett discusses. I briefly discuss two here: Mparntwe Arrernte (Central Australia, NT: Wilkins 2000), and Ngan'gityemerri (Daly region, NT: Reid 1997). I have already noted that it is characteristic of Australian languages for any noun to have a wide range of extensions. While Ngalakgan makes some distinctions in the extension of a noun by using oppositions in the NC argument prefix paradigm, many Australian languages make similar distinctions by using generic nouns to specify the function or use to which the referent of a species term is being put.

Wilkins (2000) discusses 'classifier' constructions in Mparntwe Arrernte: phrases consisting of a specific and generic noun in co-reference to an entity. In (32) (Wilkins 2000:151), 'kangaroo' is referred to once as *kere aherre*, literally 'game animal kangaroo' and once simply as *kere* 'game animal'. By contrast, in example (33) (Wilkins 2000:173), the reference to kangaroo is realised as *aherre* 'kangaroo' alone.

- (32) a. *Ikwere-nge* *re-therre* *perte-ke* *anteme*,
 3sgDAT-ABL 3dINOM creep.up-PC now
- b. ***kere*** ***aherre*** *ikwere*.
 game/meat kangaroo 3sgDAT
- c. *Kele* *itwe-k-irre-mele* *arraye*
 OK near-DAT-INCH-SS true
- d. *atanthe-ke* *irryarte-le* ***kere*** *re-nhe*.
 spear-PC spear-INST game/meat 3sg-ACC
 'After that, the two of them now crept up on the kangaroo. So, when (they) got closer (they) speared it truly with a spear.'
- (33) a. *Inarlenge* *kenhe* *kwele* *ane-me* *kwerrke* *kwele*
 porcupine BUT QUOT be-NPP young.one QUOT
- arrate-me* *apethe* *ikwerenhe-nge*, ***aherre-arteke***
 appear-NPP pouch 3sgPOSS-ABL kangaroo-SEMBL
 'Now echidnas are supposed to be (like this); baby echidnas, so they say, come out of their pouches just like kangaroos do.'

Wilkins shows that the choice - whether an Arrernte speaker uses the noun alone, as in (33) or the generic+specific construction, as in (32) - depends on the nature of the activity in which the referent is embedded. If the reference is to kangaroo *qua* potential source of meat, then the generic noun *kere* 'game/meat' precedes or is used in place of *aherre*. If the reference is to the natural habits and habitat of kangaroos, or the kangaroo Dreamtime ancestor, then *aherre* is used alone. Furthermore, many other

specific nouns, such as *arlkerke* ‘meat ant’, can appear in construction with various of the set of generics such as *yerre* ‘ant’ or *awelye* ‘medicine’, depending on their inherent nature, use, or function in any particular instance. That is, generics in Arrernte perform something like the function that NC prefixes can perform in Ngalakgan: they delimit the extension of a specific noun. Wilkins uses the term ‘discourse-relevant’ to describe such contextually-based extensions, and I follow his usage here.

Ngan’gityemerri is a language with a system of nominal classifiers: a closed set of morphemes which occur in construction with another noun and also appear in ‘agreement’ with modifiers (demonstratives, adjectives, numerals). There are fifteen nominal classes in Ngan’gityemerri, nine of which are realised as agreement affixes on nominal modifiers. In examples (34a) and (35a), we see the standard or ‘syntactic’ agreement pattern. In (34a) the species term *menem* ‘billygoat plum’ (*Terminalia ferdinandiana*), which is assigned to VEG class, being a food source, takes a VEG class agreement proclitic on a co-occurring modifier *biny* ‘ripe’. In (35a), the possessive modifier of *tyulut* ‘hook spear’ takes an agreement classifier of the ‘bamboo spear’ (B’BOO) class, to which *tyulut* itself belongs.²⁵

Apart from the regular agreement, Reid also finds ‘semantic’ agreement like the (b) examples in (34) and (35). In (34b), the discourse-relevant extension of billygoat plum is as a tree that needs to be cut down, not as a source of food. The modifier takes a proclitic marking the ‘tree’ class. And in (35b), the possessive modifier of *tyulut* ‘spear’ also takes an agreement classifier of the ‘tree’ class, to which most implements belong. Reid suggests that the speaker viewed the spear in this instance less as an offensive weapon than as an implement needing repair (Reid 1997:202).

