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Edited by
Ilana Mushin and Brett Baker

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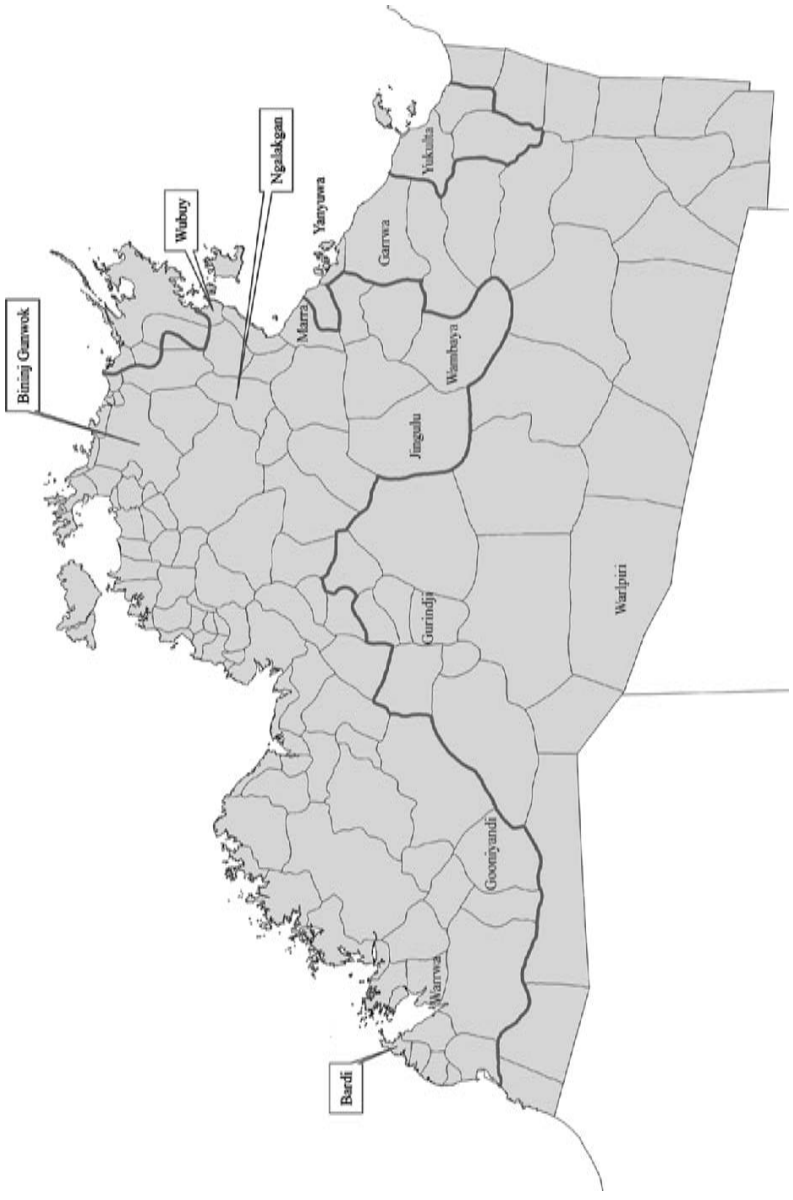
Foreword

This book emerged from the annual workshop on Australian languages hosted by the University of Melbourne in 2004. Many of the papers in the volume were presented at the workshop, though some were later additions, and some papers that were presented are not published here. We would like to thank the Department of Linguistics and Applied Linguistics at the University of Melbourne, in particular Rachel Nordlinger, for organising the workshop. We would also like to thank the contributors to the volume, as well as Emmon Bach, Claire Bowern, Michael Cysouw, Nick Enfield, Nick Evans, Holger Diessel, Nikolaus Himmelmann, Mary Laughren, Patrick McConvell, Bill McGregor, Marianne Mithun, Jane Simpson, Lesley Stirling, and Jean-Christophe Verstraete for their comments and assistance at various times. We are also very grateful for efforts of the anonymous reviewers of the papers presented herein.

Maps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Kala Lagaw Ya
Thayorre
Nyangumarta
Warlpiri
Jiwarli

Discourse and grammar in Australian languages

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1. Introduction[1]

One of the major functions of grammar for its speakers is the production of coherent and contextually meaningful discourse. Linguists have long been interested in the reciprocal questions of how grammatical structures are employed to express discourse structure and coherence, and how the pressures of communication in actual language use may influence the development of grammar. As a discourse unfolds, entities are introduced, reintroduced and referred to, and it is well recognised that languages have formal means of signalling both information status and the identity of referents. This theme in linguistic research can be classified into two "subthemes", both of which are explored in this volume: "information packaging" and "referent-tracking".

The first of these themes concerns the sensitivity of grammar to the status of information in utterances, the extent to which grammatical choices reflect particular states of cognition, "… the speaker's assessment of how the addressee is able to process what he is saying against a background of a particular context" (Chafe 1976: 27). This aspect of the relationship between grammar and discourse has been typically been called "information structure" or "information packaging". Following Chafe (1976) we use the term "information packaging" as it reflects the dynamism of grammatical choices in natural language use. One of the major issues explored in this area is how to characterise the range of information states that language is sensitive to.

Apart from information packaging, the other major theme that emerges from this literature is the way in which language is used to identify and maintain identification of referents throughout a discourse. The study of "referent-tracking" has largely been about the choice of nominal expression to refer to a discourse entity: the forms

1. Many thanks to Nick Evans for suggesting that this volume ought to include a survey of the kind we present here. Thanks also to Jane Simpson and Claire Bowern for their helpful comments on earlier versions.

of noun phrases as definite or indefinite, generic or specific; the use of pronouns, demonstratives and deictics, agreement and noun classification; and the absence of any coding (ellipsis or zero anaphora) (e.g., papers in Givón 1983; Fox 1996; Walker et al. 1998). The referent-tracking function of language is in some senses a subcategory of the overall issue of information packaging. It has been shown, for example, that the choice of linguistic forms used to refer to entities in discourse is highly dependent on whether that entity has been mentioned or evoked in the discourse previously, and the assumptions the speaker makes about what the hearer knows (or should know) about the referent (e.g., Prince 1981; Clark 1992). Indeed much of the literature on information packaging more generally has built its theories around the status of referents and their linguistic realisations (e.g., Clark's 1992, 1996 work on mutual knowledge and common ground has been largely based on the use of definite reference).

In this volume, we explore associations between discourse and grammar within Indigenous Australian languages. Typologically, Australian languages constitute a large genetic group of languages with so-called "free" word order (that is, word order is not "configurational": not closely correlated with grammatical functions). While ordering may not be detemined by grammatical functions in these languages, it is not the case that the ordering of constituents is randomly determined. Indeed, the studies which have been undertaken on patterns of word order in these languages show them to be governed by systematic principles of information packaging (see section 3.1 below and *Simpson* & *Mushin* for a summary of this literature). The relationship between pragmatics and syntax with respect to ordering and information packaging is a particular focus in this volume in the chapters by *Baker, Bowern, Gaby, Mushin,* and *Simpson & Mushin*.

Word order is but one resource available for speakers to indicate the status of information, and a closer look at individual languages in Australia indicates a range of grammatical devices well suited for this discourse function. For example there is considerable variation within Australian languages in the ways that arguments are coded, including free pronouns, clitic pronouns, pronominal prefixes, demonstratives, agreement marking, complex predicate structures and nominal classification. Referential devices and the development and realisation of their discourse functions are explored here in the chapters of *Baker, Bowern, Garde* and *Stirling*.

The collection of studies in this book demonstrates the potential of researchers working on Australian languages to substantially contribute to our general understanding of the interaction between discourse structure and grammatical structure. Some papers are largely concerned with the "online" use of grammatical resources in actual discourse, with close attention to the contexts in which particular forms are selected in a corpus of texts (*Stirling*, *Garde*, *Bowern*, *Simpson & Mushin*). Other papers are (additionally) concerned with the implications of these

choices in language change, especially grammatical change, or for formal models of grammar (esp. *Baker*, *Bowern*, *Gaby*, *Mushin*).

Almost all of the analyses presented in this volume come from primary data gathered by the authors during field trips in Australia,[2] often as part of a larger descriptive or documentary project. However the analyses themselves represent a wide range of methodological and theoretical perspectives – some from a functionalist position, and others taking a more formalist perspective. This volume thus demonstrates how the resolution of theoretical problems in linguistics may benefit from a dialogue between formalists and functionalists, in the spirit of that initiated in Darnell et al. (1999).

Finally, this book also makes a contribution to Australianist research in a little-understood area. While the literature on such issues as case-marking, non-configurationality, classification, and typology of Australian languages is fairly extensive and has been influential on the development of linguistic theory (see the following section), discussions of discourse-related phenomena are more scattered. It is possibly for this reason that they have largely been ignored by the growing body of typological and comparative work looking at this issue. This omission is striking in comparison with the prevalence of Australian languages in the typological literature more generally e.g., work on ergativity, complex predicates, and non-configurationality. Mithun's (1987) paper on the universality of basic word order uses data from Heath's (1978) Ngandi grammar. In contrast É. Kiss' (1994) volume on "discourse configurational" languages does not include any Australian languages, even though this group clearly exhibits features of discourse configurationality. One of our aims in putting this collection together is to encourage more research in this area to the benefit of the theoretical areas of typology, syntax, pragmatics, discourse analysis and historical linguistics, as well as enriching our knowledge of Australian language grammar and its uses.

The rest of this chapter considers the contribution of Australian language research to linguistic theory, and surveys what has been explored with respect to the relationship between discourse and grammar.

2. Australian languages

Like much of the Australian flora and fauna, Australian languages are endemic to the continent. And although we find a range of typological features, there is nevertheless an essential unity among them, as recognised by early linguists

2. Sometimes supplemented with materials collected previously by other researchers in the field.

(e.g., Grey 1841; Schmidt 1919; Capell 1956). Dixon (1980, 2002) argues that all Australian languages are genetically related, with just a handful of questionable cases.[3]

Traditionally, a division is made between languages of the "Top End" and Kimberley regions of the north, and those in the rest of the continent. The division was articulated in genetic terms by O'Grady et al. (1966: 29) as that between Non-Pama-Nyungan and Pama-Nyungan language groups, respectively. Pama-Nyungan languages are a genetic group, while Non-Pama-Nyungan languages are Australian languages which do not constitute a distinct subgroup, but are composed of smaller subgroups of Australian languages, in some cases isolates (see Evans 2003; and Bowern & Koch 2004 for recent discussions).

The Pama-Nyungan languages, constituting the majority of those on the continent, are largely dependent-marking and suffixing while the Non-Pama-Nyungan languages are largely head-marking and both prefixing and suffixing. Whether dependent- or head-marking, Australian languages tend to be agglutinative, with morphological case systems. Many languages have bound pronouns (as prefixes in head-marking languages and enclitics in dependent-marking languages). They tend to have elaborate pronominal and deictic systems, which sometimes incorporate aspects of social relationships such as kin and moiety. With the exception of some language groups in Cape York, phonology is fairly uniform across the continent. Australian languages typically have rich coronal inventories, with three or four contrastive places of articulation in stops, nasals and liquids being common, but generally lack fricatives altogether. Word order is typically not governed by grammatical relations. Those constraints on word order which are found are often limited to the positions of closed class items, such as interrogatives, negatives, modal particles and clitic groups.

Historically, Australian languages have proven to be important for the development of our understanding of some aspects of grammatical structure and language typology, particularly ergativity (e.g., Dixon 1972, 1979, 1994; Levin 1983; Bittner & Hale 1996; Manning 1996), and "non-configurationality" (Hale 1983; Simpson 1983; Simpson & Bresnan 1983; Austin & Bresnan 1996; Nordlinger 1998a; Pensalfini 2003). "Non-configurationality", a term attributed to Hale and first mentioned by Chomsky (1981), refers to a bundle of syntactic characteristics, some or all of which may be observed in any one language: grammatical relations not determined by word order, discontinuous phrases (especially notional Noun Phrases), and the role of pronominal clitics or agreement morphemes in expressing arguments. Such characteristics are prevalent among Australian languages,

3. Some of the languages of the Torres Strait Islands (which are Australian territory) are demonstrably related to Papuan languages.

but some or all of them are also found in languages elsewhere such as Hungarian and Russian (e.g., É. Kiss 1994). The existence of non-configurationality has proven and still proves difficult for the "Standard Model" of Chomskyan grammar to account for, since Universal Grammar relies on configurationality to determine constituency and thereby grammatical relations, at least at the underlying level.

The various nonconfigurational features – free word order, pronominal clitics and discontinuous NPs – which proved problematic for Hale's (1981) account of Warlpiri were all shown to be readily expressed in the unification-based theory of Lexical-Functional Grammar that was then being developed by e.g., Kaplan & Bresnan (1982), Bresnan (1982), and Simpson (1983). The response from Chomskyan generative grammar took several forms. Firstly, Chomsky (1981) accounts for nonconfigurationality by a rule amounting to "Assign grammatical functions freely" (essentially the solution later used in Simpson 1983). Secondly, some authors developed the (quite old) idea that NPs in languages such as Warlpiri were actually adjuncts, linked to argument positions expressed in the bound pronominal system. This idea was discussed already in Humboldt (1836), but in modern times is associated especially with Jelinek (1984) and M. Baker (1996). Arguments against the proposal, for various Australian languages and on different grounds, are discussed in Simpson (1991), Austin & Bresnan (1996), Evans (1999) and Bowern (2004).

Later developments proposed that at a deep or underlying level, Warlpiri actually possessed configurational phrases, but that these were "scrambled" in the pronunciation of a clause at the surface level, perhaps for stylistic reasons (this is the solution in Hale 1973 for example). This idea has been widely explored in modern incarnations of Chomskyan generative grammar for languages such as Japanese (e.g., Saito 1989) and German. More recently, formal grammarians (e.g., É. Kiss 1994; Laughren 2002; Legate 2002; Laughren, Pensalfini & Mylne 2005; Simpson 2007) have explored the alternative that apparently "free" word order in fact carries an interpretive load: that words occur in particular positions in order to package information in particular ways. This approach is addressed further in this book in the papers by *Baker, Bowern, Mushin,* and *Simpson & Mushin.*

Many Australian languages make an "ergative/absolutive" distinction for grammatical functions (Dixon 1980). Ergativity can be realised as a case marking system and/or a verb agreement system that groups objects of transitive verbs (Dixon's 1979 "O" function) with subjects of intransitive verbs ("S"), and distinguishes these from subjects of transitive verbs ("A"). In either case, ergativity has been similarly problematic for syntactic theory because it brings into question the primacy of the notion "subject", whether this is encoded in word order (as in Chomskyan grammar) or as a functional prime (as in LFG). Early responses to ergativity proposed that ergatives, at least in "syntactically ergative" languages such as Dyirbal (Dixon 1972), were objects at some level of representation (Marantz 1984: 196).

Later developments in functional approaches to language (e.g., Du Bois 1987) proposed that ergativity could be explained in terms of characteristic associations between information structure and NP types: NPs marked as ergative are "unexpected" on discourse grounds. In the language studied by Du Bois, Sacapultec Mayan, transitive subjects expressed as full NPs (as opposed to being expressed in verb agreement morphology) were very rare in natural discourse (monologue), while the expression of transitive objects and intransitive subjects as full NPs was relatively common. Du Bois speculates that, if it is a common tendency for transitive subjects to be known participants in discourse (his "Given A" constraint), then it is possible that ergative patterning arose from a "grammaticization of recurrent patterns in discourse" (Du Bois 1987: 806). This view has gained ground recently, in the growing recognition that "optional" ergative case marking is often subject to discourse factors including "unexpectedness" (e.g., McGregor 2006, *Gaby*). See section 3.5 below for further discussion.

This discussion paints a very rough picture of some of the features of typological and theoretical interest in the study of Australian languages. These features have also been the focus of language descriptions so that grammars of Australian languages will frequently have proportionally more substantial chapters on demonstratives and pronominal systems, case-marking and deixis than on word order or discourse structure. In both the descriptive and theoretical literature, the grammatical properties of forms and structures may be acknowledged as being subject to contextual factors, i.e., they display a pragmatic sensitivity. However the detailed analysis of the interactions between grammatical form and their contexts of use has tended not to be a priority.

This is not to say that writers of descriptive grammars have been insensitive to the way speakers use language in discourse contexts (cf. contexts of elicitation). For example, Heath's descriptive work on Nunggubuyu (1984) and Ngandi (1985); Goddard's (1985) on Yankunytjatjara; Wilkins' (1989) on Arrernte; and Evans' on Kayardild (1994) and Bininj Gun-wok (2003) are all overtly grounded in analysis of speakers' patterns of usage in discourse.[4] Some descriptive grammars have incorporated discussions of discourse structure, and the affects of discourse on linguistic structure more substantially. For example, grammars such as Rumsey's (1978) grammar of Ungarinjin, McGregor's (1990) grammar of Gooniyandi , Bowe's (1990) grammar of Pitjantjatjara, Merlan's (1994) grammar of Wardaman, Rose's (2001) grammar of

4. It is assumed that all descriptive grammars based on primary data collected by the researcher are grounded to some extent in how language is used by speakers in natural discourse contexts. The difference noted here is the extent to which this is discussed in grammars, and to which it is acknowledged as a factor in grammatical analysis.

Pitjantjatjara and Patz's (2002) grammar of Kuku Yalanji have chapters on discourse related topics such as prosody, text structure and word order pragmatics.

One of the seminal studies in discourse structure of connected monologue is in Heath (1984, Ch. 17), an examination of one particular text in Nunggubuyu. This study was groundbreaking in several ways. It was one of the first to carry out an in-depth analysis of a text in an Australian language. In addition, Heath establishes a number of parameters which are relevant to discourse structure: a representation of chunks according to breath or intonational groups (what Heath calls "strings"), an identification and representation of the basic intonation patterns, and a demonstration that the strings do not correspond to information units. Heath also introduces some features which are characteristic of and perhaps peculiar to Australian discourse, such as the use of "echo" utterances (repetitions of a string), filler utterances ("whatchamacallit" forms), and the discourse use of onomatopoeic "root" forms of verbs, which will not be examined further in this volume. Many of the features Heath identifies have become standard to later discussions (intonation is discussed in more detail in section 3.6 below).

As a final point to this section, it should be acknowledged that all of the languages of Australia are "endangered" to some extent, largely from the encroachment of European cultures and colonialisation, the destruction of communities, the dispossession of land, the advent of English language mass-media, and the Australian education system. While there are still a number of languages (perhaps 20) still being learned as a first language by children, this number continues to decline. Most of the languages discussed in this volume are no longer spoken by children, some only spoken by a handful of old people, and some no longer spoken at all on a regular basis. In such communities code-mixing between the vestiges of traditional language and English-based creoles (such as Kriol in the Top End and Kimberley) or Aboriginal varieties of English predominate, especially among younger people.

The rate of decline of Australian languages makes it increasingly difficult to examine aspects of language use, as our opportunity to record and adequately transcribe a range of discourse styles is lessened. In addition, when Aboriginal groups are in the process of reviving their traditional languages (as are many groups in New South Wales and Victoria), patterns of discourse are often the "missing pieces" from the documentation records. These factors make the study of discourse and grammar in the Australian context all the more imperative.

3. The sensitivity of Australian language grammar to discourse pressures: A survey

In this section we present a survey of work done to date on the interaction between aspects of discourse and aspects of grammar in Australian languages. Here we

focus on the areas most relevant to the themes of this work – the forms which have proven sensitive to information packaging and referent tracking. It should be noted that, while we aim to cover the major streams of research in this area, we have not attempted to provide exhaustive references to the literature here.