- (34) a. *mi-menem* *mi=biny* *werrmim-ba-ket*
 VEG-billygoat.plum VEG=ripe 3pS:AUX-arm-cut
 ‘They are picking ripe Billygoat Plums [*Terminalia ferdinandiana*].’
- b. *mi-menem* *yerr=kinyi* *yerr=syari* *yubu-ket-Ø*
 VEG-billygoat.plum TREE=this TREE=dry 2sS:AUX-cut-IMP
 ‘Chop down this withered Billygoat Plum tree!’
- (35) a. *tyulut* *yeli=nem* *ngarim-pawal*
 hook spear B’BOO=his 1sS:AUX-throw
 ‘I threw his hook spear (‘bamboo spear’ class).’
- b. *tyulut* *yerr=nem* *ngirim-wurity-ngirim*
 hook spear TREE=his 1sS:AUX-fix-1sS:sit
 ‘I’m fixing his hook spear (‘bamboo spear’ class).’

Reid (following Corbett 1991) regards the pattern in (34b) to result from a covert re-assignment of *menem* ‘Billygoat Plum’ to the ‘tree’ class. This assignment is

²⁵Not all nouns have their class marked endocentrically. As Reid observes, the class of many nouns is only revealed through [syntactic] agreement patterns.

covert, since the noun still takes a VEG class prefix, and is only realised in the class taken by co-referring modifiers. While this is not the place for a critique of Corbett’s theory, it is clear that the circumstances under which disagreement is favoured in Ngan’gityemerri are similar if not identical to those in which disagreement is observed in Ngalakgan.

I propose that the NC argument prefixes of Ngalakgan are performing much the same function for the extension of nouns in Ngalakgan as generics do in Arrernte, and classifier agreement prefixes do in Ngan’gityemerri. That is, given the fact that in Ngalakgan, as in the other languages mentioned, nouns can have a range of extensions, the NC prefixes serve to ‘fix’ or ‘delimit’ the extension of a noun to one or a few possibilities, which are dependent on context (including the choice of predicate). In the following section I examine the implications of this analysis for the morphology of verbs.

4. A morpho-semantic analysis of NC prefixes

Ngalakgan, like Arrernte and Ngan’gityemerri, also has a range of generic nouns such as *gurndu* ‘country’, *darh* ‘tree’, *barrakgarlh* ‘bamboo spear (shaft)’, *darren* ‘canegrass spear (shaft)’, *may* ‘vegetable food’, *ray* ‘small game, meat’, *jangu* ‘meat’, *weh* ‘water, watery liquid’, and others. As I show below, these generics can be co-referential to a specific noun, either as verb-incorporated stems, or in complex nominal constructions. In that case, one may ask whether generic nouns in Ngalakgan play the same role that they do in Arrernte and Ngan’gityemerri, and if so, what then is the function of NC prefixes, which I have suggested perform the function that generic nouns or classifiers perform in these other languages.

In Ngalakgan, generics occasionally occur in combination with a specific, as in (36), in a ‘classifier’ construction similar to that found in Arrernte (Wilkins 2000). In (36), note that the ergative case is marked only on the generic *gu-darh* ‘tree’ - the specific term *mu-malba* ‘ironwood’ takes no case marking. This indicates that the two words constitute a complex nominal expression. In this kind of construction, generics perform a similar function to the generics of Arrernte or the classifiers in Ngan’gityemerri: they delimit the use, function or inherent state of the specific term. In (36) for instance, the choice of *darh* ‘tree’ indicates that it was the whole tree which fell down, rather than just a branch (for which the speaker would perhaps use *jandah* ‘stick, tree’, *wanjat* ‘arm’ or just *malbah* alone). (Note that here we have an instance where we would expect disagreement - trees are prototypically NEUT class - nevertheless, the verb takes VEG class agreement, perhaps because there is no ambiguity in the interpretation of *malbah* given the presence of the generic in this case.)

- (36) *ngun-mu-bohbo*,
1sO-VEG-hit.PP

gu-darh-yih *mu-malbah* *mu-ngorh-miny* *en* *ngun-mu-bohbo*
 NEUT-tree-ERG VEG-ironwood VEG-fall-AUX.PP and 1sO-VEG-hit.PP
jet wadi bin foldan la mi en kilim mi
 ‘An ironwood tree [lit. ‘tree ironwood’] fell down and hit me.’ [2/9/97:1B]

A subset of lexical generics can also be incorporated into verbs, as in (37), where they perform much the same function as external generic+specific phrases (the difference between the two relates to information structure). In (37), the external noun *langgah* ‘billabong’ [a seasonal or permanent pool of water in sand, clay, or loam] is a type of *gurndu* ‘country’, the incorporated co-referential noun.²⁶ In (38), the incorporated stem *mili-* ‘water’ is co-referential to the external (borrowed) noun *di* ‘tea’.

(37) *gun-gohje-bugi* *gu-langgah* *gu-gurndu-ngey+bu+n* ‘Yalwarra’
 NEUT-there-just NEUT-billabong NP-country-name+[hit+]PR [toponym]
 ‘I call that lagoon “Yalwarra”.’ (Lit. ‘I country-name that lagoon “Yalwarra”.’ [KD:5])

(38) *ju-na+n* *ju-gu-mili-boylimhma+gan* *gu-di*
 2sS-see+PR 2sS-NEUT-water-boil+PURP NEUT-tea
 ‘You look, if you want to boil tea...’ [31/5/96:1B]

The incorporated nouns in examples (37-8) here perform a ‘classificatory’ function, according to Mithun’s (1984:863) criteria: they narrow the scope of the verb, while allowing a more specific noun to function as object.

Generics can also occur alone, as in (39), (40). In this case they do not refer to specific referents, but rather to some unknown referent, or to a ‘kind’ referent of a higher taxonomic level (a ‘lifeform’).

(39) *gun-wangginy* *gun-gu-darh* *gu-gu-yerrert*
 NEUT-one NEUT-DEF-tree NP-NEUT-grow
 ‘There’s one tree growing there (I don’t know what kind).’ [3/9/97]

(40) *jandah-gah,* *gu-yongo+n,* *nu-gu-dugurlah*
 stick-LOC NP-lie+PR MASC-DEF-ringtail.possum
dugurlah, thet posim, lib la tri, dugurlah
 ‘The ringtail possum lives in the branches [of trees] (any kind/different kinds of tree).’
 [2/9/97:1B]

Such generic+specific constructions, whether the generic is external or incorporated, are not common in Ngalakgan. The examples presented here (from a

²⁶Naming country is a particular kind of activity undertaken by Dreaming beings and also by humans as an invocation of the Dreaming, hence, this compound is ‘name-worthy’ in Mithun’s sense (1984:856). But it is not a lexicalised compound in the same way that *weh-nyarh* (lit. water-die) ‘dying of thirst’ is. Unlike the latter, *gurndu-ngey-bu+* can also be expressed phrasally: *gun-gu-gurndu ngu-gu-ngey-bun* ‘I call that country...’ In addition, *gurndu* can be omitted from example (37) without changing its (logical) interpretation. That is, as with true incorporation in general, *gurndu* is optional here.

corpus of around 4000 lines of elicitation and text material) represent the most unambiguous instances where generic and specific nouns are co-referential.

The situation in Ngalakgan contrasts strongly with the status of generics in Eastern Arrernte as reported in Wilkins (2000). Wilkins examined a database of 26 texts, 15 of which contained NP references to ‘kangaroo’ headed by a noun: generic, specific or generic+specific. There were a total of 50 occurrences of NPs of this kind, of which 17 (34%) were generic+specific constructions. Therefore, I conclude that Ngalakgan speakers make very little use of generic nouns in reference to specific entities, whether external or incorporated, as compared to other Australian languages. If Ngalakgan speakers are delimiting the reference of nouns, as I have claimed they are, then that function is performed almost exclusively by the NC argument prefixes.²⁷

One might suppose that NC argument prefixes are, in fact, merely reduced or alternate forms of the incorporated generic nouns. There are several characteristics distinguishing incorporated nouns from NC argument prefixes which militate against this proposal. Firstly, NC prefixes can be distinguished on morpho-phonological grounds from incorporated generics. On several morpho-phonological criteria, NC argument morphemes are clearly *prefixes*, not stems. Like other prefixes, they consistently lack stress (41), and hence a following monosyllabic open verb root must have a long vowel at the surface (B. Baker 1999).