3.1 Word order

Of all aspects of grammar sensitive to discourse pressures, the pragmatics of word order has received the most attention in the Australianist literature. Many grammars acknowledge that word order is governed by pragmatic principles, but few discuss the nature of these principles and how it impacts on word order in the language in question (exceptions include McGregor (1990), Rose (2001), Merlan (1994), and Patz (2002)). The ways that word order should be represented syntactically in Australian languages have been explored in Bowe (1990) for Pitjantjatjara, Hale (1983), Simpson (1991, 2007), Laughren (2002), Legate (2002, 2007) for Warlpiri and Laughren et al. (2005) for Wanyi.

The pragmatics of word order in Australia has been examined in a number of papers building on the seminal work by Blake on Kalkatungu (Blake 1983). These include Heath (1985) on Ngandi, Kilham (1987) on Wik Munkan, Swartz (1988) on Warlpiri, Austin (2001a) on Jiwarli, and Mushin (2005b) on Garrwa. The chapter by *Simpson & Mushin* provides more detail of the basic claims of this work. There is a general consensus in this work that what occurs initially in utterances or clauses carries particular pragmatic weight as new, prominent or contrastive information. This kind of ordering principle is consistent with Mithun's (1987) claim that languages which lack basic word order tend to put prominent information first. *Simpson & Mushin* specifically address this principle through the examination of what occurs initially in four Australian languages.

As discussed in the *Simpson & Mushin* paper, there is variation in the word order literature on free word order languages as to whether the domain of "initial position" should be defined on purely syntactic grounds or whether prosody should also play a role. That is, whether initial position should have its domain as the intonation unit, or whether "initial" also includes left-dislocated phrases that occur as a separate prosodic unit preceding the rest of the clause. Mushin (2005b) has discussed some of the functional differences of these two types of "initial" with respect to Garrwa narrative, finding that left-dislocated phrases functioned to introduce new characters, while true clause initial elements expressed prominent information. McGregor (1990) and Rose (2001), for example, contain discussions of language ordering which acknowledge a functional difference between types of initial constituents (and see *Baker* for further discussion). There is not enough information as yet to determine how widely this functional difference is shared, and whether left-dislocation is used in the same way across Australian languages more

generally. *Simpson & Mushin* is largely concerned with initial elements within a prosodic domain, but acknowledge that when using secondary sources, such as reference grammars, for typological analysis, as they do here, it is not always possible to be certain of the prosodic boundaries in texts.

Following this clause-initial position, we often find a set of grammatical elements, very frequently cliticised to the word or phrase in initial position. Second position clitics of this kind are globally widespread and there is a substantial literature addressing their syntactic and phonological properties (e.g., papers in Halpern & Zwicky 1996; Anderson 2005). There has been far less investigation into the *functionality* of second position – why certain grammatical structures might develop as second position clitics. Recent explorations of this issue have centrally involved the study of Australian languages. These include McConvell (1996), Cysouw (2003), and Mushin (2005a), and are explored further in Mushin (2006), *Mushin* and Mushin & Simpson (in press). All of these studies relate attraction to second position with attraction to a prominent initial constituent.[5] Examples (1) and (2) illustrate how question words and answers to questions (canonical focus categories) are found in initial position followed by a second position clitic group (clitics in boldface).

(1) Warlpiri (Laughren 2002: 94)
ngana-patu **ka=lu** wangka-mi?
who-PL:NOM PRES-(3)PL.S speak-NPAST
'Which ones are speaking?'

yurntumu-wardingki-patu **ka=lu** wangka-mi
[placename]-habitant-PL:NOM PRES-(3)PL.S speak-NPAST
'The Yuendumu people are speaking.' (= answer to question)

(2) Garrwa (Mushin 9.5.01.1)
wanya=**ninji** najba juka kukulinya
what=2SGNOM see boy grandson
'What do you see, Grandson?'

nganbi-nyi=**ngayu** yadajba kukudi
lilyseed-DAT=1SGNOM wait granny
'I'm waiting for lilyseed, Granny.'

Pronominal clitics are the most widespread type of second position clitic in Australia, and may exhibit the grammatical properties of arguments (Austin & Bresnan 1996), as pronominal prefixes frequently do in the prefixing

5. Cysouw (2003) includes a range of Australian languages in his global survey of pronominal clitics. He is more concerned with the attraction of pronominal clitics to positions of prominence, wherever they might be in the clause, rather than second position per se.

Non-Pama-Nyungan languages (Baker 2002). They occur in a relatively wide and contiguous area across the north and centre of the continent and a smaller area in the far southeast (see Dixon 2002 for a mapping of bound pronouns in Australia more generally). Most of these languages are Pama-Nyungan, but there are some dependent marking Non-Pama-Nyungan languages which also have pronominal clitics. McConvell (1996) traces the origins of a set of pronominal clitics in a western Pama-Nyungan subgroup called Ngumpin. Focusing on the properties of pronominal clitics in the Ngumpin family, he demonstrates a relationship between the pragmatic properties of initial position and the tendency for pronominal clitics to end up in second position.

Pronominal forms are not the only grammatical elements systematically found in second position in Australia. Warlpiri auxiliaries, which include pronominal clitics and which mostly occur in second position, also incorporate an aspectual "base" (obligatorily) and modal-type complementisers (optionally) (Laughren 2002; Legate 2007). The Non-Pama-Nyungan dependant-marking languages Wambaya (Nordlinger 1998b) and Yukulta (Keen 1983) also incorporate tense, aspect and some modal morphemes into a second position clitic cluster. *Mushin* examines the distribution of tense and aspect clitics in Garrwa (Non-Pama-Nyungan). The ordering within Garrwa clitic clusters is not fixed and tense/aspect clitics are found both in second position, following the pronominal clitics, and attached to verbs directly. *Mushin* considers these properties of the tense/aspect clitics to be partially a result of paradigm shift in the tense/aspect system. Variation in clitic placement carries a functional load in discourse to signal information structure and to highlight episode structure in narrative.

Another pragmatically significant position is the "right-dislocated" position, where a (typically phrasal) constituent is informationally connected to a preceding utterance (e.g., it refers to a discourse entity which was also referred to in the previous utterance), but is offset prosodically from that preceding utterance. This is illustrated in (3) for Garrwa.

(3) ngardijba=yalu-ny=ili ngulurr-ina nanga-ndu nanaba, **jula[ki]-wanyi**
hide=3PL-ACC=HAB back-LOC 3SG-LOC there bird-ERG
(She) used to hide them behind her back over there, the bird. (18.4.00.1)

Perhaps because of their separate intonation contour, right-dislocations are frequently ignored in language descriptions, although a glance at texts included in most grammatical descriptions indicates that they are used widely in discourse. Frequently called "afterthoughts" (as in Donaldson 1980: 235), their use is mostly (loosely) associated with clarification or disambiguation, or apposition. In the case of Nunggubuyu, Heath (1984: 614) explains "by *afterthought* we normally mean a

clarifying constituent added to an earlier string after a pause or sharp intonation boundary". Similarly, McGregor (1990: 376) calls this construction "tagging" and claims it "normally serves the function of reminding the hearer of the identity of the Theme or of making its identity explicit, in case there is some chance of ambiguity." The disambiguating or clarifying function of right dislocation is also discussed in Bowe (1990) and Rose (2001) for Pitjantjatjara.

3.2 Referring expressions

Choice of referring expressions is a key cue to information status for hearers (Givón 1983; Ariel 1990; Gundel et al. 1993). Here we briefly survey some of the commonly found NP types and their characteristic uses in information structure, as well as some referring expressions with rather specialised discourse functions.

As discussed by Heath (1986), the non-configurational characteristics of Australian languages make it particularly difficult to identify referring expressions on a formal basis, and therefore, to identify referents in some cases. His (1984) discussion of reference tracking in Nunggubuyu, a Non-Pama-Nyungan language, identifies the noun class system as a prime, though not infallible, source of referent identification in discourse. Heath also singles out demonstratives (which form an exceedingly complex system in Nunggubuyu) as reference tracking devices, because by indicating relative spatial relationships they can map onto the participants of an event. To our knowledge, this idea has not been subsequently explored in detail (but see Wilkins 2006 for related discussion).

Heath (1984: 606) also devotes some space to discussion of his understanding of the "pregrammatical discourse categories" Focus, Topic, Definiteness, Given and New. He makes a preliminary association between the two major forms of the noun class prefixes, and these various categories, an association which is further explored for Nunggubuyu and other neighbouring languages by *Baker*.

Nunggubuyu, like many Australian languages, possesses a set of distinctive "contrastive" pronouns which are used in contexts where one referent is contrasted with another:

(4) 'X went west, Y went east.'

Heath (1984: 609) notes that in such contexts, referent Y is likely to be realised with a contrastive pronoun, whether or not a full, referential NP follows. This kind of "double reference" is explored by *Stirling* in another quite different Australian language, Kala Lagaw Ya. Some Australian languages have been claimed to use independent pronouns only for contrastive purposes, all other pronominal mentions being realised by zero or some kind of bound pronominal system. Ngalakgan is one such language (Baker 2002). This kind of use of pronouns is an instance of

what Vallduví & Vilkuna (1998: 87) refer to as "Thematic Kontrast", also referred to as "Contrastive Topic" (e.g., Myhill 1992). In English, such functions may be realised by left-dislocated (cleft) sentences: "As for him, he hates beer". The pronoun thus functions as a kind of "switch reference" marker.

Heath also identifies a specifically Emphatic pronoun form, which does not serve to generate a contrast set, but merely to draw attention to new information. This pronoun then, realises what Vallduví & Vilkuna (op.cit.) refer to as "Rheme". Other Australian languages make use of a set of free pronouns in a wider range of pragmatically marked contexts, which might include contrast and emphasis, but also other contexts where referents are signalled as "prominent" (e.g., in answers to questions, topic and perspective shifts). Warlpiri is a language of this type (Simpson 2007).

With respect to the demonstrative system, Heath (1984) makes the important observation that some demonstrative pronouns have a specifically discourse anaphoric (rather than spatial deictic) function. Such forms have been found in numerous Australian languages, particularly from the Non-Pama-Nyungan bloc. In the Non-Pama-Nyungan language Gun-djeihmi (Evans 2003: 290), from the Bininj Gun-Wok dialect chain, we find the following demonstrative forms with a primary reference-tracking use (exemplified with the unmarked Masculine gender forms): *namege* "that, aforementioned"; *namekke* "that mentioned just before"; *nabernu* "the one which you wanted to know about, which is over there"; *nabehrnu* "the one which you wanted to know about, which is over here"; *nakka* "that just mentioned/ that was just present"; *nawu* (a) relative pronoun (b) "that which you should be able to identify when I mention its name" (see further *Garde*).

Dixon (1980: 276) had earlier noted that in many Australian languages, pronoun paradigms have gaps in the third person, these functions being filled instead by the demonstrative system. In Jiwarli (Austin 2001b) for instance, overt anaphoric references are most commonly realised with the distal demonstrative *ngunha* "that". Austin notes (2001b: 90) that although Jiwarli has third person pronouns, these are "very infrequently used and are emphatic". In Jiwarli, as in many Australian languages then, demonstratives are the prime correspondent to unstressed third person pronouns in a language like English. In the current volume, *Stirling* shows that, by contrast to the usual Australian pattern, demonstratives in the Torres Strait language Kala Lagaw Ya are very rarely used to refer to humans in discourse, pronouns being used instead. Demonstratives are used more often for non-human participants.

Subsequent work in reference tracking has shown that Australian languages accord with the general principles proposed in Givón (1983), that reference is iconic: mentions of known participants tend to take reduced forms – pronouns, demonstratives or zero – while mentions of new participants tend to take more

contentful forms: nominals or nominal groups. For instance, Kim et al. (2001: 10) find that pronominal affixes in Bininj Gun-wok have the lowest measure of "referential distance" (Givón 1983), which is one measure of a referent's topicality in discourse. Similarly, *Stirling* considers the application of Givónian methodology to the unusual "double reference" construction in Kala Lagaw Ya.

3.3 Ellipsis

The absence of overt referring expressions for a notionally present referent, usually called "ellipsis", "pro drop" or "zero anaphora" in the general literature, is also a notable feature of Australian languages. Many grammars of Australian languages do acknowledge that in actual discourse, referential expressions, including pronouns and demonstratives may be omitted without loss of either grammaticality or (apparent) understandability. The freedom to omit referential terms has been used as one of the diagnostic features for non-configurationality (e.g., Austin 2001b), furthering the claim that most Australian languages are non-configurational. Nordlinger (1998a) and *Bowern* however point out that omission of nominals is not without constraint and there are some syntactic contexts, such as NPs as arguments in raising positions, in which overt nominal expression may be required.

Nonetheless, it is a common theme through descriptions of Australian language discourse that noun phrases and even free pronouns are used infrequently, so that from an English speaker's perspective, the discourse seems underspecified and difficult to follow. Swartz's (1991) analysis of the use of ellipsis in Warlpiri narrative resulted in his conclusion that ellipsis was the normal state of affairs in discourse:

> Zero anaphora … is the pragmatically unmarked, or neutral, condition in Warlpiri clauses. Zero anaphora is the primary means of maintaining thematic continuity throughout a stretch of discourse … Conversely overt nouns and pronouns … occur primarily to fulfill some pragmatically marked discourse function as determined by the narrator. (Swartz 1991: 45).

Bowe (1990) similarly notes the difficulty in determining word order patterns in Pitjantjatjara because of the large number of "verb only" clauses in her corpus. It should be noted that both Warlpiri and Pitjantjatjara have systems of obligatory clitic pronouns, which are rarely counted as independent referential devices. The presence of person/number marking in the form of pronominal clitics does result in a kind of referent identification. We need to tease out the use of free phrases as referential devices, whatever their function in reference identification and tracking, and the use of grammaticalised referential systems, such as bound pronouns and agreement marking, for referent identification in contexts of thematic continuity (cf. *Bowern*). Some person/number combinations may not be overtly marked in

the system of bound pronouns. For example, in many languages, third person singular reference has no overt realisation in the bound system.[6] In a third person narrative text, this may result in chains of thematically continuous clauses with no overt reference to discourse participants. An equivalent first person narrative might however have overt reference, due to the presence of first person forms.

This kind of contrast, i.e., between third person and first person narrative, raises the question of whether the observed prevalence of ellipsis in Australian language discourse might be a result of the kinds of texts used in analysis. Many text collections of Australian languages consist almost exclusively of narratives, often traditional stories or stories about the effects of European colonisation. Narratives as a genre tend to have passages of thematic continuity (e.g., where a character embarks on a sequence of events). This is the primary context for ellipsis (with or without bound pronominal marking), whatever the language. The papers by *Bowern* and *Stirling* in this volume both show that the contexts for ellipsis in Bardi and Kala Lagaw Ya narratives do seem to conform to those described for other languages (i.e., the highest levels of topic continuity).

There is good evidence however that patterns of ellipsis are part of basic conversational language in Australia. *Garde*'s analysis of conversation in Bininj Gun-Wok demonstrates that a lack of referential specificity, by English language standards, is standard in Bininj Gun-Wok talk. He suggests that underspecification of this kind might be a feature of small, close-knit community talk more generally. Speakers in small communities all over the world have a high degree of mutual knowledge, and can assume as much from their interlocutors. This principle applies in face-to-face encounters of everyday interaction where the referents of person and place may be well known, as well as in narratives of which storytellers can assume their audience has prior knowledge.[7] This fact about the needs of communication in such communities might account for the felicitous use of extensive ellipsis we see in so many Australian languages.

3.4 Morphological markers of information status

Australian languages on the whole are morpologically rich. Many grammatical functions are signalled morpologically and this is no doubt correlated with the fact

6. The absence of third person singular forms in pronoun paradigms is common across languages in general. We need to distinguish between ellipsis as a result of paradigmatic gaps, and ellipsis as a result of referential omission. The former is a feature of grammar, the latter is contextually motivated.

7. Nonverbal cues may also be used to assist in referent identification and tracking, as suggested by Wilkins (2006).

that few grammatical functions are realised in syntactic structures. As discussed above, word order appears to be reserved for the organisation of information in utterances rather than for the assignment of grammatical relations. In addition to word order, some languages have developed morphemes that overtly indicate the status of information in a clause or utterance. These morphemes are described in various ways in grammars as "post inflectional suffixes" (Austin 1981), "topic markers" (Kilham 1977; Donaldson 1980), "focus markers" (Pensalfini 1999, 2003) and "prominence markers" (Morphy 1983).[8] Markers of this type do not appear to be widespread, although this could be a symptom of the lack of focus in grammars on discourse related phenomena. Most of the described forms are in Pama-Nyungan languages; possibly this is a significant difference between Pama-Nyungan and Non-Pama-Nyungan languages, in which case, it demands further explanation.

Care must be taken in assessing the discourse functions of morphemes which are described as marking information status. For example, Austin (1981: 182ff) describes two post-inflectional suffixes in Diyari (Pama-Nyungan: South Australia) which he glosses "old information" and "new information" respectively. The "old information" marker *–ṭa* is used to "denote a situation or referent(s) mentioned in the previous context" while the "new information" marker *–l̪a* is used to "mark a new participant or situation". An examination of the Diyari text at the back of the grammar indicated that these suffixes were used quite rarely and it was difficult to determine the motivation for their use when they did occur.

(5) Diyari

mayi,	kira-**l̪a**	mani-ŋa	waṉṭi-yi	pulali	/
well,	boomerang-NEW	get-PTCP	AUX-PR	3DL.A	/

ŋanda-ŋanda-l̪a-**ṭa**	ṉiṉa
ITER-hit-SAME.SUBJ-OLD	3SGNF.O

'Well, they got a boomerang and hit him all over (Text 1, line 91)

The example in (5) is a complex sentence which has both post-inflectional suffixes. The boomerang (marked with the "new information" suffix) is mentioned for the first time, and never again in the narrative. However, there are other new mentions in this text which are not marked as new information. In (5), the "old information" marker is found on the verb but it is unclear in what sense this is discourse-old, as the event described here has not occurred previously in the

8. Other morphemes associated with discourse may function in conversation management (e.g., Evans (1992, 2003: 618–623) or expressions of speaker stance and affect (e.g., Donaldson 1980; Wilkins 1992).

discourse. Similar problems arise in Kilham's (1977) description of the functions of the enclitics *–an* "definite" and *–iy* "topic" in Wik-Mungkan.

Morphy (1983: 50) describes a post-inflectional clitic *-ny/-tja* she calls a "prominence" marker in the Yolngu language Djapu. This clitic can occur with any word class in any position in the clause and is frequently used. The functions she describes for this clitic clearly fall into the class of functions associated with "prominence" (Choi 1999) or "kontrast" (Vallduví & Vilkuna 1998). These include requests for information and changes of subject from the previous sentence (Morphy 1983: 50). Morphy also lists "new information" as one category of information marked with this form; however, an examination of the Djapu texts in this description indicates that not all new information attracts this morpheme. The difficulty in characterising the semantics and pragmatics of these information status-sensitive morphemes is clear from these examples and highlights the need for detailed empirical discourse based investigations of their distribution.

In addition to these "post-inflectional" and clitic type morphemes, there is evidence in a number of languages that the Ergative case marker is losing its status as a marker of grammatical function and is instead evolving into a marker of information status, more specifically a marker of "unexpected" information used when the subject of a clause is not the expected referent in the discourse context. This phenomenon has been discussed recently for Warlpiri and Gurindji (Meakins & O'Shannessy 2004; O'Shannessy 2006), Jingulu (Pensalfini 1999, 2003), and Warrwa (McGregor 2006).