- | | | | | |
|------|----|------------------------------------------|--------------------------------------------------|--------------|
| (41) | a. | <i>yirr-mi-ma</i>
1pS-VEG-get.PR | [jirmimá:]
‘we get it (VEG)’ | [DP] |
| | b. | <i>ngurrurn-mu-ne</i>
12pO-VE-burn.PR | [ŋʊrʊŋmuŋé:]
‘It [sc. ‘sun’ (VEG)] burns us.’ | [13/3/95:3A] |

Prefixes contrast in this respect with compounded/incorporated stems, which *must* be stressed regardless of size (42) (B. Baker 1999).

- | | | | |
|------|----|----------------------------------------------------|----------------------------------------------|
| (42) | a. | <i>gu-weh-mah</i>
NP-water-good | [guwèɛmáaʔ]
‘it is freshwater’ |
| | b. | <i>yi-gi-bo-wa+na</i>
12S-NEUT-river-follow+FUT | [jigibò:wána]
‘we’re following the river’ |

²⁷Ngalakgan therefore lends support to the claim by Foley (1997) that elaborated and productive noun class systems are in complementary distribution to productive noun incorporation in polysynthetic languages. It makes sense of my informal impression that the degree of incorporation in Ngalakgan is much less than that in closely related Gunwinyguan languages like Rembarrnga and Bininj Gun-wok. In these languages, there is no NC agreement in verbs (indeed, verbal agreement for noun class is rare; among GN languages only Ngalakgan, Ngandi (Heath 1978) and Nunggubuyu (Heath 1984) have this feature). It appears that the capacity for verbal agreement, and especially *disagreement*, is the crucial feature separating Ngalakgan from languages like Bininj Gun-wok and Rembarrnga.

NC prefixes are therefore distinct morphologically and phonologically from incorporated generic nouns such as *may* ‘food’, *mili-*, *binyi-*, and *weh* ‘water’, and *gurndu* ‘topographic’, since the latter are treated like stems.

Secondly, NC prefixes, unlike incorporated generics, cannot co-occur with two filled prefixal argument positions, and in this respect are like other argument prefixes. Like many multi-argument indexing languages, Ngalakgan permits a maximum of just two argument prefixes to a verb. In the case of trivalent verbs such as *wu-* ‘give’, *mutjji-* ‘show, teach’, and *bak-bawunh-mi-* ‘leave for’, which have three syntactic-semantic roles - agent (‘giver’), theme (‘gift’), and goal (‘recipient’) - the two roles expressed by verb prefixes are the agent and the goal (43a). When the theme is an inanimate entity, as it typically is, there can be no argument prefix indexing this entity (43b). But it may be expressed by an incorporated (or external) noun, as in (43c, cf. also 44).

- (43) a. *ngu-bu-wohwo*
1sS-3p-give.PP
‘I gave them [something].’ (Not: ‘I gave them to him/her.’)
- b. **ngu-bu-mu-wohwo*
1sS-3p-VEG-give.PP
- c. *ngu-bu-may-wohwo*
1sS-3p-food-give.PP
‘I gave them vegetable food (*may* VEG class).’
- d. **ngu-bu-mu-may-wohwo*
1sS-3p-VEG-food-give.PP
- (44) a. *jun-gurndu-mutjji+nga*
2s/1s-country-show+FUT
‘You have to show me your country.’ [22/5/98]
- b. **jun-gu-mutjji+nga*
2s/1s-NEUT-show+FUT
‘You have to show me it [sc. ‘country’].’ [22/5/98]

That this restriction is morpho-syntactic, not morpho-phonological, in nature is shown by examples such as (45), where a co-referent NC prefix and incorporated noun co-occur.

- (45) *ngurr-mu-birtidin-marninyh-nya*
12pS-VEG-bread-make+FUT
‘we’ll make some lilyseed bread.’

Apart from the phonological and morphological criteria, NC prefixes are much more frequent than generic nouns. These patterns indicate that NC argument prefixes are not some kind of reduced incorporated generic noun. Clearly, they are argument prefixes.

However, it has been my contention throughout that the argument prefixes of Ngalakgan do not constitute a homogenous class; before proposing a classification of these prefixes, I outline in summary the differences between them, as shown in Table (4).

Table (4): Contrasting properties of argument prefixes

	SAP	3pl (+hum)	3pl (-hum)	inanimate NC
Obligatory?	yes	yes	no	no
Stress?	no	no	no	no
Generic refs?	yes	yes	no	yes
Indefinite (\exists) refs?	no	yes	no	yes
Neg. indefinite ($\neg\exists$) refs?	no	yes	no	yes
Questioned refs?	no	yes	no data	yes
Can disagree?	no	no	no	yes

On many tests, the NC prefixes perform just like the 3pl prefix when co-referential to humans, but not animals. In both cases, and in contrast to SAP prefixes and to 3pl prefixes referring to non-humans, both definite and indefinite references are possible. The use of the 3pl prefix in reference to animals is restricted to definite, referential cases only. I have argued that the argument prefixes of Ngalakgan can be divided into at least three categories according to their morphological behaviour and their referential characteristics. In concluding I suggest how these differences can be characterised informally.

5. Conclusion

There have been two major currents to the debate over the status of multiple argument-marking affixes in polysynthetic languages. On the one hand, authors such as Jelinek (1984) and M. Baker (1988, 1996) have proposed, following earlier authors such as Boas, that such affixes constitute the ‘real’ arguments of the clause, and that the optional nominals represent adjuncts linked by apposition. Bresnan and Mchombo’s (1987) term for such pronominal arguments is ‘pronominal anaphor’.²⁸ On the other hand, Simpson (1991), Evans (this volume), and others have shown that argument affixes cannot constitute pronominal anaphors in all cases.

²⁸Note that this use of the term ‘anaphor’ differs both from the traditional grammatical use and from the more recent use in Generative grammar. Traditionally, an ‘anaphoric’ pronoun literally ‘refers back’. In Generative grammar (e.g. Chomsky 1981), ‘anaphor’ refers exclusively to reflexive and reciprocal pronouns. In Bresnan and Mchombo’s use, the term refers to pronominal elements which are also referring expressions, rather than mere agreement markers. I follow their usage here.

I have shown here that we must distinguish more carefully between the categories of person, number, and gender since Ngalakgan evinces several such categories that have differing distributions according to their inherent person/number/noun class features or else the characteristics of their co-referential nominal expressions. There are three formal categories of argument prefixes according to the first criteria: SAP, 3rd person plural, and inanimate, but four according to the second, with a further division between (+human), and (-human), in the 3rd person plural.

These categories cannot be characterised uniformly either as ‘agreement’ markers nor as pronominal anaphors. On the one hand, SAP argument prefixes do not countenance such external co-referentiality at all, and hence must be interpreted as the arguments of the predicate to which they are affixed. That is, SAP argument prefixes are bound pronominal anaphors.

On the other hand, the argument prefixes for the two inanimate noun classes do not necessarily *agree* with their co-referential nominal expressions at all. Therefore, these NC prefixes cannot be considered to be ‘agreement’ markers either. Rather, in referential terms they behave more like generic nouns and classifiers in other languages such as Eastern Arrernte and Ngan’gityemerri, which delimit a domain of function/use to which the external noun is being put in any particular environment.

Nevertheless, NC markers, and the third plural prefix, cannot be called ‘pronominal anaphors’, if what we mean by this term is elements which are both arguments and definite referring expressions, such as the anaphors of English (‘he, she, it’, etc). That is because, as pointed out by Evans (this volume), the prefixes for both these categories can appear in a wide range of environments where they are co-indexed with entities which are indefinite, non-specific or non-referential in various ways. English anaphoric pronouns cannot refer to such entities (Evans claims), therefore the two - argument affixes, and anaphoric pronouns - are distinct. I concur with Evans that the 3pl affix should be termed an ‘agreement affix’, and should be considered to be analogous to such affixes in European languages and Warlpiri. Such affixes can commonly be ambiguous between agreement and argument interpretations. Bittner and Hale (1995), for example, show that Warlpiri 3rd person clitics may, in the absence of a co-referential noun, be interpreted as anaphoric pronouns.