In much of this literature, the pragmatic function of the ergative morpheme is analysed as a grammatical change associated with intensive contact with English and with language death. As word order begins to attain grammatical functions in these languages, so that utterances have English word order, the ergative morpheme becomes redundant in its grammatical function of marking transitive subject. This leaves it free to adopt other functions. Importantly however, *Gaby's* study of the pragmatic functions of ergative marking in the Cape York language Kuuk Thaayorre demonstrates that ergative morphology can attain pragmatic properties even when the language has not had intensive contact with English. In Kuuk Thaayorre, optional ergative marking is conditioned by animacy and what counts as an "expected subject" in a given speech community.

3.5 Prosody

There are still only a handful of detailed studies of prosody in Australian languages, and even fewer where this examination is related specifically to discourse structure. Bishop (2002) provides a useful summary of work done to date. We believe it is fair to say that work of this nature is in its infancy in Australia, though

there are several research projects underway in this area. Perhaps the earliest study of this type, and still one of the most detailed in discourse terms, is Sayers (1976) description of Wik-Munkan intonation. Sayers identifies 26 distinctive (that is, phonological) tunes associated with distinct discourse meanings and, often, specific 'discourse particles' as well (in this case, phrase final clitics).[9]

Both Sayers and Bishop recognise a hierarchy of prosodic domains. For Sayers, above the word there are the Phonological Clause and Phonological Sentence. The P-clause is bounded by potential pause, has a "single clause-stress" (what would these days be referred to as "cumulative accent"), and a coherent intonation pattern. Sayers (1976: 34) argues that the position of the accent is determined by grammatical factors. These can be summarised in the following rule: accent falls on a lexical (content) word preceding the verb; if there is no lexical word preceding the verb, it falls on the verb. In non-verbal clauses, it falls on the predicate. In addition, certain grammatical elements in particular attract accent (and override the rule, we assume): interrogative pronouns, negatives, and the "frustration marker". The class of items which attract accent in Wik-Munkan is highly suggestive: it overlaps those classes of items which commonly host second position clitics in other Australian languages such as Gurindji (see McConvell 1996, *Mushin*, and *Mushin & Simpson*).

The P-clause can encompass stretches of discourse smaller than the grammatical clause, for instance listed items, left-dislocated sentence topics and components of certain other sentence types (Sayers 1976: 41).[10] Similar phenomena are reported elsewhere in the literature, though in less detail. For instance, Heath (1984) identifies left-dislocated topics with a specific intonation contour and pausing in Nunggubuyu, and *Baker* finds the same structure in nearby Ngalakgan. Such topics characteristically take an IP-final H boundary tone in Ngalakgan (H% in ToBI transcription: Beckman & Pierrehumbert 1986), and apparently also in Wik-Munkan judging by Sayers' transcription convention, with superscript "3", indicating high pitch on a P-clause final "carrier clitic" (Sayers 1976: 52). An examination of Sayers' examples of these structures suggests that the whole construction – initial topic, followed by sentential comment ending in low boundary tone (L%) – has much the same intonation characteristics as it does in Ngalakgan.

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9. Other work in this area includes Heath (1984: Ch16), McGregor (1990: 362), Merlan (1994) and Rose (2001: 113) who discuss the functionality of "tone units" as units of different kinds of information.

10. The P-clause is thus probably equivalent to the "Intonational phrase" level of Autosegmental-Metrical phonology (e.g., Beckman & Pierrehumbert 1986), as used by Bishop (2002) in her examination of Bininj Gun-Wok.

Fletcher & Evans (2000) suggest further characteristics associating particular intonational events with particular discourse-related functions in narrative, such as New Topic. In the next few years, we expect this area of study in Australian linguistics to produce several major pieces of research building on the pioneering efforts of the scholars mentioned here.

4. A final note on terminology

The study of the interaction between information packaging and grammatical structure in the field of linguistics has its origins in the Prague School's notion of "communicative dynamism" (e.g., Firbas 1964 – also Halliday 1967), and early work on distinguishing information types coming from the emerging field of functional linguistics (e.g., Chafe 1976; Prince 1981). The common thread that wound around this body of work is that languages provide speakers with the means to distinguish:

a. Information that the speaker expects the hearer to be able to identify without much cognitive effort (associated with terms such as "given", "old", "thematic", "established", "activated", "identifiable", "topical");
b. Information which the speaker does not expect the hearer to have already identified (associated with terms such as "new", "rhematic", "unactivated", "focus");
c. Information to which the speaker wants the hearer's attention to be drawn (associated with terms such as "prominent", "focus", "pragmatically marked", "highlighted", "newsworthy", "contrastive").

Among the plethora of terms associated with different information states (or packaging of language with respect to information states) "focus" and "topic" emerge frequently. Investigations of focus and topic have been concerned with questions of how they should be defined (as features of particular linguistic forms, as states of cognition, as structural positions), how they should be represented in syntactic theory (e.g., Rizzi 1997; Legate 2002; Van Valin & LaPolla 1997), how many different kinds of topic and focus should be identified, and what are the range of linguistic forms that express these information states (e.g., Lambrecht 1994; É. Kiss 1998; Vallduví 1992; Vallduví & Vilkuna 1998).

While there is clear variation in the detail, throughout this work there is a general consensus that "focus" is underlyingly a pragmatic notion that refers in some way to information to which speakers want to draw attention (for whatever reason), and that "topic" is also a pragmatic notion that refers in some way to

what the discourse is "about". We recognise however that both terms have been used, and continue to be used, to cover a range of pragmatic and linguistic phenomena, so there is a potential for the misrepresentation of pragmatic meanings for particular linguistic phenomena, as well as difficulty in comparing phenomena cross-linguistically.

This is an important concern for a book that seeks to provide its readers with a range of analyses of the relationship between information type and linguistic form from a number of theoretical perspectives. We have retained the use of the terms "focus" and "topic" throughout the volume but the use of these terms in each case is carefully defined, according to the framework used. As this book is about the deployment of linguistic tools, rather than the explication of terms like "focus" and "topic", we invite the reader to concentrate on the analysis of data and description of discourse contexts in which forms occur.

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Clause-initial position in four Australian languages

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Word order in Australian languages has frequently been described as "free" or subject to pragmatic or discourse constraints rather than governed by syntactic rules. This paper examines both the pragmatic and syntactic factors which motivate the placement of constituents in clause initial position. We find striking similarities across four languages – Warlpiri, Jiwarli, Nyangumarta and Garrwa – suggesting underlying principles for ordering that belie their description as "free word order" languages. Clause initial position is dominated by "prominent" constituents" – both those which are inherently prominent and thus obligatory in initial position, and those which are prominent by virtue of the discourse context.

1. Introduction[1]

This paper presents a comparison of ordering preferences in narrative texts across four dependent-marking Australian languages – Warlpiri, Jiwarli, Nyangumarta and Garrwa. In all of these languages, the ordering of constituents is syntactically "free", meaning that they do not signal grammatical function. Here we explore the question of how much variation there is in the choices speakers make as to where they place constituents in terms of their information status. We are particularly interested in the interactions between syntax and pragmatics in *clause-initial position*, and how what comes first in a clause may affect the ordering preferences for the rest of the clause.

In the rest of this introductory section we present a survey of previous studies of word order and word order pragmatics in Australian languages. Section two outlines our methods, a comparative approach to the distribution of linguistic structures in the spirit of Myhill (1992)'s "typological discourse analysis". In this

1. This paper has emerged from our presentation "Discourse Prominence in Four Australian Languages", at the 2005 Australian Linguistics Society meeting. We thank members of that audience, and particularly Janet Sharp, for their comments. We thank Alan Dench for access to his recent work on Nyamal and on pronouns.

section we also provide more information about the languages of our study and the corpora used for this investigation. Section three presents the distributions of forms found in initial position in the four languages. Section four focuses on forms which must occur in initial position, and their pragmatic status and section five focuses on the pragmatics of nominals in initial position. Section six summarises our findings and presents an outline for future research.

1.1 Word order and information packaging in Australian languages

The flexibility of word order in Australian languages, and its sensitivity to the pressures of information packaging, was noted as far back as 1840 for Kaurna (a Pama-Nyungan language originally spoken where Adelaide is today),

> A general rule is, that part of a sentence which is of more importance in the idea of the speaker, and upon which he will draw the attention of the hearer, is put first; therefore, also, the accusative is put before the verb; as, *Turlabutto meyu; nurrettoai, nunyaretinga* – Full of anger is the man; lest he enchant you, be silent; *Wothangko padlourlaintya turteanurla*? *Mette biri nindo purla* – Whence is that jacket? Stolen you most likely have it; the answer is, *Yungki ngai padlo, yakko ngatto metti* – Given to me he has it, not have I stolen it. (Teichelmann & Schürmann 1840: 24)

The writers probably recognised this use of flexible word order for pragmatic and grammatical purposes because they were German speakers and readers of Latin. Many Pama-Nyungan languages show similar flexibility, but not all Australian languages do, as Arthur Capell noted in 1956, when he contrasted the great flexibility in the Western Desert languages (now considered part of the Pama-Nyungan language family) with more "crystallised word orders" elsewhere, most notably in North Australia among languages now considered non-Pama-Nyungan (Capell 1956: 12). The flexibility of word order was picked up and elaborated by Dixon (1980), when he summarised some of the discoveries made since Capell's initial formulation:

> The order of words and phrases can, in most Australian languages, be extraordinarily free; it has little or no grammatical significance. A preferred order can usually be perceived; this may be employed in systematic elicitation, or in a discourse where ambiguity might otherwise result. But there can be unlimited deviation from this preferred order, dictated partly by discourse considerations ("topic" and the like) and partly by the whim of the speaker. Even when a preferred order is adhered to most of the time, this is still a phenomenon of a quite different nature from word order in English or French, where it is the main or only marker of syntactic function. (Dixon 1980: 441–442)

This general observation has been elaborated upon in subsequent work examining motivations for the ordering of constituents in individual Australian languages (e.g., in Pama-Nyungan languages: Kalkatungu – Blake 1983; Pitjantjatjara – Bowe

1990, Rose 2001; Warlpiri – Swartz 1991; Hale 1992; Laughren 2002; Legate 2002; Jiwarli – Austin 2001b; Nyamal – Dench in prep-a., and in non-Pama-Nyungan languages: Gooniyandi – McGregor 1990, 1997; Garrwa – Mushin 2005a and Wanyi – Laughren et al. 2005). All of these works seek to tease out the information types that are associated with different positions, usually through allocation of discourse-pragmatic terms like "focus", "theme", "topic" and "comment" to different parts of the utterance. While these terms are used in various related ways, there is consensus that whatever core constituent occurs *clause-initially* has some pragmatic importance or prominence. This "importance" is usually to signal that the information in question is brought to the forefront of the hearer's attention, perhaps by emphasis or contrast, because it is either non-recoverable (i.e., new) or it runs counter to expectations (i.e., it changes the interlocutor's knowledge state) and is thus prominent (Choi 1999). This pattern of ordering follows the general principle described in Mithun (1992) as putting the most "newsworthy" information first.[2]

There has been less consensus on what discourse-pragmatic term should be applied to this initial position – "focus" (e.g., Austin 1981; Blake 1983; Evans 1995; McConvell 1996; Heath 1981, 1984; Merlan 1994), or "topic" (e.g., Donaldson 1980; Kilham 1987; Bowe 1990). Part of the problem lies in whether initial position includes so-called left-dislocated constituents (i.e., initial constituents which are intonationally separated from the rest of the clause and may or may not have a pronoun copy in the main part of the clause). Left-dislocated constituents have different discourse-pragmatic functions from "clause internal" initial constituents (Mushin 2005a), and may lead to initial position being labelled "topic" (e.g., as a topicalised constituent, as Bowe (1990) does) rather than the more commonly used "focus".[3] In fact, for Warlpiri, Laughren (2002) and Legate (2002) argue for an ordering "topic focus …", where the topic may or may not be in the same intonation unit as the rest of the clause. In this paper we are mostly concerned with initial constituents which occur under the same intonation contour as the rest of the clause.

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2. This view runs counter to the earlier Prague School principle of communicative dynamism, such that older, given information precedes new information (e.g., Firbas 1964; Halliday 1967).

3. Donaldson (1980) actually defines topic as what occurs initially, "…constituents consisting of one or more words of any word class are referred to as topics when they occupy sentence-initial position …" (Donaldson 1980: 237). This may have come from a conflation of "topic" with the Systemic-Functional notion of *Theme*, which was defined by Halliday (1967) as what comes first in a clause.

In this paper we adopt the terms "new" and "prominent", following Choi (1999), as a cover term for two types of pragmatic markedness – non-recoverable information ("new"), and information that changes the knowledge state of the interlocutor, e.g., in constructions such as contrastive focus ("prominent"). Newness and prominence are both associated with initial position in Mithun's "newsworthy first" framework, and we find the same pattern exhibited by all the languages examined here.

The order of constituents following the pragmatically significant first position appears to be more varied across Australian languages. For example, Blake (1983) describes what follows first position in Kalkatungu in terms of pragmatic categories: (focus-topic-(rest of) comment), where "topic" is what is being talked about, already established in the discourse, while the "comment" is that which is being said of the topic. Blake's "topic" is perhaps best described as "continuing topic", and is often expressed by pronouns. "Focus", in this framework, is the part of the comment that is most pragmatically salient, most "newsworthy" (we will discuss these terms later in more detail as they apply to our data). In contrast, Bowe (1990: 133) more explicitly describes a word order template for Pitjantjatjara in terms of both pragmatic and morphosyntactic categories as "TOPIC-[S FOCUS … VERB]-ANTITOPIC. Note that Bowe calls the first position, what Blake calls "focus", "topic". The term "focus" in Bowe's account is used for arguments in immediately preverbal position that are not pragmatically highlighted. Swartz (1988: 154)'s description of Warlpiri word order is (sentence topic) – [verb phrase –(remainder of comment)]. For Swartz "sentence topic" includes "focused topics", "raising the status of one participant relative to other participants", "contrastive or reciprocal prominence". This approach acknowledges that only the verb is obligatory as a constituent in Warlpiri clause structure.

These approaches to the analysis of word order in individual Australian languages have moved away from attempting to characterise ordering preferences in terms of subject, object, and verb positions. But while this work has acknowledged the role of pragmatics (i.e., information packaging) as primary, there has been relatively little investigation from a cross-linguistic perspective. Do Australian languages follow a homogenous pattern of ordering, or is there variation? A cursory glance at the patterns observed for individual languages suggests that the placement of pragmatically prominent information clause-initially is a widespread phenomenon, but that languages do vary in how grammaticalised this relationship has become.

And while the ordering of arguments (and to some extent, adjuncts) with respect to the verb may be pragmatically driven, Australian languages do display some syntactic constraints on ordering. At least some Australian languages appear to have syntactically defined verb positions. For example, Bowe (1990) (and others working on Western Desert languages) have identified a basic verb-final pattern,

while Garrwa and Wanyi may be described as "verb-initial" (Laughren et al. 2005; Mushin 2005a). Nyamal arguably has the object immediately following the verb (Dench, in prep-a). The high rate of ellipsis in Australian languages often results in verb initial – often verb only – utterances (Bowe 1990; Swartz 1991; Evans 1995; Nordlinger 1998), even when verb initial is not analysed as a preferred word order. This suggests that verb initialness need not carry much pragmatic weight in itself, being a result of the pragmatics of ellipsis. However, pragmatic weight can be carried when there is a choice to put the verb initially or not. Laughren argues that in Warlpiri the choice of putting a verb initially is a decision to make the verb the "information focus" of the clause (Laughren 2002, 2005), a position modified by Simpson who suggests that the verb must also be prominent (Simpson 2007).

Other syntactically defined positions may include Wackernagel's position, the position immediately following initial position or more generally the position in which auxiliaries and pronominal clitics are frequently placed (e.g., the Warlpiri auxiliary – Laughren 2002), and the restriction in some languages for negatives and modal particles to occur initially (see section 3 below). We expect such "syntactic" constraints on ordering to interact with general information packaging principles and to result in variations in ordering preferences across languages. The languages we have chosen for this investigation differ with respect to the syntactic placement of verbs and with respect to the syntactic salience of second position.

Another variable which we hypothesise may affect the patterns of word order preferences across languages is the range of nominal expressions available to speakers to express the identity of discourse entities and to track them through discourse. This range includes full NPs, free pronouns, bound pronouns, demonstratives and zero (ellipsis). Studies of word order patterns frequently ignore the way that an argument is realised in their calculation of word order variation but Blake (1983) notes different ordering patterns between nouns and pronouns in Kalkatungu, and Dench (in prep -b) gives tables showing differences between nominal and pronominal subjects and objects.

Australian languages in general display a wide range of pronominal types (e.g., Dixon 2002). Many languages make use of weak or bound pronouns, either as prefixes or as enclitics. These pronouns index person, number, gender and grammatical status. In some cases they may resemble agreement systems (e.g., where such pronouns are obligatory, even if there is another nominal expression present in the same clause, as in Warlpiri (Hale 1973, 1983)). Languages with bound forms generally[4] also have a set of free pronouns, which may pattern morphologically

4. An exception is Warumungu, a neighbour of Warlpiri (Simpson 2002). There is only one set of pronouns, and most of these forms are bound.

with nominals. As anaphoric and deictic devices, pronouns by their very nature refer to information already established in the discourse; however free pronominals may also be used in contexts of pragmatic prominence (e.g., contrast). In this way, in languages with two sets of pronouns, free pronouns may share more pragmatic functions with nominals than with weak pronouns.

The effect of rampant ellipsis on analysis of word order has also been noted (e.g., Bowe 1990; Swartz 1991; Austin 2001a; Mushin 2005a). These studies all show that because the languages in question allow for the zero realisation of discourse referents, some utterances may consist of a predicate with no overt realised arguments. For languages with weak or bound pronominals or obligatory agreement, reference may be maintained morphologically, but even languages which lack such tools still make use of zero anaphora in actual discourse (e.g., Jiwarli – Austin 2001a; Garrwa – Mushin 2005a).

These two variables, the degree to which languages in question can be said to have "syntactic structure" and the range of strategies for the realisation of nominals, form the basis for the text-based investigation presented in this paper. Taking these factors into consideration, we focus on three aspects of the interaction between information packaging and clause-initial position in four languages:

1. Forms which must occur in clause initial position (i.e., what has been grammaticalised in that position), and their pragmatic status.
2. Nominal expressions in initial position, and their pragmatic status.
3. The predicate in initial position, and its pragmatic status

Patterns of ordering preferences were examined in a corpus of traditional narrative texts for the four languages. For this paper, we have taken a largely quantitative perspective in presenting the findings of the comparison in order to deliver an overall sense of the observed patterns. Such an approach allows us to see, for example, obvious differences between languages. However, in a study such as this, which investigates interactions between pragmatics and syntax, we recognise the importance of qualitative analysis and of accounting for the occurrence of forms in their particular contexts, and will provide discussions of the contexts, where relevant.

2. The data

The data used for this investigation are oral narrative texts. The quantity of data was chosen to align with the amount used in comparable studies of Australian languages (e.g., Swartz 1991) – approximately 300 clauses. The Warlpiri data come from two oral texts, one collected by Stephen Swartz (Swartz 1991), and one by Adam Kendon (Kendon 1988). The Jiwarli data comes from 6 oral texts in Austin (1997).