That is, *neither* of the commonly accepted characterisations of argument affixes - agreement markers, or bound pronouns - seems appropriate to the characterisation of NC prefixes in Ngalakgan. Rather, I propose the term *bound pronominal generic* for these prefixes. Like generic nouns in other Australian languages pronominal generic affixes can (optionally) serve to delimit the function/use of an external noun (though they do not always do so), and in some cases NC argument prefixes in this function will clash with the morpho-syntactic features of the co-referential noun. Again, like generic

nouns, they are not necessarily referential in such constructions. Indeed, it's possible that they may be more important to the interpretation of the *predicate*, rather than the referent (as Mithun 1984 suggests is the case for incorporated nouns). They may also be anaphoric when occurring independent of any co-referential noun (hence 'pronominal'). Pronominal generic affixes are like the 3pl prefix in this regard.

Table (5) summarises the essential properties and proposed terms for the various categories of argument prefixes in Ngalakgan.

Table 5: The argument prefix categories of Ngalakgan

	Always agrees?	Always referential?	Allows co-reference?	Term
SAP	yes	yes	no	'anaphoric pronominal'
3pl (-hum)	yes	yes	yes	'agreement affix'
3pl (+hum)	yes	no	yes	'pronominal agreement affix'
NC	no	no	yes	'pronominal generic affix'

Finally, we can ask whether the three- or four-way division of the argument affixes in Ngalakgan finds any universal support. I have already noted that SAP argument affixes in Ngalakgan may never have indefinite and non-specific readings, and that such a restriction is probably lexical in nature. I suspect that the restriction on indefinite or non-specific uses of SAP argument affixes is very common, if not universal, among polysynthetic languages at least, though few grammars explicitly discuss this asymmetry. In short, we expect to find that if any argument prefixes behave more like bound pronominal anaphors, it will be those indexing SAP referents. In addition, it also seems common for the 3rd person plural pronoun in languages to take on the functions of an indefinite, non-specific, or non-referential pronoun. This is the case in English, as well as Ngalakgan and Bininj Gun-wok.

I hope to have shown a way forward out of the debate between 'argument-ist' and 'agreement-ist' positions over the function of argument-indexing affixes. This will come from a recognition of the diverse referential and morpho-syntactic functions that argument affixes can play in many languages, not just those characterised as 'polysynthetic'.

Abbreviations

Boundary symbols, in order of increasing freedom and productivity: + ('root-level'), - ('word-level'), = ('clitic') see B. Baker (1999).

1, 12, 2, 3	1st, 1st inclusive, 2nd, 3rd person
ABL	ablative
ALL	allative
AUX	auxiliary, finite verb stem
BGW	Bininj Gun-wok

COM	comitative
DAT	dative
DEF	definite
DIST	distributed
DUR	durative
ERG	ergative
F/FUT	future
FEM	feminine noun class
GEN	genitive
GN	Gunwinyguan language family
INCH	inchoative
INST	instrumental
INT	interrogative clitic
INTENS	intensified
ITER	iterative
LAT	lative
LOC	locative
MASC	masculine noun class
NC	noun class (MASC, FEM, VEG, NEUT)
NEUT	neuter noun class
NOM	nominative
NP	non-past
O	object
p	plural
PC	past continuous
PNEG/PRNEG/FNEG	past/present/future negative suffixes
POSS	possessive
POT	potential
PP	past punctual, present perfective
PR	present
QUOT	quotative
RED	reduplication
REL	relative/subordinator
RR	reflexive/reciprocal
s	singular
S	subject (that is, Agent of a transitive or Subject of an intransitive verb)
SAP	speech act participant (1st and 2nd person referents)
SEMBL	semblative
SS	same subject
VBSR	verbaliser
VEG	vegetable noun class

References

- ALPHER, BARRY, NICHOLAS EVANS, AND MARK HARVEY (1999): Proto-Gunwinyguan verbal suffixes. To appear in Nicholas Evans ed. *Studies in comparative Non-Pama-Nyungan*. Canberra: Pacific Linguistics.
- ANDERSON, STEPHEN R. (1992): *A-morphous morphology*. Cambridge Studies in Linguistics. Cambridge: Cambridge University Press.
- BAKER, MARK C. (1988): *Incorporation: a theory of grammatical function changing*. Chicago: University of Chicago Press.
- BAKER, MARK C. (1996): *The Polysynthesis Parameter*. Oxford: OUP.
- BAKER, BRETT J. (1999): *Word structure in Ngalakgan*. Unpublished PhD thesis, University of Sydney.
- BAKER, BRETT J. (2000): *The referential function of the noun class prefixes of Ngalakgan in nominal expressions*. MS, University of Sydney.