The Garrwa data are from oral texts recorded by the second author, and used in Mushin (2005a, 2005b).[5] The Nyangumarta data comes from the orally produced texts published in Sharp (2004) and is less comparable as the number of clauses is much smaller than the data used for the other languages. The make-up of the corpus is summarised in table 1.

Table 1. The corpus

	Number of clauses (verb and noun headed)	**Number of texts**	**Source**
Warlpiri	282	2	Kendon (1988) – Winnie Nangala, speaker Swartz (1991) – Jerry Jangala, speaker
Nyangumarta	117	4	Sharp (2004) – some from Monty Hale (Texts 1, 3, 6 and 7)[6]
Garrwa	315	4	Mushin Field notes: (2000) Don Rory, speaker (2001) Kathleen Shadforth, speaker
Jiwarli	278	6	Austin (1997) – Jack Butler, speaker, texts 37, 43, 44, 48, 50, 65

In addition to the availability of texts, these four languages were chosen because they differed in terms of their pronominal systems: Warlpiri and Nyangumarta have two sets of pronouns, free and bound, while Jiwarli and Garrwa have only one set of pronouns. The languages also differ with respect to their reported word order preferences. Warlpiri has been analysed as underlyingly verb-final because subordinate clauses must be verb final. Swartz's (1991) survey of word order and anaphora in narrative found an overall preference for verb final clauses. In contrast, Garrwa has been described as underlyingly verb-initial, meaning that initial position is the "pragmatically neutral" position for verbs, the preferred position for verbs in (elicited) transitive clauses with two overt NPs, and the position of verbs in subordinate clauses. Neither Jiwarli nor Nyangumarta are assigned an underlying word order in their respective descriptions, although Austin (2001)

5. We can therefore only be certain of the Garrwa data in terms of the degree to which these texts were "edited" in the process of transcription, as this is the only language for which we have direct access to the relevant sound recordings.

6. Janet Sharp, e-mail to Jane Simpson, 10/5/06.

does note that verbs preferentially follow rather than precede subjects (i.e., SV rather than VS) in Jiwarli.

The languages also differ with respect to the grammaticalisation of "Wackernagel's position", the obligatory positioning of constituents in second position. This is the normal position for the Warlpiri auxiliary, a morpheme cluster minimally consisting of a "base" with tense/aspect meaning and pronominal enclitics. Auxiliaries may occur in initial position in certain phonologically based environments, but essentially they follow an initial constituent. Second position is also the normal position for Garrwa pronouns (often in conjunction with tense/aspect morphology), as demonstrated in section 4 and in Mushin (this volume). In contrast, no grammatical significance is given to second position in either Nyangumarta or Jiwarli.

The only area of syntactic restrictiveness which all four languages exhibit is the placement of interrogative words (WH-words) and markers of clausal negation in initial position. This is a common feature of Australian languages more generally and will be discussed further in section 3.

The grammatical features of the languages used in this study are summarised in table 2.

Table 2. Grammatical properties of the four languages

Language	Pronoun type(s)	Preferred word order	Wackernagel position	Interrogatives/ Clausal negatives
Warlpiri	Obligatory pronominal clitics, free pronouns	Verb final, subject precedes verb	Auxiliaries (BASE + pronomina l clitics)	Initial normally
Nyangumarta	Obligatory pronominal clitics attached to verbs, free pronouns	No reported preference	No reported grammatical status	Initial normally
Garrwa	One set of pronouns	Verb initial	Pronoun + tense/aspect morphology	Initial
Jiwarli	One set of pronouns	Preference for subject to precede verb, no preference reported for verb position	No reported grammatical status	Initial normally

The analysis presented here is based on the division of the corpus into main clauses, headed by both verbal and nominal predicates. The median clause length

for all four languages was three constituents. We consider left and right dislocated constituents to be outside of the clause for the purposes of determining ordering within the clause.[7] These types of constituents tend to be offset from the main clause by some kind of intonation break, and may be cross-referenced in the main clause. Our ability to judge what falls under a single intonation contour varied across the languages, as we were able to make use of the sound recording for the Garrwa data only, and it was not always clear from the published text materials where the intonation breaks lay. There is some use of commas in the published texts which we took to mark intonation breaks. For this reason, for the Warlpiri, Nyangumarta and Jiwarli corpora we conservatively counted whatever came first as "initial" unless there was a clear indication of a break (e.g., a comma or line break in the published text). This may mean that the counts include some data which might be best analysed as "clause external", given more information about the utterance. This is particularly the case for initial locative or nominal expressions which we believe may actually be preposed or postposed. Despite these limitations, our data show some clear patterns of preference for what occurs first in a clause.

3. General features of clause initial position

The two main studies of what occurs in initial position in an Australian language have been undertaken within the Systemic-Functional Grammar framework, as a result of the importance that framework attributes to initial position, the position where the "Theme" appears. The first is McGregor's study of Gooniyandi (McGregor 1990), and the second is Rose's study of Pitjantjatjara (Rose 2001). McGregor wrestles with the notion "Theme" and the importance of initial position. He argues that in Gooniyandi as in English the Theme occurs first in the clause. But then he observes that the term "Theme" (contrasted with "Rheme") can mean either "the point of departure of what the speaker has to say" or "what the speaker is talking about" (McGregor 1990: 371). In the "point of departure" sense McGregor distinguishes a class of "textual Themes" which include sentence conjunctions such as demonstratives like "after that". Another type are propositional

7. In Australian languages, there has been little discussion of the pragmatic force of placing constituents on the right margin; although Dench notes that in Nyamal "heavy phrases may be pushed to the right clause margin" (Dench, in prep. (2005 version). However, McGregor (1990: 364–366) argues for a breakdown of clauses into tone/information units in which the secondary unit provides additional information about the primary unit, a distinction carried on by Rose (2001: 197) when he argues for elements in a separate tone group following the main predicate as having a discourse function of "Late New" often qualifying a participant, circumstance or process.

modifiers including the negative particle. In the second sense, "what the speaker is talking about" may be new information or given information. As given information it can be ellipsed. He notes that:

> The experiential role of Actor [JHS/IM: Subject] is statistically the most frequent choice of Theme in situation clauses. In non-situation clauses it is the thing characterised or identified that is the preferred choice of Theme. But all other participant and circumstantial roles appear to have the potential of being thematic (McGregor 1990: 377–8)

We interpret this to mean that any argument or adjunct can appear in initial position in the clause, but that Subjects are most commonly found there. As well, verbs can appear in initial position. McGregor considers the problem of determining what information type is conveyed by such verbs, noting that to date he has found that clauses which have initial verb phrases always have established given participants which could be ellipsed Themes (in the "what the speaker is talking about" sense).

Since there are two types of "Theme" it is not surprising that both can co-occur in a clause. McGregor states that sentence conjunctions must occur clause initially, and notes that Themes representing argument or adjuncts tend to follow other Themes.

Rose (2001) places more weight than McGregor on the initial position. He argues that the "message" [roughly, clause]

> is organised into the speaker's point of departure, i.e., "this is what I'm talking about" and remainder "this is what I'm saying about it". So the Theme usually extends up to and includes the **first experiential element** (DR's boldface) that the speaker is talking about. (Rose 2001: 168)

Thus Rose collapses the distinction McGregor makes between "point of departure" and "what I'm talking about". His initial position spans more than one constituent. For example, in (1) Rose claims that both the propositional modifier and the locative (the first experiential element) are the Theme, whereas for McGregor they would be two Themes.[8]

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8. The following abbreviations are used: 1SG – 1st person singular, 1DU – 1st person dual, 1PL – 1st person plural, 2SG – 2nd person singular, 2PL – 2nd person plural, 3SG – 3rd person singular, 3DU – 3rd person dual, ABL – ablative, ACC – accusative, AFF – affective verbaliser, ALL – allative, ANT – anticipatory mood, CAUS – causative, CHAR – characterised by, COM – comitative, DAT – dative, DEF – definite, DM – discourse marker, EMPH – emphatic, ERG – ergative, EXCL – exclusive, FACT – factitive, FUT – future, HAB – habitual, IMP – imperative, IMPF – imperfective aspect, INCH – inchoative, INCL – inclusive, INF – infinitive, INT – interrogative, INTENT – intentive, IRR – irrealis, LOC – locative, NEG – negative, NFUT – nonfuture, NOM – nominative, NM – nominaliser,

(1) ***tjinguru*** ***nyara-ngka*** *nyina-nyi* *urilta*
maybe yonder is sitting outside
'It may be over there, on the outside.' (p. 169 Text 3.2)

Rose classifies Themes into three types, textual Themes which are the same as McGregor's textual Themes and also occur first in the clause, "interpersonal Themes" which include McGregor's propositional particles (negation), as well as questions, judgements, and which tend to follow textual Themes (although doubtless this is not the case for exclamations and vocatives which fall into this class), and "experiential Themes" which include both arguments (although these are merged into the semantic roles "Medium" and "Range") and adjuncts (Circumstance) and the main predicate itself (Process). The most common is "Medium" – which in classical SFG is roughly equivalent to the semantic role "Theme" of Generative Grammar, the participant which undergoes the action denoted by the main predicate, and which in many Australian languages would be unmarked i.e., Absolutive case. As far as we can understand however, Rose uses Medium mostly for subjects of intransitive clauses, but extends it to include the semantic role of Agent (Actor) when expressed by unmarked (nominative) personal pronouns. "Range" covers some but not all Objects. He does not discuss the problem of what kind of information is conveyed by placing the verb first.

Summarising both authors,

1. Initial position is associated with two related information functions, point of departure, and what the speaker is talking about. If both types are present in a clause, both may appear at the start of the clause, with ordering tendencies, the most categorical being that sentence conjunctions must occur initially.
2. Clauses can be verb-initial, but the information status of the verb is unclear. In Gooniyandi it seems that verbs only occur initially if there is a given participant which is understood to be what the clause is about.
3. Sentence conjunctions, propositional particles, questions, negation, exclamatives and vocatives all appear in "Theme" position.
4. Gooniyandi and Pitjantjatjara differ as to which arguments appear in "Theme" position. In Gooniyandi it tends to be Actors (Subjects?), while in Pitjantjatjara it tends to be Absolutive arguments (mostly Subjects of intransitive verbs but also some Objects of transitive verbs) and also pronominal Agents.

NPAST – non-past, O – transitive object, PAST – past tense, PHON – phonological clitic meeting word-final vowel constraint, PRES – present tense, PURP – purposive, REFL – reflexive, S – intransitive subject, SEQ – sequential complementiser, SPEC – specific, SS – same subject, TOP – topic.

This summary provides a starting point for looking at what occurs in initial position in the four languages under discussion. Two of them, Jiwarli and Warlpiri, have been compared by Austin (2001) with respect to positions of V, S, A and P[9]. Austin noted the importance of initial position in Jiwarli as the locus of the same kind of information that McGregor and Rose indicate. He explicitly includes scene–setting elements (e.g., temporal adverbs) and comments on the use of initial position for new topics, re-established topics, contrast and new information. Under new information he also includes verbs, and attributes to this the high number of VS intransitive clauses in Jiwarli. Thus, he claims that verbs can occur initially when they represent significant new information.

Taking the lead from Austin, in Table 3 we compare Jiwarli, Warlpiri, Nyangumarta and Garrwa, with respect to what appears in initial position.

Table 3. Distribution of forms in initial position

	Jiwarli		Nyangumarta		Warlpiri		Garrwa	
Main predicate	73	26%	36	31%	88	32%	183	58%
Arguments	102	37%	44	38%	65	24%	41	13%
Scene-setting	26	9%	13	11%	21	7%	13	4%
Operator, text connector, demonstrative	48	17.4%	13	11%	87	30%	76	24%
Other	27	9%	11	9%	18	6%	2	0.6%
Total clauses	276		117		279		315	

The chart has been divided into categories corresponding roughly to the categories identified by McGregor, Rose and Austin. The first category is of elements fulfilling the function of main predicate. Jiwarli, Nyangumarta and Warlpiri have similar proportions of clauses starting with main predicates, but the proportion for Garrwa is much higher (58%, compared with 26%, 31% and 32%). This difference is consistent with the analysis of Garrwa as basically verb-initial (Mushin 2005a). What this means is that unlike the other languages of this corpus, Garrwa speakers place verbs before other kinds of constituents, unless (a) there is a constituent which must occur initially (see section 4), and (b) unless there is some expression of prominence (see section 5). Verbs in initial position in Garrwa do not reflect particularly prominent contexts.

9. Austin bases the Jiwarli counts on his Text 43 which we use, and the Warlpiri counts on the oral text count in Swartz (1988). Swartz (1988) says that his counts are based on 5 oral texts, but does not name them. From an example in the paper, it seems that they probably include the Swartz 1991 oral text G (Jerry Jangala) which we also use.

Table 4. Main predicates in initial position

Main predicate	Jiwarli		Nyangumarta		Garrwa		Warlpiri	
							V (AUX)	
V only	11	15%	3	8%	24	13%	60	68%
V+ pronoun	8	11%	17	47%	61	33%		
							V (AUX) X	
V followed by other (arg/adj)	44	60%	14	39%	90	49%	20	23%
Preverb							8	9%
Nominal Predicate	10	14%	2	6%	8	4%		
Total	73		36		183		88	

What can follow initial verbs is presented in Table 4. We split the main predicate category into verb-only clauses and verb-initial clauses with more than one constituent (we include V AUX clauses as verb-only clauses for Warlpiri, since the AUX is obligatory, but they of course also include V plus one class of pronoun, the bound pronouns). This was done to see whether, if there is a choice, main predicates are placed initially. Jiwarli had the highest proportion of predicate-initial clauses *when there was another argument/adjective present in the clause* (i.e., something other than a predicate or a pronoun which could potentially occur initially). This was surprising, as the overall proportion of predicate initial clauses was the lowest of the four languages. In Garrwa, multi-constituent verb-initial clauses are also relatively frequent, consistent with its verb initial status. Multi-constituent verb-initial clauses followed by elements other than pronouns are less frequent in Nyangumarta and Warlpiri.

Jiwarli has only one set of pronouns, whereas Warlpiri and Nyangumarta have both free pronouns and bound pronouns. Thus the Jiwarli free pronouns have to do the work of the Warlpiri and Nyangumarta free pronouns in conveying prominence, and the work of the Warlpiri and Nyangumarta bound pronouns in conveying continuing topic. However, only 8 of the Jiwarli verb-initial clauses are followed by pronouns expressing arguments (which would thus be comparable to some of the Warlpiri Verb AUX clauses). Even if we include them in the Verb-only clauses, the resulting proportion 19/44 V-only and V+pronoun to multi-clause V-initial still goes in the opposite direction from the Warlpiri proportion 60/20[10]

10. The counts in Austin (2001b) and Swartz (1988) are not directly comparable since they relate to the relative ordering of S, A, O and V, and do not consider constituents other than these. However, as expected, a similar reversal of the proportion of V-only to multi-constituent V-initial clauses is found: Jiwarli 10/21, Warlpiri 123/87. Without examining the Warlpiri texts however, we have no explanation for why the number of Warlpiri multi-constituent V-initial clauses is so much higher than in the data we have looked at.

and the Nyangumarta proportion 20/14. Hence for this data Warlpiri and Nyangumarta have a stronger preference for putting something other than the main predicate in initial position if there is a choice.

This difference becomes even more striking if we compare Jiwarli with Garrwa, the other language in our corpus to have only one set of pronouns. In Garrwa, 61 of the verb-initial clauses are directly followed by a pronoun, analogous to the Warlpiri Verb AUX clauses. The proportion of V only and V+pronoun clauses in Garrwa (27%) looks more similar to Warlpiri (22%) than to Jiwarli (7%). This reflects the fact that Garrwa pronouns occur in second position when they are functioning to mark continuing reference in discourse, and only move to initial position in contexts of prominence (see below). So even though neither Garrwa nor Jiwarli have a separate paradigm of pronominal clitics, as Warlpiri and Nyangumarta do, they show different preferences for placing constituents after the verb, when the verb is in initial position.[11]

Table 5. Nominal arguments in initial position

Arguments	Jiwarli	Nyangumarta	Garrwa	Warlpiri
S (in both intransitive and transitive clauses)	81	34	26	27
O	11	8	9	35 (Indirect object)
Dative	10	2	6	3
Total argument-initial	102	44	41	65
Total clauses	276	117	315	279
Percentage of total clauses	**37%**	**38%**	**13%**	**24%**

Table 5 breaks down the second category, elements representing arguments of the clause occurring in initial position. Here Jiwarli and Nyangumarta had the greatest proportion (37–8%) and Garrwa had the lowest proportion (13%). Warlpiri came in between (20%). In large part this is due to the high number of Subject initial clauses in Jiwarli and Nyangumarta, and suggests that the speakers of these languages behave more like McGregor's Gooniyandi speakers in preferring initial Actors/Subjects. Subjects also occurred more often in initial position in Garrwa. The Warlpiri speakers behave more like Rose's Pitjantjatjara speakers in preferring initial Objects.

11. The preference for Garrwa pronouns to occur in second position is highlighted by the fact that they occur in second position even when the verb is elsewhere in the clause (e.g., in Questions, Negatives).

This then leads to another question – do the Warlpiri speakers also prefer initial Absolutive Subjects? Table 6 presents data on number of Ergative and Absolutive subjects appearing in initial position.

Table 6. Ergative and Absolutive subjects in initial position

Case of subject	Jiwarli	Nyangumarta	Garrwa	Warlpiri
Ergative	9	15	2	9
Absolutive/unmarked	72	19	24	18

Considering Rose's claim for the preference for Medium and Range (Absolutive arguments), we note that the majority of the Warlpiri Subjects are Absolutive, and of the 9 with Ergative case only one is a nominal in Ergative case, and the rest are subject-modifying adjuncts or demonstratives or pronouns. In the Jiwarli data, 9 nominals have Ergative case, as does one pronoun. In Garrwa there are only 2 Ergatively marked nominals in initial position. In all of the languages there are more Absolutive Subjects in initial position than Ergative Subjects, but it is not clear whether this reflects a preference for Absolutive Subjects in initial position, or the greater frequency of Absolutive subjects in general, or the subject matter of the texts.

Table 7a–b shows the proportion of scene-setting elements, the third category. We defined "scene-setting" elements as those which describe the time or place in which the event denoted by the proposition takes place.

Table 7a. Scene setting structures in initial position

Scene setting	Jiwarli	Nyangumarta	Garrwa	Warlpiri
Time	12	3	3	1
Loc	14	10	10	20
Total	**26**	**13**	**13**	**21**
Total clauses	276	117	315	279
Percentage	9%	11%	4%	7%

For the third category, Jiwarli, Nyangumarta and Warlpiri have roughly the same proportions of clauses starting with Scene-setting elements, while the Garrwa proportion is a little lower. If this tendency holds up with a larger corpus, then the lower proportions for Garrwa could be attributed to the overall preference for verb-initial structures, and from some of these elements occurring in independent intonation units.

Table 7b. Other structures in initial position

Operators, text connectors, demonstratives	Jiwarli	Nyangumarta	Garrwa	Warlpiri
WH	22		17	5
Neg	21	1	6	7
Particle	1		10	17
Demonstrative	4	12	4	18
Conjunction			39	36
AUX				4
Total	**48**	**13**	**76**	**87**
Total clauses	276	117	315	279
Percentage	**17%**	**11%**	**24%**	**31%**

The substantial differences between the languages with respect to the number of members of this category depends on the fact that the presence of question words, negation, conjunctions and propositional particles, and perhaps also the likelihood that the choice of anaphors such as "then, after that" and text connectors may reflect the story-teller's own style, and with Jiwarli we have only one story-teller. Second, the differences in the breakdown of the fourth category stem from several factors: the use of the Warlpiri auxiliary which includes tense, aspect and argument agreement features and which has no counterpart in Jiwarli; the fact that Warlpiri and Nyangumarta have text connectors such as *ngula* and *pala* respectively which are used as anaphors of arguments as well as events, and may be ambiguous between the two, the large number of Ablative connectives with *pala* used in Nyangumarta. The small number of instances of some of the elements (questions, negation etc) in the fourth category belies their significance in grammatical description, since these elements are often obligatorily in initial position; that is, the position is grammaticalised for them (see section 4).

To summarise the major trends found in these comparisons:

1. Garrwa has a much stronger tendency to being Verb-initial than the other languages. (Table 3)
2. Of the other three languages, if there is a choice, Nyangumarta and Warlpiri prefer not to have verbs in initial position. (Table 4)
3. Unsurprisingly, Garrwa has the lowest proportion of arguments in initial position, Jiwarli and Nyangumarta have the highest proportion (Table 5).
4. Warlpiri has a higher proportion of Objects in initial position than Subjects, whereas the other languages have a higher proportion of Subjects. On this data, Warlpiri behaves more like Pitjantjatjara in Rose's account, and the other languages behave more like Gooniyandi in McGregor's account (Table 5).

All the trends must be treated with caution, because the data-sets for each language are small and involve only a few speakers at most. In the remainder of

the paper, we will first consider those elements which obligatorily appear in first position and then consider nominals occurring in first position.

4. Obligatory initial position

In theory any type of constituent, be it nominal, verbal, adverbial, or conjunction, may occur in clause initial position. As noted in the introduction, a distinction may be drawn in Australian languages between constituents which *must* occur initially, and those which *may* occur initially. In this section we first discuss the range of constituents which have been described as always occurring initially and then examine what does occur initially in our corpus. It will be shown that the range of obligatory initial forms is a reflection of their discourse-pragmatics, and that, as claimed in earlier work, when an optionally initial form does occur initially, regular pragmatic conditions apply.

Forms which tend to occur initially include interrogatives, sentential negators, and certain types of complementisers (e.g., McConvell 1996; Laughren 2002; Laughren et al. 2005). Complementisers are hard to detect in these languages without thorough syntactic investigation, but the other forms are easy to locate. These are all types of grammatical categories which have been associated with the notion "focus". Interrogatives in particular are "focus"-related as, prototypically, they express a "gap" in information and an elicitation for new information to be presented (i.e., as the answer to the question).[12] The link between clausal negation and information packaging is less well defined than the link between interrogation and information packaging, but as negation falls under the umbrella of operations which have quantificational or scope-related meanings, it fits in with other focus phenomena (McConvell 1996). As well, in sentential negation, the negated proposition is usually treated as though it is in the common ground, and what is new is the denial ("People probably think that X is true, but I am saying that X is not the case").

4.1 Interrogatives

Many Australian languages require that interrogatives occur first in a clause, although the same forms may occur elsewhere when functioning as indefinite determiners.[13] In our corpus, Warlpiri follows this pattern, and the pronominal

12. Indeed the information requested in the use of an interrogative is frequently used as a test for the scope of focus (e.g., Lambrecht 1994; É Kiss 1998).

13. In many Australian languages, and all four languages of the survey, the same form represents both indefinite and interrogative meanings for some category of knowledge – an "epistememe" (Mushin 1995)

clitics normally attach to the interrogative, since they occur in second position. In Garrwa interrogative/indefinite forms must always occur initially, regardless of function. The obligatory initialness of interrogative is perhaps most striking in Garrwa, which is normally verb-initial. Pronouns, which normally occur in second position, follow the interrogative.

(2) *Warlpiri* (Kendon 1988: line 87, p. 503)
Ngayi? ***Nyiya****=rlipa=rla* *yi-nyi=waja?*
Indeed? What=1DUS=3SGDAT give-NPAST=EMPH
'Indeed? What can we give it to him on then?'

(3) *Garrwa* (Mushin 25.8.03.1)
wanyimbala *ja=ninji* *karri* *balba*
when FUT=2SG east go
'When are you going east (to Robinson River)?'

In Nyangumarta question words normally occur in main clauses (Sharp 2004: 366–7), and appear to do so in subordinate clauses (embedded questions) (Sharp 2004: 256–258, 270–3), but the situation with true indefinites is less clear, since it is often hard to distinguish them from embedded questions

(4) *Nyangumarta* (Sharp 2004: text 4 lines 81–2, p. 400)
Wunyjurru-ji-limi*-nyi* *palama* *pali* ***nganurtu***
how-AFF-FUT-1PLS that maybe who

turrpa-kata *mira-lkurliny-pa?*
brave-CHAR relieve-FUT-PURP

'How will we do it, who will be brave and take it?'

In Jiwarli question words normally occur initially (in (5)), but indefinites have been found following negatives (in (6)):

(5) *Jiwarli* (Austin 1997: text 43 line 40 p. 61)
Nhaa*-rru* *nganthurra-lu* *thika-lku*
what.ACC-now 1PL-ERG eat-FUT
'What will we eat?'

(6) *Jiwarli* (Austin 1997: text 69, line 24 p. 206)
Warri ***ngana*** *ngatha-rla* *yana-nyja-rni*
NEG someone 1SG-ALL come-PAST-hence

ngatha-rla *helpa-ma-ru*
1SG-ALL help-CAUS-PURP.SS

'No one comes to help me.'

4.2 Negation

Sentential negators also tend to occur in initial position in all four languages, although they are occasionally found in later positions; for example there are two Jiwarli examples in which the sentence negator *warri* follows a time word, and in Nyangumarta there are a number of examples in which the sentence negator *munu* appears in second position, including following Subjects (nouns or pronouns). Again, in Garrwa and Warlpiri, pronouns follow the sentence negator:

(7) *Garrwa* (Mushin 2.5.01.1)
***miku**=nurr=ili* *jarr-kanyi,* *mukawu*
NEG=1PLEXCL=HAB eat-NEG cow
'We didn't used to eat beef.'

(8) *Warlpiri* (Hale 1959: 27)
***Kula**=rna=ngku* *yi-nyi* *miyi=ji.*
NEG=1SGS=2SGO give-NPAST good=TOP
'I'm not going to give you food.'

(9) *Nyangumarta* (Sharp 2004: text 2 line 57 p. 398)
Munu *yarrarna* *wata* *mirti* *jarri-a* *nyurru-lu.*
NEG again mistake run INCH-ANT [sic] 2PLS-ANT
'You won't drive silly again will you.'

(10) *Jiwarli* (Austin 1997: text 44 line 46 p. 72)
Warri *parru* *warnti-ra* *nganthurra-la*
NEG again get.up-FUT 1PL-LOC
'(They) will not rise again among us.'

There are subtle differences between the languages in terms of the syntactic status of the negator. Laughren et al. (2005) have shown that sentential negators cannot combine with questions in Warlpiri (*Where aren't you going?), and that this is plausibly attributable to the Warlpiri sentential negator *kula* being an X^0 category (a functional head base generated in C but obligatorily moved up to a Focus position). They contrast this with the sentential negator *budangku* in Wanyi which acts more like a nominal, (indeed an XP), and allows certain kinds of non-pronominal clitics to attach to it. The Garrwa negative particle *miku* patterns like Wanyi and allows non-pronominal clitics to attach to it, as in (11).

(11) *Garrwa* (9.5.01.1)
***miku**=wali* *ninga* *wayka* *barri* *kukulinya* *ngaki* *nayi*
NEG=can 2SGACC.1SGNOM down DM DaSo 1SGDAT here
'(I) can't (give) you my grandson here.'

The Jiwarli sentential negator *warri* sometimes has clitics attached to it with glosses such as "just" "still" (in (12)), and the Nyangumarta sentence negator *munu* also can have clitics attached to it, such as the Focus clitic. However, determining these subtle properties of the sentential negators in the languages other than Warlpiri is beyond the scope of this paper,

(12) Jiwarli (Austin 1997: text 10 dictated, l. 3–4, p. 6)
Warri-nthi nhurra- lu karla-rla-rninyja-thu jukurtu-la ngurnta-irarri
NEG-just 2SG-ERG fire-FACT-PAST-TOP smoke-LOC lie-INTENT
'Why didn't you make a fire and lie in the smoke?'

4.3 Conjunctions and complementisers

Conjunctions and complementisers also tend to occur in initial position across Australian languages, consistent with their clause-linking role. The term "conjunction" here covers a range of connective meanings including forms which translate as "and", "then", "since", "while" and "but". Table 8 below lists the connectors which occurred in the Garrwa texts, with frequency and percentage of overall initial position forms. This is an illustration of the range of forms which may be included under the "conjunction" category. While all of these forms occur initially, there is evidence that differences in their syntactic behaviour may indicate differences in grammatical status.

Table 8. Garrwa: Text connectors

Conjunction *baki* ("and")	14	4%
Conjunction *ngala* ("but/since")	18	6%
Conjunction *jala* (then/since)	3	1%
Conjunction *marda* also	4	1%
Hypothetical *minji* "if"	1	0.3%
Future *ja*	9	3%
Thus (*nani* "like so")	4	1%

For example, the Garrwa clausal connector *baki* occurs initially and may attract the habitual clitic=*yili*, a clitic which typically occurs in second position and cannot occur initially (see Mushin, this volume, for further details). However what follows *baki* tends to be a clause with the ordering one would expect from a clause without the overt connector. For example, pronouns rarely directly follow *baki*, and then only when they are serving a focus function, as in (13). In contrast, the connectors *ngala* "but" and *jala* "then" are always followed by a pronoun (*jala* also attracts aspectual clitics, whereas *ngala* does not). Examples are given in (14) and (15).

(13) *Garrwa* (25.8.03.1)
baki *nurru* *bardajba=yi* *nanamu(ngku)ji* ***baki*** *ninji* *bardajba=yi*
and 1PLEXCL come=PAST that-ORIGIN and 2SG come-PAST
jibiya *Wínmirrina*
stay Calvert Hills
'And we came (to) our country, and you came staying
at Calvert Hills Station.'

(14) *Garrwa* (18.4.00.1)
baki *janyba* *ngambala-kiya* (*yanyba?*) *wabula* ***jaliya*** *ngambala-nya*
and die 1PLINCL-IRR (say) old.time since-IRR 1PLINC-ACC
minimba *nanaba* *julaki-wanyi*
show there bird-ERG
'And we wouldn't have died in oldentimes if the bird had
shown us over there.'

(15) *Garrwa* (8.5.01.1)
ngardijba-yi *nangka* *there* *bula-ngi* ***ngala*** *bula* *kujba*
hide-PAST REFL 3DU-DAT while 3DUNOM hunt
'He hid himself from them while they were out hunting.'

Given the overwhelming tendency for pronouns to occur in second position in Garrwa, this suggests that *baki* is not counted as "initial position" for the purposes of calculating second position, whereas *ngala* and *jala* are in "true" clause internal initial position for this language.[14] Note that these are both contrastive conjunctions, which is one of the canonical contexts for focus, as contrasts present information that runs counter to hearer expectations (e.g., because it is a shift in topic or a contradiction). The contrastive conjunction *kala* in Warlpiri behaves similarly. In example (16) below it precedes the question word.

(16) Warlpiri (Kendon 1988: line 85 p. 503)
Kala nyarrpara=npa yirra-rnu yangka=ju panu
but where=2SGS put-PAST the=TOP many
'But where did you put them all?'

The evidence in the other two languages is less clear. Nyangumarta has propositional particles which appear in different places in the clause, and there are no obvious uniform principles for determining scope.

14. Bowe (1990) observes a similar phenomenon in Pitjantjatjara where only the switch reference conjunctions *ka* and *munu* attract pronominal clitics.

4.4 Summary

All four languages of our survey are similar in the range of forms which must occur clause-initially when they occur. The initialness of interrogatives is clearly related to their function as markers of gaps in knowledge, eliciting new and as yet unknown information from an interlocutor. In this sense, interrogatives invite an utterance with an element which is both new and prominent (i.e., the answer to the question). That such forms do not need to occur initially when serving indefinite functions, a function unrelated to prominence or focus, is further evidence that it is a general principle of "prominent information first" which motivates this rigid association.

Here the initialness of negative particles also appears related to the notion of focus. Like interrogatives, negative particles indicate that some information about to be expressed runs counter to current knowledge states and is therefore prominent (although not necessarily new). Of course the nature of the mapping between knowledge states is qualitatively different between these two categories. With interrogatives, the new and prominent information is to be provided by the addressee of the question. With negatives, it is provided by the current speaker.

Conjunctions are almost universally found initially in the world's languages, and this is clearly related to their function as linkers of propositions. Complementisers are also mostly clause-initial cross-linguistically. In the four languages examined here, conjunctions appeared to fall into two types. The first type were those which were treated as clause initial for the purposes of calculating what occurs second (e.g., placement of the Warlpiri auxiliary or Garrwa pronoun). Conjunctions or complementisers which express notions associated with prominence (e.g., contrast) tended to attract second position elements. Clause linkers which were not associated with pragmatic prominence (e.g., "and"-type connectors) and did not tend to attract second position elements constitute the second type. This split in the syntax of conjunctions suggests a qualitative difference between the pragmatics of bare clause linkage, which appears "outside" of our regular reckoning for what is clause initial, and the pragmatics of expressing prominence, which is subject to the same family of syntactic constraints as interrogatives and negatives.[15]

5. Nominal expressions in initial position

The types of initial constituents discussed so far are ones we expect to occur initially when they do occur in discourse. This is supported by their occurrence

15. Of course there are morpho-syntactic differences, but their precise nature must be left to another paper.

clause-initially as the norm both in our corpus, and in descriptions of these languages more generally. Of particular interest is the occurrence of forms in initial position which may occur elsewhere in the clause without altering the propositional meaning of the clause. Noun phrases, including demonstratives and free pronouns, whether argument or adjunct, are forms which fall into this category. These are found in numbers of positions – finally, medially and initially, as Austin (2001b: 310–311) shows for Jiwarli, Sharp (2004: 331) shows for Nyangumarta, and Hale (1983: 6) shows for Warlpiri. The examples in (17)–(19) demonstrate this range of positions for Garrwa (final, second and initial positions respectively).

(17) *Garrwa* (9.5.01.1)
najba-yili ***nanang(i)*** ***juka-wanyi***
see-HAB that-ERG boy-ERG
'That boy kept watching her.'

(18) *Garrwa* (9.5.01.1)
ngala[16] *"Wanya* ***nangany(i)*** ***juka-wan(yi)*** *jarrba"*
while what that-ERG boy-ERG eat
'What's that boy going to eat?'

(19) *Garrwa* (8.5.01.1)
bawanganja ***nanga-ngi*** *kirrijba=yi* *kingkarri*
older.brother 3SG-DAT climb=PAST up
'This older brother climbed up.'

There is not enough space in this paper to provide a detailed analysis of position of NPs for all four languages (but see Mushin 2005a for an analysis of Garrwa NPs in the same corpus). The main point is that the position of full NPs in all of these languages is clearly determined by contextual factors interacting with other syntactic pressures. For example, the position of the Garrwa NP *nanganyi jukawanyi* "that boy (ERG)" in (18) is dependent on the fact that both the conjunction *ngala* (which may in this case be analysable as "outside" of the clause as a framing marker of speech representation akin to *she goes* in English) and the interrogative *wanya* "what" must occur before anything else in the clause. Only after the interrogative *wanya* do we get to constituents which do not have to occur in any particular position on morpho-syntactic grounds.

In all four languages, NPs occur in initial position when they are "prominent". Recall that prominent information may or may not be new in the discourse. Prominent information which is new comes in the answers to questions. We stated

16. *Ngala* here functions to introduce the direct speech of a story character. See Mushin (2005b) for further discussion.

earlier that there is an overwhelming tendency for interrogative forms to occur initially in Australian languages. Answers to these questions, when provided, also place the new (answered) information in initial position. There were few examples of these in our corpus and these come from passages of represented dialogue between narrative characters. In (20), from the Garrwa corpus, the represented dialogue is between a grandmother and a grandson. The grandmother asks the grandson what he is looking at, and the grandson evasively answers that he is waiting for some food. The food, lilyseed, is found clause-initially.

(20) *Garrwa* (9.5.01.1)
A: ***wanya*** *ninji* *najba* *juka* *kukulinya*
what 2SGNOM see boy grandson
'What do you see, Grandson?'
B: ***nganbi-nyi*** *ngayu* *yadajba* *kukudi*
lilyseed-DAT 1SGNOM wait granny
'I'm waiting for lilyseed, Granny.'

A similar example from a Jiwarli dictated text (not included in our corpus) is given in (21).

(21) *Jiwarli* (Austin 1997: text 29 dictated lines 1–2 p. 21)
A: *Nhaa-nha* *nhurra-lu* *wiri-rninyja*
what-ACC 2SG-ERG swallow-PAST
'What did you swallow?'
B: ***Pirru*** ***ngunha*** *ngatha* ***muurr-pa*** *wiri-rninyja.*
meat.ACC that.ACC 1SG.ERG tough.ACC-PHON swallow-PAST
'I swallowed some tough meat.'

Answers to questions involve information that is represented as both new and prominent to the hearer. Contrasts provide another context for clause initial noun phrase constituents. "Double contrast", "contrastive topic" or "double focus" (McConvell 1996) follows a basic template: *A did B and/but X did Y*, where both the agent and at least part of the predicate is contrasted. The prominent information in contrasts clearly does not have to be new information, as attested in the use of pronouns in contrast. In the Garrwa example in (22), the referent *bula* "those two", two characters in the story, is presented in contrast with a third established character, *nyulu* "he". (The first two characters are eloping together while the third character is the older brother who has been trapped up in a tree). The pronoun in the first clause occurs initially followed by a discourse marker *barri* which may also function to highlight the initial constituent.[17] The second clause in this double

17. *Barri* seems to function as a marker of certain kinds of discourse related boundaries. Its functions overlap with signalling prominent information, but this is not its sole function.

focus construction starts with the contrastive connector *ngala* followed immediately by the third person subject pronoun *nyulu*, a form which only appears in contexts of pragmatic prominence.

(22) Garrwa (8.5.01.1)
bula *barri wanbiya nanaba ngala* ***nyulu*** *jungku langa=yi*
3DUNOM DM emerge over.there while 3SGNOM sit hang=PAST
nanaba kingkarri nganymarrkijba=yi wabuda-nyi
over.there up thirst=PAST water-DAT
'Those two joined up with them there while he was hanging up there dying of thirst.'

A similar example from Jiwarli is in (23) below (albeit without an overt marker of contrast):

(23) Jiwarli (Austin 1997: text 39, lines 14–14, p. 37–38)
Nhurra *kumpa-ma yirrapirti-la-rru* ***Ngatha*** *kumpa-ira parlu-ngka*
2SGNOM live-IMP ledge-LOC-now 1SGNOM live-FUT rock-LOC
yirrara thirri-rarri-la-thu
TOP.LOC spinifex-among-LOC-TOP
'You live on the ledge. I will live on top of the hill amongst the spinifex.'

In the Warlpiri example in (24), the hawk's relations offer to follow him (bound pronoun "we"). He rejects their offer, contrasting what he wants them to do, with what he will do (the latter expressed as a free pronoun "I" which is placed initially in the third clause).

(24) *Warlpiri* (Swartz 1991: text 7, line G83–85, p. 124)
[Relations] *Pura-mi=nya=rna=ngku=lu?*
follow-NPAST=INT=1PLS.2SGO
'Shall we follow you?'