- BITTNER, MARIA AND KEN HALE (1995): Remarks on definiteness in Warlpiri, in: Emmon Bach, Eloise Jelinek, Angelika Kratzer, and Barbara H. Partee eds., *Quantification in natural languages*. Dordrecht: Kluwer. Pp. 81-106.
- BRESNAN, JOAN AND SAM A. MCHOMBO (1987): Topic, pronoun, and agreement in Chichewa, in: *Language* 63: 741-82.
- CHOMSKY, NOAM (1981): *Lectures on Government and Binding*. Dordrecht: Foris.
- CORBETT, GREVILLE (1983): *Hierarchies, targets and controllers: Agreement patterns in Slavic*. London and Canberra: Croom Helm.
- CORBETT, GREVILLE (1991): *Gender*. Cambridge: Cambridge University Press.
- EVANS, NICHOLAS (1997): Head classes and agreement classes in the Mayali dialect chain, in: Mark Harvey and Nicholas Reid eds., *Nominal classification in Aboriginal Australia*. Studies in Language Companion Series. Amsterdam and Philadelphia: John Benjamins. Pp. 105-146.
- EVANS, NICHOLAS (1998): Emu divorce, in: M. Catherine Gruber, Derrick Higgins, Kenneth S. Olson, and Tamra Wysocki eds., *CLS 34*. Chicago IL: Chicago Linguistics Society.
- EVANS, NICHOLAS (2000): *Bininj Gun-wok: A pan-dialectal grammar of Mayali, Kunwinjku and Kune*. MS, University of Melbourne.
- FOLEY, WILLIAM A. (1997): Polysynthesis and complex verb formation: the case of applicatives in Yimas, in: Alex Alsina, Joan Bresnan, and Peter Sells eds., *Complex predicates*. CSLI Lecture Notes No. 64. Stanford, CA: CSLI Publications.
- HARVEY, MARK (1997): Head and agreement classes: an areal perspective, in: Mark Harvey and Nicholas Reid eds., *Nominal classification in Aboriginal Australia*. Studies in Language Companion Series. Amsterdam and Philadelphia: John Benjamins. Pp. 147-164.
- HEATH, JEFFREY (1978): *Ngandi grammar, texts and dictionary*. Canberra: Australian Institute of Aboriginal Studies.
- HEATH, JEFFREY (1984): *Functional grammar of Nunggubuyu*. Canberra: Australian Institute of Aboriginal Studies.
- JELINEK, ELOISE (1984): Empty categories, case, and configurationality, in: *Natural Language and Linguistic Theory* 2: 39-76.
- LYONS, CHRISTOPHER (1999): *Definiteness*. Cambridge: Cambridge University Press.
- MERLAN, FRANCESCA (1983): *Ngalakan grammar, texts and vocabulary*. Canberra: Pacific Linguistics.
- MITHUN, MARIANNE (1984): The evolution of noun incorporation, in: *Language* 60: 847-93.
- REID, NICHOLAS (1997): Class and classifier in Ngangityemerri, in: Mark Harvey and Nicholas Reid eds., *Nominal classification in Aboriginal Australia*. Studies in Language Companion Series. Amsterdam and Philadelphia: John Benjamins. Pp. 165-228.
- RIZZI, LUIGI (1986): On the status of subject clitics in Romance, in: Oswaldo Jaeggli and Carmen Silva-Corvalan eds., *Studies in Romance linguistics*. Dordrecht: Foris. Pp. 391-420.
- SIMPSON, JANE (1991): *Warlpiri morpho-syntax: A lexicalist approach*. Dordrecht: Kluwer.
- WILKINS, DAVID P. (2000): Ants, ancestors and medicine: a semantic and pragmatic account of classifier constructions in Arrernte (Central Australia), in: Gunter Senft ed., *Systems of nominal classification*. Cambridge: Cambridge University Press. Pp. 147-216.