[Hawk] *Lawa, watiya-rla=<u>lu</u> makuntapanji*
no weapon-LOC=2PLS opposite.matrimoiety
nyina-ka=rra ***Ngaju***=*<u>ka=rna</u>*
sit-IMP=thither 1SGS=PRES=1SGS
jinta-ngku rdaarrka-nyi
one-ERG endanger-NPAST
"No just stay put because of the weaponry! I'll be the only one heading into danger."

The hawk rejects his relations' offer of help three times. The other answers include the following in (25) and (26), one of which has the contrastive pronoun

initially, and the other of which has the modifying Ergative nominal *jintangku* "alone" (also contrastive) initially:

(25) *Warlpiri* (G14 p. 116)
***Jinta-ngku**=ka=rna=ji* *rdarrka-nyi*
one-ERG=PRES=1SGS=1SGO endanger-NPAST
'I will endanger only myself.'

(26) *Warlpiri* (G54 p. 116)
***Ngaju=juku**=ka=rna=ji* *rdarrka-nyi* *jinta-ngku=juku*
1SGS=still=PRES=1SGS=1SGO endanger-NPAST one-ERG=still
'I'll just endanger myself only.'

Thus in each of the three instances, the contrastive element, a pronoun (or modifier of it) expressing information which is otherwise well-established in the discourse, is placed initially.[18]

The Nyangumarta example in (27) shows a temporal nominal adjunct occurring finally in the first proposition, and a contrasting temporal occurring initially in the second proposition.

(27) *Nyangumarta* (Sharp 2004: text 4, l.118–119, p. 403)
Yija ngarra jurru paji-na-kata wani-nya-yi ***kuwarri***
truly specifier snake bite-NM-CHAR stay-NFUT-3PLS now
Purlpi *maruntu* *wani-inyi* *paji-na-kata*
long.time Gould's Goanna stay-IMPF bite-NM-CHAR
'Truly the snake is the one who bites today. A long time ago it was the goanna who could bite, who was the cheeky one.'

We have discussed one kind of contrast here, the "double focus" construction. There are of course other kinds of contexts which may be considered contrastive. These include the shifts in perspective between one character and another in a narrative, and the flagging of new discourse participants as highly significant for the plot.[19] These are all contexts of what we call "narrative prominence", and are discussed further in Mushin (2005a).

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18. The distribution of free pronouns in our corpus showed interesting variability with respect to whether the language also had bound pronouns. We expected the languages with two sets of pronouns to only use free pronouns in contexts of prominence, while for the other languages had to use the same pronouns in all contexts. We found that Nyangumarta free pronouns were far more frequently used than Warlpiri, but this may be a coincidence of the texts used in the analysis. More interesting was the very strong tendency in both Jiwarli and Garrwa for pronouns to occur in second position, perhaps as a precursor to grammaticalisation as Wackernagel clitics (Mushin & Simpson 2008).

19. Mushin (2005a) also found unexpected initial NPs concentrated around the climax of the stories she examined.

The range of nominal forms found in contrastive contexts in initial position in all four languages is wide. We have shown that arguments expressed by full NPs or free pronouns, and adjunct nominals are all sensitive to contrast, and are found in initial position regularly when expressed in such contexts. The use of initial pronouns in this context is evidence that initial position is about prominent information rather than new information.

As noted in the previous section on conjunctions, prominence is not the only pragmatic factor motivating the placement of forms in initial position. Conjunctions were analysed as initial because they function to link propositions – a previous one with a next one. These can be described as "discourse-organisational" functions, rather than information packaging functions. While discourse-organisational functions are largely carried out by clausal connectors and discourse markers, some nominal expressions in adjunct roles also serve this function. For example, temporal adjuncts that carry the narrative forwards, such as "after that", are often used to connect events in a story. We briefly illustrate these in (28)–(31).

(28) Nyangumarta (Sharp 2004: text 2, l.45 p. 397)
Pala-ja *yija-lu* *yirri-rni* *murtuka* *mirti-jarri-kinyi* *rutu-ngu* wirurru
that-ABL truly-ERG see-NFUT motorcar run-INCH-IMPF road-LOC fast
'And then he truly did see a car on the road travelling very fast.'

(29) Jiwarli (Austin 1997: text 43, l.11, p. 57)
Parru-nthu *ngunha-pa* *wangka-ja*
and.then.again that.NOM-SPEC talk-PAST
'Then he said again.'

In Warlpiri this "after that" form may or may not directly precede the auxiliary.

(30) *Warlpiri* (Swartz 1991: G26 p. 118)
Ngula-jangka=ji *mangulpa-kurlu-rlu* *kala* *pantu-rnu*
that-after=DEF shovel.spear-COM-INST used.to spear-PAST
'After that with the shovel spear he would spear it.'

(31) *Warlpiri* (Swartz 1991: G45 p. 120)
Ngula-jangka=ji *kala* *ngurrju-jarri-nja-rla* *rdurru.yu-ngu*
that-after=DEF used.to good-INCH-INF-SEQ begin-PAST
japi-rninja-ku=yijala
ask-INF-DAT=again
'After that, having become well, he would again begin to ask.'

Finally, we briefly mention scene-setting locatives (time and space), which are sometimes found in initial position in our corpus (in (32)–(34)).

(32) *Nyangumarta* (Sharp 2004: text 4, l.103–4, p. 402)
'Wurra-li-ji *wirla-la-rni-nti-li* *nyuntu'* ***Pala-nga*** *jurru-lu*
tell-IMP-1SGDAT hit-ANT-1SGS-2SGO-ANT 2SGA that-LOC snake-ERG
karrama-rna-lu,
say-NFUT-3SGDAT
'Tell me the truth before I hit you." And there the snake said to him, …'

(33) *Warlpiri* (Swartz 1991: text 7, G17–18, pp. 116–117)
Kala *marda* *yangka* *parlu.pu-ngu* *yarlu* *kulkurru*
used.to maybe forementioned find-PAST clearing halfway.
Ngula-ngka=ji ***yarlu-ngka*** *kala-rla* *rdaku=ju* *rdurru.yu-ngu.*
that-LOC=DEF clearing-LOC used.to-3SGDAT hole=DEF begin-PAST
'Maybe that same one used to find a clearing along the way. Right there in that clearing he used to begin (digging) a hole for it (the shield).'

(34) *Jiwarli* (Austin 1997: text 43, l.20–21, p. 59)
Juma-rti *nhurra-kara-lu* *wantha-nma* *ngatha-la* ***Nyirnta*** *kumpa-ira*
child-PL.ACC 2PL-ERG leave-IMP 1SG-LOC here.LOC sit-FUT
juma-rti.
child-PL.NOM
'Leave the children with me! The children will stay here.'

There are no equivalent examples in the Garrwa corpus of scene-setting nominals in "true" initial position. Such forms either occur in clear separate intonation units, or they occur following the verb, as in (35), which starts off a new narrative episode. It is of course possible that some of the temporal and locative expressions in the other three languages were offset from the rest of the clause by intonation breaks. It may also be the case that the verb-initial structure of Garrwa motivates a more rigid positioning of adjunct constituents after the verb.

(35) *Garrwa* (8.9.01.1)
kanga=yi *munganawa* *nanankardi*
leave=PAST next.day there-ABL
'(He) left the next day from there.'

In summary, the close examination of a corpus of narrative texts in four different languages has shown a range of pragmatic factors involved in motivating the placement of nominal expressions in initial position. The placement of argument NPs, representing the identity of referential discourse participants, in initial position can often be attributed to their association with a "prominent" context, including represented answers to information questions, double focus constructions, shifts in narrative perspective and topic shift. These are all contexts

consistent with Mithun's (1992) findings for her survey of three polysynthetic languages (one being the Australian language, Ngandi).

Adjunct forms were also sensitive to prominent contexts, as the Nyangumarta contrastive example in (27) demonstrated. However temporal and spatial adjuncts were also found in initial position in contexts which could not readily be explained in terms of prominence and seemed to contribute to the movement of narrative time and the linking of narrative events in time and space. This is a discourse organisational function, such as was seen for conjunctions. Such adjuncts are drawn to initial position so that they can be situated at the junction of two utterance units.

Prominence and discourse organisation have been identified as two variables motivating the placement of nominal expressions. Referential expressions appear far more sensitive to prominence while temporal/spatial expressions may contribute more to discourse organisation, when they are found in clause initial position. It remains to be seen how these two variables interact in detail. The patterns observed here would suggest that where both are at issue, discourse organisational functions are expressed before the prominent information. This is a context where we suspect prosody has a big role to play. Such an investigation is beyond the scope of this paper however.

6. Summary and conclusions

The results of this survey of what occurs clause initially and its pragmatic profile in our restricted corpus support what has been described for individual Australian languages, but reveal a more complex picture. These can be generalised as follows:

1. Certain forms normally occur in initial positions. Interrogatives, negatives and some conjunctions have an association with pragmatic prominence or "focus", by virtue of setting up a context for information that runs counter to expectations. In the case of interrogatives, the prominent and new answer comes in the next turn (or represented turn). In the case of negatives and complementisers the prominent information under their scope occurs in the same clause.
2. Non-contrastive conjunctions occur initially because they serve as a link between what came before and what follows. We hypothesise that certain types of discourse markers may occur initially for this reason, although we had few in our corpus.
3. Locative and temporal phrases also occur initially ("scene-setters") and it is not always obvious that these should be analysed as "prominent". We analyse these as serving a "discourse-organisational" function, analogous to the linking function

served by conjunctions, which expresses the relationship between narrative information by virtue of its information about temporal and spatial orientation. Such information may also function to signal a new narrative episode, or switch in narrative topic or perspective.

4. Initial noun phrases (including free pronouns and demonstratives) that are core arguments (subjects and objects) tend to represent prominent information. This covers a range of discourse contexts including double focus, and various narrative functions such as shifts between focal or active characters. Our results thus support Austin (2001b)'s findings for Jiwarli, and Swartz (1991)'s findings for Warlpiri. However, an area of possible difference for further research has emerged, as to which grammatical functions appear more commonly clause-initially – Objects, as in the Warlpiri data (and perhaps Pitjantjatjara), or Subjects, as in the other languages and Gooniyandi.

Whether speakers choose to place the main predicate initially in multi-constituent clauses varies considerably among the languages in this survey. In Garrwa, the default position for the main predicate is initial. Tentatively, we suggest that in Warlpiri verbs must be both new and prominent to appear in initial position (Simpson 2007), whereas in Jiwarli and Nyangumarta perhaps newness alone is enough. However, as McGregor (1990) suggests, a proper understanding of the reasons for choosing to put a verb in initial position require looking at the prominence and newness of other information in the same clause.

The notion of "prominence" has clearly played a role in the restriction of certain forms to initial position. It also appears to motivate the placement of certain types of NPs before anything else in the clause. Clearly this is not the only pragmatic factor at play however. We have also identified the linking of discourse propositions by conjunctions, temporal and spatial terms as a function best suited to initial position. Our survey has demonstrated some of the complexities in how speakers "choose" what comes first, at least in narrative discourse.

Our survey has also demonstrated some of the complexities in deciding what counts as "initial". We began with a definition based on prosodic and syntactic grounds, and decided to exclude preposed constituents. However we recognise the close association of information in left-dislocated positions with what follows, and it clearly has a definable pragmatic profile (e.g., McGregor 1990).

While our results show some variability across the languages with respect to what occurs initially, there was also remarkable consistency. We take this as evidence of a general information packaging principle, identified in different ways for numbers of individual languages in Australia, to put prominent information (what others have called "focus" or "newsworthy") in clause initial position. This principle has led to the obligatory appearance of interrogatives, negatives and markers of contrast in that position.

The status of Wackernagel's position in individual languages is an important factor in determining what follows this initial constituent, and where the predicate goes in the clause. We have hypothesised that pronominal information which is not prominent is drawn to Wackernagel's position because it is the least prominent information in the clause (representing well-established and continuous discourse participants). This pattern of ordering is explored in Mushin (2006) as an underlying motivation for the grammaticalisation of second position. How this principle interacts with what comes before and after is the subject of future work.

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Bardi arguments

Referentiality, agreement, and omission in Bardi discourse

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The Bardi language of Northwestern Australia exhibits complex interactions between morphology, syntax, and discourse structure. In this paper I examine the interplay between constituent order, the marking of argument functions through verbal agreement, and the role of bound nominal omission. The findings presented here have implications for the Pronominal Argument Hypothesis and analysis of bound argument markers as "pronominal".

1. Introduction[1]

In this paper I examine some of the issues involved in the coding of information structure, in particular the way in which the combination of argument marking on verbs and free (pro)nominal material jointly determine discourse reference in a nonconfigurational language. The language in question is Bardi, a Nyulnyulan (non-Pama-Nyungan) language spoken by a small number of people who mostly live at One Arm Point Aboriginal Community in Australia's north-west. Bardi is strongly nonconfigurational and shows phenomena characteristic of polysynthesis. Languages of this type have been argued to be pronominal argument languages (e.g., Baker (1996); Jelinek (1984); Pensalfini (2004)); that is, the subject (and other) markers on the verb saturate the verb's argument structure.

1. I gratefully acknowledge fieldwork support over the period 2001–2004 from AIATSIS (G2001/6505 and G2003/6761) and the Endangered Language Foundation. This paper is based partly on material analysed from published Bardi sources (e.g., the Bardi texts in Hercus and Sutton (1986) and Metcalfe (1975)); however most of the material on Bardi is from my fieldnotes. I am very grateful to Bessie Ejai, Jessie Sampi, and especially to †Nancy Isaac, who provided many of the initial grammaticality judgements and the explanations of her intuitions which led me to investigate this topic further. All errors of course are my responsibility, not theirs. All examples and the sample text in the appendix are published with their permission. I thank the editors for comments on an earlier version of this paper.

Free nominals and pronouns, when they appear, are assumed to be anaphoric adjuncts. Work on pronominal argument languages, however, seldom discusses the discourse contexts under which full arguments appear (although for an exception see Nordlinger (1998)).

This chapter examines the interrelationship between argument structure, case marking, ellipsis and the placement of overt nominal material. Furthermore I discuss the evidence which Bardi provides for the Pronominal Argument Hypothesis. Given that the conditioning of appearance of pronouns versus full arguments is tied to information structure (at least as closely as it is to syntax), the Pronominal Argument Hypothesis also raises questions about the discourse status of free pronouns. For example, what is the information structure content of free pronouns in a language where half the clauses in a narrative contain no overt nominal or pronominal material? If the "pronominal" agreement markers on the verb are truly pronouns, what behaviour would we expect them to have in discourse?

Section 2 gives general information on Bardi and the Nyulnyulan languages. In Section 3 I discuss verb agreement, while Section 4 provides a summary of the evidence for Bardi being a nonconfigurational language. In Section 5 I provide some discussion of constituent order and argument ellipsis. Sections 6 and 7 provide an explication of reference tracking in overt nominal material and verbal morphology, respectively.

2. Background on Bardi and the Nyulnyulan languages

Bardi is a non-Pama-Nyungan, Nyulnyulan language spoken now by about 30 people on the Northern tip of the Dampier Peninsula. The total number of people identifying as Bardi is around 1000, although most Bardi people use English in all situations, except when the oldest Bardi people talk amongst themselves. No full published description of the language exists, although one is in preparation (Bowern [forthcoming]) and Metcalfe (1975) contains detailed information about verb morphology.[2] There is extensive unpublished raw data on Bardi dating back to the Laves collection of the late 1920s.

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2. Aklif (1999) also contains a summary of morphology and case marking; that analysis, as well as mine presented in Bowern (2004a), differs in several significant ways from Metcalfe's. Note that because of the severely restricted use of the Bardi language these days, I have almost no conversational data, and my information on the language comes from elicited sentences and narratives. I am aware that this greatly limits the conclusions which can be drawn regarding the principles of discourse organisation; however since Bardi is now used in such restricted contexts it is very unlikely that the necessary data can be gained. Thus the comments made here should be taken to apply to narratives only.

All the Nyulnyulan languages exhibit extensive case marking. Case morphology is ergative/absolutive for all nouns and pronouns (there is no ergative split). The Eastern Nyulnyulan languages have an overt dative case, although this is lacking in the Western languages, where the dative has changed in meaning to a causal in Nyulnyul and Jabirr-Jabirr (cf. McGregor 2006: 93), and has almost disappeared in Bardi.[3] The languages also show agreement for subject, object and oblique/indirect object. Most Nyulnyulan languages only mark one of oblique and direct object at a time, although Bardi can mark both.[4]

The Nyulnyulan languages are all nonconfigurational and (as far as I can tell from the sources available to me) make use of similar principles of discourse organisation. There are, however, differences in verb morphology and agreement marking. These differences form the main evidence for the subgrouping of Eastern and Western Nyulnyulan languages; there are further minor differences between the individual languages. In all Nyulnyulan languages, verbs are marked for tense and aspect, and marking is discontinuous. There is a prefix slot (which intervenes between subject person marking and subject number marking in Bardi) where distinctions are made between past, present, future and irrealis. The tense suffixes encode finer tense/aspect distinctions and include future, continuous, completive and remote past. A template of the Nyulnyulan verb is given in (1).[5]

(1) Person–Tense–Number–Trans–**Root**–Tense/Aspect=IO/Poss=DO

3. Summary of Bardi verb agreement

Bardi verb morphology is complex and agreement is extensive. For full details, see Bowern (2004a: Chs. 4–8). All verbs obligatorily cross-reference at least one argument, identifiable as the "subject" from tests such as the addressee of imperatives and the binder of reflexives. Direct object and oblique agreement also occurs.

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3. There are a few frozen forms, although the only place the suffix regularly appears is in the phrase *oorany-**ji** -monji-* "to fight over a woman". See also the discussion of example (38) below. There is evidence, however, that the disappearance of this case has occurred within the last few generations, since it appears in some examples in McGregor (2006), which uses data from 1929–1935.

4. Data sources are: Nyulnyul and Jabirr-Jabirr: McGregor (1996), Nekes and Worms (1953), McGregor (2006); Nyikina: Stokes (1982); Yawuru: Hosokawa (1992); Warrwa: McGregor (1998). For summaries of comparative Nyulnyulan verbal morphology, see Bowern (2004a: Ch. 4).

5. Variants and a few additional affixes are ignored in this schema for reasons of clarity.

Nominal and pronominal arguments, when they appear, are also case-marked on an ergative/absolutive pattern. Some examples are given in (2)–(4) below. In (2) we see an overt absolutive pronoun *joo* "you (singular)", and an agreeing prefix – *mi-* – on the verb. In (3), we have another second person singular subject; this time the free pronoun is ergative (*joo-nim,* compare absolutive *joo*). The verb is marked by the prefix *n-*, which appears on bivalent verbs. Note, however, that the agreement marker is the same *mi-* which appeared on the monovalent verb *-nganka-* "talk" in (2). Agreement is only sensitive to transitivity marking in the second person future/irrealis/imperative, where intransitive second person *nga-* compares with transitive *a-*. Example (3) also illustrates object agreement. The noun *aarli* "fish" is cross-referenced by *=irr* "they" on the verb. Finally, (4) gives an example of the marking of three participants. The beneficiary is marked only on the verb, by *=jan* "for me"; the object/theme is marked by *=irr* and the subject is marked as a prefix.[6]

(2) *Joo mingankan.*
Joo **mi**-nganka-n.
2SG.ABS 2SG-talk-CONT
'You're talking.'

(3) *Joonim aarli minarlijirr.*
Joo-**nim** aarli-**ø** **mi**-**n**-arli-j=irr.
2-ERG fish-ABS 2SG-TR-eat-PER=3PL.DO
'You ate up the fish.'

(4) *Dalboonkoon anamajanirr ooldoobal!*
Dalboon-koon a-na-ma=**jan**=irr ooldoobal!
dry place-LOC 2SG.IMP-TR-put=1SG.OBL=3PL.DO things
'Put my things in a dry place!'/ 'Put those things in a dry place for me!'

The subject agreement markers are prefixes which are sometimes fused with tense/mood prefixes, as seen in (4) above. In contrast, the (direct and oblique) object agreement markers are clitics which attach to the end of the verb stem,

6. A note on my glossing conventions is required. Where the morphology is crucial to the argument, I have given the full sentence, the free translation, and then a morpheme-by-morpheme gloss. Where the precise morphology is not important for the point being made, I give schematic glossing of whole words only. Abbreviations used are: ABS, absolutive; ALL, allative; CONT, continuous [aspect]; DO, direct object; ERG, ergative; FUT, future; IMP, imperative; INDEF, indefinite; IO, indirect (oblique) object; INTER, interrogative particle; LOC, locative; PER, perfective; PL, plural; POSS, possessive; POSS'R, possessor; PST, PAST; QUANT, quantification; REC.PST, recent past; REM.PST, remote past; SG, singular; TR, transitive;

following clausal clitics. In (4) there is an example of both the direct object and oblique clitic. Example (5) illustrates the relative placement of agreement and clausal clitics with the clitic =*gid* "then".

(5) *Injaybini=**gid**=irr* *nyoon* *injalanabalirr.*
3-TR-ask-PST=then=3PL.DO there 3-PST-see=QUANT=3PL.DO
"jana *goongarramagal* *oorany?"* *injoonoojirr*
where 2-PST-PL-put-REC.PST woman 3SG-PST-DO/say=3PL.IO
'He asked everyone he saw, 'where did you put the woman?' (he said to them).'

In Bardi it is also possible to mark nominal possessors on the verb. In (6), for example, the clitic =*jan* "my, for me" is the possessor of the free noun *birrii* "mother".

(6) *Birrii Broomengan inyjiidigal**jan**.*
Birrii Broome-ngan i-ny-jiidi-gal=**jan**.
mother B.-all 3-PST-go-REC.PST=1SG.POSS'R.
"My mother went to Broome."

Such marking will not be further discussed here, although we should note in passing that it represents another area in which free nominal material and affixation interact.

4. Nonconfigurationality

It is worth briefly reviewing the evidence for Bardi's nonconfigurational status and its polysynthetic properties, in order to see why one might want to make the case for Bardi being a pronominal argument language (which provides the foundation for further and more general theoretical arguments about appropriate analyses of nonconfigurationality). Bardi is nonconfigurational by all the tests discussed by Hale (1983). In addition to free constituent order and extensive ellipsis (exemplified in the text in the Appendix), Bardi has discontinuous constituents and displays no subject/object asymmetries.

Bardi does have free pronouns for all persons (in fact, the pronouns make a distinction between first person plural inclusive and exclusive which not all of the verbal markers do). The first and second pronouns are rarely used, and are largely confined to the marking of heavy emphasis. Third person pronouns and demonstratives will be considered further below in Sections 7.2 and 7.3.

Word order encodes no information about core grammatical relations. I have examples of all permutations of Subject, Object, Oblique and verb, given in (7) below:[7]

(7) *Baawanim inanggagaljin mayi aamba.*
child-ERG 3-TR-PST-bring-PST=3SG.IO food man
'The child brought food for the man.'

✓ Baawanim inanggagaljin aamba mayi.
✓ Mayi inanggagaljin baawanim aamba.
✓ Mayi inanggagaljin aamba baawanim.
✓ Aamba inanggagaljin baawanim mayi.
✓ Aamba inanggagaljin mayi baawanim.
✓ Baawanim mayi inanggagaljin aamba.
✓ Mayi baawanim inanggagaljin aamba.
✓ Mayi aamba inanggagaljin baawanim.
✓ Aamba mayi inanggagaljin baawanim.
✓ Baawanim aamba inanggagaljin mayi.
✓ Aamba baawanim inanggagaljin mayi.
Inanggagaljin aamba baawanim mayi.
Inanggagaljin baawanim aamba mayi.
Inanggagaljin mayi baawanim aamba.
Baawanim mayi aamba inanggagaljin.
Mayi baawanim aamba inanggagaljin.
Aamba mayi baawanim inanggagaljin.
Aamba baawanim mayi inanggagaljin.

Phrases may be discontinuous, but such orders are dispreferred in natural speech, except for phrases of quantifier + noun, where discontinuity is, if not the more common order, at least very frequent.[8] Examples are shown in (8) and (9), where

7. These sentences were elicited by Gedda Aklif and some word order combinations seem not to have been elicited. The sentences without ticks against them do not appear in Aklif's field notes with the other permutations of the clause and were generated by me on the basis of patterns attested in texts and elicited with other lexical items.

8. Compare also examples of possessors marked on the verb, such as (6) above, which may also be thought of as a type of discontinuity. Note, however, that we cannot just say that dative and possessive functions are marked identically, since dative function is *always* encoded as agreement on the verb, whereas possession is optionally marked within the noun phrase along with the possessum. Moreover, dative arguments can be accompanied by a coreferential free pronoun, whereas possessives cannot. Thus examples such as

(i) *Ngayoo birrii Broome-ngan i-ny-jiidi-na=**jan**.*
1SG mother Broome-ALL 3SG-PST-go-PAST=1SG.IO

the numeral *gooyarra* "two" is separated from *aarli* "fish". There seems to be no preference for the relative placement of quantifier and noun; that is, either the quantifier or the noun may appear directly before the verb. Another example of a discontinuous constituent is in line 27 of the text in the Appendix; *iina bardag* "firestick sticks" is split by the verb.

(8) *Aarli nganarlij gooyarra.*
fish 1SG-TR-eat-PER two
'I ate two fish.'

(9) *Gooyarra nganarlij aarli.*
two 1SG-TR-eat-PER fish

I have not included in the count of discontinuous phrases those phrases which could be said to contain right-dislocated elements. There is an intonation break before the extra information in such cases.[9]

Other syntactic tests reveal little evidence for subject/object asymmetries at the level of the clause; they are only present at the level of verb morphology. The case split is ergative/absolutive throughout the language; nouns and pronouns are both straightforwardly marked for either ergative or absolutive (although see Bowern (2004b) for some unusual uses of ergative case marking). Examples were given in (2)–(4) above. Reflexive binding holds at the level of verb morphology, but not clausal syntax. Reflexive/reciprocal morphology derives monovalent verbs from bivalent verbs. Either a circumfix immediately adjacent to the root is used (of the form *m- -inyji*), or, in complex predicates, a reflexive light verb, *-banji-* "share", appears. Examples are given in (10).

(10) *ingoorroo**m**oolooloong**inyji**gal* "They are washing themselves"
*anggarr**m**al**inyja*** "We'll see each other (there)"
*maanka im**banjij*** "He made/painted himself black."
*loorrbooloorrb ingarr**banjij*** "They were arguing with each other."

Binding tests provide further evidence for nonconfigurationality. Pronouns need not be bound in what appears to be their binding domain, and equally, referring-expressions may be bound by pronouns. In (11) and (12), for example, coreference is possible between *Mary* and *jin(a)* or *-in* (both signalling a third

with the clitic jan doubled by the free pronoun ngayoo, can only mean "mother went to Broome for me", not "*My mother went to Broome".

9. A similar intonation contour is used for repeated reinforcing information as well. Is is possible that these discontinuities could be secondary predicates. Some elicitation of secondary predication was done in 2001, however the results were highly inconclusive, but seemed to suggest that discontinuous phrases could also have readings as secondary predicates, but did not have to. This would imply that Bardi is similar to Warlpiri (Hale 1989) in this respect.

person possessor). (13) is a translation equivalent of (12), with an overt possessor *ginyinggi* "she, he". The grammaticality in Bardi of examples like (12) stands in contrast to the translation equivalents in English (and other configurational languages), which are ungrammatical.

(11) *Mary$_i$nim jina$_i$ birrii injalagal.*
M-ERG 3SG.POSS'R mother 3-TR-see-REC.PST.
'Mary's mother sees her.' / 'Mary sees her mother.'

(12) *Birriinim-in$_i$ injalagal=jin$_i$ Mary.*
mother-ERG-3SG.POSS'R$_i$ 3-TR-see-REC.PST=3SG.IO$_i$ Mary$_i$.
'Her$_i$ mother sees Mary$_i$.'

(13) *Ginyinggi$_i$nimjin$_i$ birrii injalagal Mary$_i$.*
3SG-ERG-3SG.POSS'R mother 3-TR-see-REC.PST M.
'Her$_i$ mother sees Mary$_i$.'

Weak-crossover effects are not in evidence. The relevant sentences are fully grammatical, as seen from example (14) – compare the ungrammaticality of the English translation.

(14) *Anggabanim injalanajin birrii?*
who-ERG 3-TR-see-REC.PST=3SG.POSS'R mother
lit Who$_i$ saw her$_i$ mother?"

Various authors, including Baker (1996, 2001) have appealed to the Pronominal Argument Hypothesis to explain the behaviour of nonconfigurational languages. The idea that the verb markers on such languages behave somewhat like pronouns is not new and it received its first treatment in a generative framework by Metcalfe (1975) and Jelinek (1984). Bardi is a good candidate for a pronominal argument language. As we have seen from the previous examples, subject-object asymmetries and other markers of configurationality appear to hold within the verb, but not at the level of the clause.

Other tests for argument/adjunct status in Bardi, however, show that free nominals display properties of arguments when they are co-referential with an agreement marker. For example, although one can include multiple locational adjuncts, multiple arguments are ungrammatical unless they are interpreted as secondary predicates or are conjoined with plural agreement. Consider (15), the first clause of the story in the Appendix.

(15) *Giido Ganbaliny ingarralana injiidarr.*
G. G. 3PL-live-PST spouse.
'Giido and Ganbaliny lived as husband and wife.'
*'Giido and Ganbaliny lived a husband and wife/spouse.'

Likewise, transitive verbs without overt nominal material are still interpreted as transitive. A verb such as *injalagal*, for example, must be interpreted as "he was looking

at something", with an unexpressed object which may be definite, indefinite but specific, or generic. It does not mean "he/she/it was looking" (see also (17) below).

Furthermore, although ellipsis is very frequent and pervasive, it is not universally licensed. There are contexts where overt nominal material is required (see also Nordlinger's 1998 discussion of similar properties for the nonconfigurational language Wambaya). For example, although heads of nominal phrases may be non-overt, arguments in raising constructions must be expressed. In (16), for example, omitting *oorany* "the woman" results in an ungrammatical sentence, even though in the corresponding set of paratactic clauses (as illustrated in (17)), an argument may be inferred.[10]

(16) *Nganjalagal* **(oorany)* *roowil* *innyana.* *jaarla*
1SG.PST-see-PST woman walk 3SG-"catch"-PST beach.LOC.
'I saw the woman walking on the beach.'

(17) *Nganjalagal. Roowil innyana jaarla.*
'I saw [her/someone/something]. [She/he/it] was walking on thebeach.'

Therefore, although Bardi provides no evidence for subject/object asymmetries, it does provide evidence for argument/adjunct asymmetries. There are further issues in the syntax of Bardi that pose problems for the Pronominal Argument Hypothesis (PAH); for example, as I discuss in Bowern (2005), Bardi exhibits none of the ancillary correlations of the PAH which we expect from languages such as Mohawk (Baker 2003) and Mayali (Evans 2003), such as the absence of referentially defective nouns (which could not be simultaneously nonreferential and coreferential with the pronouns on the verb). Therefore there are two explanations. Bardi could be is nonconfigurational, as is strongly suggested by the core tests described above, but the strongest interpretation of the PAH does not hold (that is, that the verb markers are pronoun-like). Alternatively, Bardi is configurational at the clause level, and we need some alternative explanation of the nonconfigurational behaviour seen above. I assume here that the core tests of nonconfigurationality do establish the status of Bardi as a nonconfigurational language and that there is an alternative explanation for the presence of referentially defective nouns, for which see further Bowern (2005).

5. Constituent order

We have therefore established that Bardi shows the canonical features of a nonconfigurational language. Since one of those features is the striking amount of

10. The position of *oorany* "woman" in the clause is not fixed; it may precede or following *nganjalagal,* for example. To express "I saw someone walking on the beach", one uses *anggabal* "someone or other".

ellipsis (or non-expression of free arguments), let us now examine in more detail the situations in which free nominal arguments appear, and how they behave in the discourse.

Free nominals in argument positions are rather rare, thus arguments regarding constituent order must be based on relatively small amounts of data. However, from text counts we do find some intriguing results. The following are the counts based on two typical texts from Tudor Ejai (Text 1) and David Wiggan (Text 2). The first column gives the order in question; the second is the number of occurrences of this order in the texts. The third column is this figure expressed as a percentage of total clauses. In the final two columns, the two texts are compared; percentages are given as a fraction of the total number of that type of word order.[11]

From these statistics we might conclude that the basic word order of Bardi is V! Of 171 clauses, almost half contained no core arguments at all. Of the other orders, VS and VO have approximately the same frequency (between 13% and 15%). Less common again (5%–7%) are the SV and OV orders. We should further note that most of the VS and VO orders appear in the first text, while most attestations of SV occur in the second. However, the numbers are too small to draw any meaningful conclusions.

This lack of overt material and preponderance of verb-initial (or verb-only) orders makes sense when considering the information structure of narratives and the targets of ellipsis. Kuno's (1982) point that ellipsis targets recoverable information seems to hold true generally for Bardi. Omitted arguments are old information and form part of the "common ground" in the discourse. Thus nominal arguments that appear are already marked just by their presence (on this point see also Mushin 2005 and Swartz 1988, who make similar observations for the Australian languages Garrwa and Warlpiri respectively). Overt nominal material is either novel, or there is some reason for highlighting it; either the participant is doing something novel, or is standing in contrast to another participant, or for some other reason is not recoverable from the discourse. There are two positions where such information is introduced – clause initially, and clause finally.

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11. A single clause is here defined by the presence of an intonation boundary or a discourse clitic such as *=amba, =gid, =min* or *=arda*, which only occur after the first word of the clause. I did this because of the problems of assigning the argument of a sequence V Arg V to one clause or the other (see also the following footnote on the coding of VOV and VSV sequences). Text 1 was recorded by CD Metcalfe in 1970 and is about a drunk man who talks to his dog and danced with it; text 2 was recorded in 1990 by Gedda Aklif and is a traditional story about a woman and her two daughters travelling to find a husband. I have not run any tests of statistical significance on these data because there are not enough clauses to make any findings statistically significant. This was a pilot test.

Table 1. Basic word order and argument presence in Bardi texts

Order	Count	% age of total orders	No. in Text 1	No. in Text 2
SVO	0	0%		
SOV	0	0%		
OVS	1	0.6%	1	0
OSV	0	0%		
VOS	0	0%		
VSO	2	1.2%	2	0
SV	13	7.6%	2	11
VS	22	12.9%	19	3
OV	10	5.8%	5	5
VO	26	15.2%	18	8
OVO[12]	10	5.8%	5	5
VOV	4	2.3%	1	3
SVS	1	0.6%	1	0
VSV	1	0.6%	1	0
V	81	47.4%	48	33
Total:	171	100%	103	68

Novel information (whether verbal or nominal) occurs first in the clause (Simpson & Mushin, this volume). New characters in a story, for example, always appear initially in the clause at their first mention. Answers to questions are usually initial too. In clauses where the same character performs a string of actions, the verbs of those clauses are initial; the action (or change of action) is new information. This position thus has the core characteristics of a position for syntactic focus (see, e.g., Dalrymple 2001: 182–185), and specifically identificational focus (É. Kiss 1998).

There is a further class of information which is not "new" to the listener but nonetheless occurs in initial position in the clause. In all cases of this position that I have examined, non-novel new information could be analysed as bearing contrastive focus (É. Kiss 1998). That is, it occurs particularly when two participants are contrasted with one another along some dimension. Therefore I will be referring to initial position as the "focus" position for the remainder of this paper, and this should be taken to cover identificational focus, novel information, and contrastive focus.

Final position in the clause is the most usual position for reintroduced old information. There is a strong correlation between the use of the participant tracker

12. I have included here forms which seem to me on intonation grounds to be monoclausal but to contain more than one verb, and clauses which contained discontinuous constituents. The O is the object of both verbs; I had no basis for choosing between coding of such clauses as V, OV or VO, V. I have listed here all such occurring sequences. Note, incidentally, that in OVO, SVS and VSV constructions, there is no intervening material (although there can be in the case of VO and OV, and so on).

ginyingg(i) "he/she" and final position in the clause. The text in the Appendix illustrates these principles. Note that I follow Mithun (1992) in simply noting a strong correlation between constituent order and pragmatics; I do not deny that there are exceptions to these tendencies. Some of these exceptions could be due to the misidentification of the speaker's pragmatic intent, for example. In a clause with only two elements, it may be hard to tell whether the second item is marked as "old information" or the first is in focus. Furthermore, we will see below that the expression of new information focus and participant tracking is not wholly dependent on constituent order; verb morphology and determiners also play a role. These points are taken up in Section 7.1.

6. Reference and agreement

In the second part of the paper I examine the role of agreement, argument ellipsis and free pronouns in establishing referentiality and encoding discourse and argument structure. This section concentrates on the role of agreement in establishing discourse reference and marking referentiality and quantification. While there are many possible areas for investigation, here I focus on the implications for pronominal arguments in discourse. Are there differences between "pronominal agreement" markers and free pronouns in this area? How precisely are discourse relations established using free and bound pronouns? What discourse properties do Bardi "pronominal agreement" markers display? I examine subject marking separately from object marking, and in 6.3 I discuss the special properties which third person agreement displays. In Section 7 I turn to overt nominal material and discuss the same issues.

6.1 Subject marking

Subject marking in Bardi takes the form of a prefix. All verbs take a subject prefix (cf. the examples in (2)–(4) above). Subject marking in Bardi behaves much like subject agreement in more familiar pro-drop languages, such as Italian. The third person marker *i-*, for example, may be coreferential with a free nominal (as in 18), referential, and anaphoric as in (19), non-referential, as illustrated in (20), or impersonal, as in (21).

(18) *Oorany inyjiidina Broomengan.*
woman 3SG-PST-go-PST Broome-ALL
'A/some/the woman went to Broome.'

(19) *Bardi birarr injoon.*
yesterday return 3SG-DO-PST.
'She came back yesterday.'

(20) *Aarl irli.*
fish 3SG-eat
'People eat fish.'

(21) *Ool inamana.*
water 3SG-put-PST
'It rained.'

For any given verb, the referential status of the subject is determined by a combination of the discourse context and the use of demonstratives and pronouns such as *ginyinggi* (3rd person) or *jarri* "this" (to be further discussed below). The subject marker on the verb itself does not vary. This reinforces Evans' (2003: 16) point that simply equating pronominal arguments with pronouns is misleading. Pronouns do not tend have the same degree of variability in interpretation, at least in languages like English.[13]

6.2 Object and oblique marking

Direct object and oblique marking in Bardi have rather different properties from subject marking. While subject marking is always overt (even in imperatives), DO marking is null in the third person singular. IO marking is always overt, however, even in the third person singular. DO and IO markers are clitics, while Subject markers are affixes. Furthermore, the form of speech-participant (that is, first and second person) DO and IO markers is sensitive to discourse roles in a way that third person markers and all subject markers are not. Possessives DO not seem to participate in this system either, although this requires confirmation.

Direct object and oblique agreement markers have two forms. Examples (22) and (23) illustrate this with the verb "to give":[14]

(22) *Anangay (oola)!*

a-	*n-*	*ø*	*-a*	***=ngay***	*oola*
IMP-	TR-	"give"	-FUT	=1SG.DO	water

'Give me water!'

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13. As I argue in Bowern (2005), however, one way to avoid the problems that Bardi poses for the Pronominal Argument Hypothesis is to assume that pronouns (or rather, pronominal agreement markers) in languages such as Bardi *are* more susceptible to non-referential or generic readings than pronouns in languages like English (see also Evans 1999, 2003 for different conclusions based on the same data).

14. Note that the "direct object" forms also occur on predicative adjectives and also show *=jarr-* marking. The oblique forms are related to the free possessive pronouns, however the possessive pronouns cannot occur with *jarr*.

(23) *Anajarrngay %(oola)!*

a-	*n-*	*ø*	*-a*	***=jarrngay***	*oola*
IMP-	TR-	"give"	-FUT	=1SG.DO	water

'Give me water!'[15]

Table 2 below gives the forms for first and second person. The third person agreement markers do not participate in this system; they are invariantly =ø for the singular and =*irr* for plural.

Table 2. Forms of the direct object markers

	Jarr-forms	**unmarked forms**
1 SG	*=jarrngay*	*=ngay*
2 SG	*=jirri*	*=rri*
1+2 dl	*=jarrway*	*=way*
1 PL	*=jarrmoord*	*=moord*
2 PL	*=jarrgoorr*	*=goorr*

Jarr-forms (as I will call the set) are transparently related to the unmarked set of agreement markers. Various authors have given different accounts of the distribution of the two sets. Aklif (1993), for example, says that the *jarr*-forms are used after stems ending in a consonant. Metcalfe (1975) argues that *jarr*-forms occur on stems containing an odd number of syllables. Neither of these distributions accounts for the data, as syntactic minimal pairs like (22) and (23) show. The distribution cannot be phonological.

There are two very common frames where the *jarr*-forms occur. The first place where *jarr*-forms occur is where arguments are contrastive, such as in example (24) below. The second is where there is a third person subject and first or second person object, and the speech act participant is featured in the discourse over several clauses (that is, the object is a grammatical topic in the sense it is used in frameworks such as LFG: see, for example, Dalrymple (2001)). This is shown in example (25).

(24) *Niiwandi=**jarrngay**, joo ngaada=**jirri**.*
tall=1SG.DO, 2SG short=2SG.DO.
'I'm tall, but you're short.'

(25) *Ngoorra inanggala**jarrngay** amboorinynim.*
last night 3SG-TR-PST-visit=1SG.DO person-ERG.
'Someone visited me last night.'

15. This sentence is pragmatically highly marked with the word *oola* "water". That is, the presence of *jarr* in the verb tends to coerce the omission of the theme. (23) would normally be used when the theme is already established; however, the sentence is grammatical with *oola* present.

The *jarr*-forms are not used when the verb (or another participant in the clause) is in focus. In (26), for example, the speaker wanted to be sure that the person she was talking to wasn't just daydreaming.[16]

(26) *Nganyji milamanka=ngay?*
INTER 2SG-listen=1SG.DO?
'Are you **listening** to me?'

Similar forms are found for oblique markers (=*jarran/jan* in the first person), although they are much rarer. The oblique markers have the same distribution between the two sets in discourse as the direct object forms do. An example is given in (27).

The occurrence of *jarr*-marking does not seem to interact with constituent order in the clause, or whether free pronouns are present. For example, the presence or absence of =*jarr*-forms does not seem to affect the appearance of free pronouns. They are rare whether or not they co-occur with *jarr*-marking. *Jarr*-marking also co-occurs with fronted new information which is not coreferential, as in (27) above, where *jarrngay* **"**1SG**"** appears although there is also a fronted non-coreferential NP *Marbiddynim* "Marbiddy-ERG". This implies that *jarr-* forms do not mark identificational focus. However, there is some evidence that *jarr*-forms can bear contrastive focus, as in (28) below.

(27) *Marbiddynim inanggalajarrngay bardi, gooyarr aalga*
Marbiddy-ERG 3SG-TR-PST-visit=1SG.DO yesterday, two day
*inggoodali=**jarran** arra darr oolarnajan.*
3SG-PST-lost=1SG.IO NEG come 3SG-IRR-"spear"=1SG.IO.
'Marbiddy came to visit yesterday, for two days I didn't know where she was [lit. she was lost on me], she didn't come.'

(28) "*Ngay goongorrojarrngay,*" *injoonajirr.*
1SG 2-PST-PL-hit=1SG.DO 3SG-TR-say-PST=3PL.IO
'You're hitting me!" he said to them.' (L152.16)

In this example, the initial argument *ngay* is not novel information, since the addressees are aware that they are hitting the speaker of the clause.

The forms with =*jarr-* are cognate with verb forms marking relative clauses in the related languages Warrwa and Nyikina – for details see Bowern (2004a).

16. Note furthermore that the interrogative particle *nganyji*, although it has a tendency to occur initially in the clause, can also appear before the questioned element. This provides further confirmation that the meaning of the sentence is not *Are you listening **to me***, since in that case we would expect one of the constructions which show constituent interrogation: in particular, a free pronoun *ngayoo* to appear after *nganyji* or *ngayoo* suffixed with *–arda*.

The marker is also no doubt cognate with the demonstrative *jarri* "this" (for which see further Section 6.2 below). It is not surprising that a marker with the function of introducing relative clauses, that is, one that establishes coreference relations in syntax, should be co-opted to track and signal coreference across clauses. What is surprising, however, is that the forms are only used for speech act participants, especially since relative marking is not restricted to speech act participants in Nyikina and Warrwa. Perhaps the *jarr*-forms also have functions which are linked to discourse-based obviation (for which see, for example, Aissen (1997)). I have seen no evidence for similar marking in Nyulnyul or Jabirr-Jabirr and in the absence of further data this remains an open question. However, given the strong preference for use of these forms when a participant lower on the person hierarchy is acting on someone higher up the hierarchy, an obviation-based account is plausible.

6.3 Third person object quantification and definiteness

While it is true that third person object markers are not sensitive to marking by *jarr-,* third person direct object verb marking does encode whether the participant is definite or indefinite (or unspecified for definiteness); object quantification is also marked on the verb. This is done in two ways. For plural arguments, the presence or absence of plural agreement signals individuation. A quantifier may also appear on the verb stem.

The non-appearance of object marking was noted by Metcalfe (1975) and argued to be optional in Bardi, on the basis of pairs of sentences such as (29) and (30), which differ only on the presence or absence of the plural object agreement marker *=irr.*

(29) *Aambanim inamboona niimana aarli.*
aamba-nim i-na-m- boo-na=ø niimana aarli.
man-ERG 3-TR-PST-spear-REM.PST=3SG.DO Many fish
'The man speared many fish.'

(30) *Aambanim inamboon**arr** niimana aarli.*
aamba-nim i-na-m- boo-na =**rr** niimana aarli.
man-ERG 3-trans-PST-spear-REM.PST=3PL.DO many fish
'The man speared many fish.'

The best generalisation for predicting the "optionality" of agreement is that plural agreement occurs when the object is individuated, and singular agreement occurs when the object is treated as a group or collective. This is the intuition of speakers when asked about the difference. Nancy Isaac (pers. comm, 2003) described (29) is being spoken when the speaker is talking about the fact that there's a lot of them (for example, when examining the pile of fish caught after a day of

fishing), whereas (30) would be used when the speaker is concentrating on the fact that the fish were all speared individually, one after the other.

Furthermore, we can argue that in sentences such as (29), agreement is not absent, it is singular. This can be seen more clearly when the agreement is dative, and thus overt in both singular and non-singular.[17] In (31), the more normal construction, the third person plural agreement marker *=jirr* is co-referential with the noun *ambooriny* "people". (32) is the same, except that the agreement marker is singular.[18]

(31) *Injoonoo**jirr** ambooriny.*
'He spoke to the people.'

(32) *Injoonoo**jin** ambooriny.*
'He spoke to the people.'

Moreover, similar agreement patterns for subject agreement were possible in earlier stages of the language (for example in the Laves texts, recorded in the late 1920s), although such agreement for subjects is no longer possible in current Bardi. Furthermore, in earlier Bardi there are examples of certain nouns forcing plural agreement. *Gaalwa* "mangrove log raft" always takes plural agreement in the Laves corpus, even when the sentence refers to a single raft (perhaps *gaalwa* originally meant the logs tied together to form the raft). In the face of this it is difficult to argue that *gaalwa* is an adjunct, which it would be under the Pronominal Argument Hypothesis, if it is a notionally singular noun triggering irregular plural agreement. A further example of non-notional agreement in the Laves corpus is given in (33). Here we see the subject is marked by singular agreement on the verb, however the number of the subject is clearly plural: *guyarra agal guyarra agal guyarra agal guyarra* literally "two and two and two and two".

(33) *Guyarra agal guyarra agal guyarra agal guyarra galgarriny*
two and two and two and two swim
inyjalgun.
3.PST-fall-CONT
'Eight of them were swimming.'

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17. This example is not definitive as the verb *-joo-* has a variable argument structure without agreement, meaning "speak, say something", however note the use of the singular agreement and the normally plural *ambooriny* "people".

18. A note is warranted also on some reflexive forms in the text in the Appendix (for example, line 36), as they also appear to be number mismatches. Forms such as *ingirrinijin* "they said to each other" have a plural subject, marked by *ingirr-*, but a singular oblique object, *=jin*. Indirect reflexives (that is, where the reflexive is not the direct object of the verb) are always marked by *=jin*, whatever the person and number of the verb.

We can see from these examples from texts from the 1920s that Bardi agreement there were even more cases of non-anaphoric agreement in earlier stages of the language.

Bardi also has several clitics which occur just before the direct object agreement and mark quantification. The two most common forms are *=nid* and *=(b)al*. *=nid* refers to a large group, while *=al* or *=bal* denotes an indefinite number.[19] Note that these clitics are not obligatory when the object is indefinite or a large group; their presence forces a specific interpretation but their absence does not. Note further that *=nid* and *=bal* can appear on intransitive verbs and quantify the subject; on transitive verbs, however, they obligatorily quantify the object. This is the only area of Bardi verb marking which exhibits ergative/absolutive patterning; all other areas are nominative/accusative. An example is given in (34).

(34) *Nyoonoo Landandinyinngan arr angarrinan**nid***
here L.-all go 1-PST-PL-TR-DO/say-CONT-REM.PST-QUANT
'We used to go to Landandinyin.'

The clitics *=nid* and *=bal* occur in addition to third person agreement marking, in the same slot that *=jarr-* does, although they are in complementary distribution with *=jarr-*, as *=nid* and *=bal* do not occur with speech act participants. The examples in (35) and (36) provide illustration. In (35) we have a very interesting example or change in agreement. At the first mention, the subject *ambooriny* is singular; when *ambooriny* is the understood object of the second verb, *ingarralaninirr* "they caught sight of them", agreement changes to plural. The third verb, *ingoorroongoorribinanabalirr*, has them with plural but indefinite agreement, presumably because we don't know exactly how many dogs there were, and while we know that there are non-zero numbers of dogs and people, we do not know precisely which people out of the group are being chased. (36) gives an example of a generic and nonreferential singular. As shown from (35), however, items marked by *–bal*(*irr*) are not always nonreferential.

(35) ***I**nyjarralan bard ambooriny, bard iilanim*
3-PST-run-CONT off person, off dog-ERG
ingarralanin=irr
1-PST-PL-TR-see-CONT-REM.PST=3PL.DO
*ingoorroongoorribinana=**balirr**.*
3-PST-PL-TR-chase-CONT-REM.PST=INDEF=3PL.DO
'The [group of] people ran off, and the dogs caught sight of them and chased them.'

19. Metcalfe (1975); Metcalfe (n.d.) records one or two other items of this kind which I was unable to re-elicit and confirm on my field work. He gives only a few examples of them, however.

(36) *Jabarra* *jinarr* *lagoorr* *arrarlin=jam=**bal**.*
k.o. lizard 3SG.POSS'R-3PL-POSS'E eggs 1PL-eat-CONT=thus-INDEF.
'We eat *jabarra* lizard's eggs.'

6.4 Summary

This survey of agreement and free nominal marking has revealed considerable evidence in favour of the Pronominal Argument Hypothesis for Bardi (that is, that the "agreement" markers are acting as the arguments themselves). For example, the direct object markers are sensitive to discourse marking, as shown by the *jarr-* forms of speech-act participant object markers. Other verbal marking provides direct information about quantification and individuation.

We have also, however, seen evidence that it is the combination of verb marking and free nominals which provides information about referentiality and discourse continuity. Subjects and objects behave differently from each other, and third person objects are different again from speech act participants. In Section 3 we also examined evidence that while pronominal marking could saturate theta roles and showed argument-like properties, the free nominals did not behave as adjuncts.

The next stage is to examine in more detail the behaviour of overt nominals in syntax and discourse.

7. Definiteness and referentiality in overt nominal material

First and second persons are always definite and referential in Bardi. That is, there is no use of the second person in non-referential uses, as in English "you (=people in general, one) want to be careful of linguists". Third person participants, however, can be referential or non-referential, definite or indefinite, individuated or not. In Section 5 we saw the ways in which verbal morphology marks discourse functions. There are also ways to signal definiteness, referentiality, and anaphora with material outside the verb. Bardi speakers also use pronouns, demonstratives and ellipsis (no material at all) to signal different discourse functions.

In order to illustrate the points made in this section, I have included an interlinearised text in the Appendix. The portion included here is the beginning of a longer narrative which was told by the late David Wiggan to Gedda Aklif in 1990, transcribed by Aklif and checked by me with the speaker's sister. The text is a variation of the well-known fire-making stories of northern Australia. In this version, Giido and Ganbaliny (the sooty oystercatcher and pied oystercatcher respectively) steal the *iina* "firesticks" from Girrgij (grey goshawk or osprey). In some Bardi

versions of the story Girrgij is replaced by Joonggilbil, a falcon. The points made will be illustrated using this text so that the context of examples can be clearly seen.[20]

7.1 Character introduction and continuity

New participants in the discourse are introduced in initial position. We see this, for example, in the first line of the text.

(37) *Giido Ganbaliny ingarralanana / injidoron //*
Giido Ganbaliny they lived husband and wife
'Giido and Ganbaliny were husband and wife.' (=Appendix text, ln 1)

Topic continuity is usually signalled by omission of the argument. In the text, for example, after the first mention of Giido and Ganbaliny their next mention is six clauses later, when Giido says something to Ganbaliny (who is not mentioned). The next time they are mentioned is when they are reintroduced after the description of Girrgij's fire-making at line 15.[21] Note that the singular agreement of Girrgij versus the plural marking of husband and wife Giido and Ganbaliny provides disambiguation.

The next mention of Giido and Ganbaliny is contrastive: after the description of Girrgij's incendiary abilities we are reminded at line 15 that the oystercatchers are still without fire and must eat their fish raw, in contrast to Girrgij who can eat his fish cooked. Line 15 also represents a change of scene; we are back with Giido and Ganbaliny and remain with them for eleven lines.

Once the characters in the discourse have been introduced and activated, switches between characters are not necessarily signalled. In lines 22–24, for example, where the speaker is reporting a conversation back and forth between Giido and Ganbaliny, the change in speaker is not signalled by any overt material, but may be inferred by the fact that we are witnessing a conversation.

It is also useful to co-opt a distinction between active participants in the discourse and passive participants – I have in mind something similar to the "figure"

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20. This text was chosen as representative of the material as a whole. Statements made here also apply to my corpus of Bardi texts, which is currently about 15,000 words of digitised and searchable material and more than three times that amount of hand-written transcription. Throughout section 6, references of the form line X refer to the line number of the text in the Appendix. References of the form example (y) are to examples in the body of the paper.

21. Note that when Girrgij is introduced at line 3, he is not in initial position. I assume that this is because once Giido and Ganbaliny are introduced, any Bardi person listening to the story will know that Girrgij is also a character; thus once Giido and Ganbaliny are introduced Girrgij is not new information.

and "ground" distinction of Talmy (1983), extended to "figure" participants (or characters) and "ground" participants (non-characters) – see also Kuno (1987). In lines 12–14, for example, the arguments *aarli* "fish" and *noorroo* "fire" are less important than the actions that Giido and Ganbaliny are watching Girrgij perform. I assume that the verbs are in initial position, the position for newsworthy information, and that the actions are more newsworthy than the patients of the verbs (after all, one expects the lighting to be done to the fire and the cooking to be done to the fish).

Thus discourse characters are introduced in initial position, and are continued, usually by ellipsis, until they are reactivated. Let us now consider other overt marking of items in the clause.

7.2 *Jarri* "this"

Bardi has a number of deictic elements, including *nyoonoo* "here", *nyalab* "this way", and *balab* "that way". There is also a demonstrative *jarri* "this", along with *boonoo* "that" and *jiiba* "this one close up" (demonstratives and deixis is discussed extensively in Bowern (forthcoming)). The neutral demonstrative *jarri* is of interest here, because it is the only one used extensively in narratives.

Jarri is a marker of deixis in the literal sense of the word. That is, *jarri* points to its referent independent of the discourse context. The referent of *jarri* can be established independently of the preceding discourse. This contrasts with the patterning of the other common element *ginyinggi* (usually translated as "he"), for the referent of *ginyinggi* is dependent on pre-introduced information; it is always bound and behaves rather like a logophor (further discussion is given below). *Jarri* is used for third persons in a rather similar way to that in which *jarr*-forms of direct object markers of speech act participants are used. This is not surprising, since the two are etymologically related. The free form *jarr* is not limited to direct objects, however.

There are only two uses of *jarri* in this text; at line 35 and at line 39. The instance at line 35 is in direct speech, while the use at line 39 is repeated as example (38):

(38) *Injalana arrjambala* ***jarr*** *injidar irr Giido Ganbaliny.*
he saw their tracks this spouse they Giido Ganbaliny.
"He saw the tracks of the husband and wife Giido and Ganbaliny."
(=Appendix text ln 39)

In the story Giido and Ganbaliny have remained activated for the previous few lines, while they run away, and Girrgij returns and sees that his firesticks are missing. He does a number of actions (all focused) and then he sees their tracks, and Giido and Ganbaliny are then mentioned, in final position, with *jarri*.

7.3 *Ginyinggi* "he, she, it" and *irr* "they"

Ginyingg or *ginyinggi* is the third person singular pronoun. It is referentially dependent on an antecedent in the preceding discourse (usually, the closest character). It thus behaves rather like a logophoric pronoun. It is very rarely used to refer to participants, however. Lines 31, 33 and 37–38 are the only examples in the text. In lines 31 and 33 *ginyingg* is used just before the topic is changed. In 37–38 it is used to reintroduce Girrgij as a topic in the discourse. These examples are typical of the corpus as a whole. *Irr* "they" is used for plural nouns; *ginyinggi* is always singular.

While *ginyingg* is commonly translated as the equivalent of English "he", "she" or "it", it has a rather different distribution, and behaves more like a demonstrative than a true pronoun. For example, in ll 33 and 37–38, *ginyingg(i)* co-occurs with the name. In contexts other than elicitation, *ginyingg(i)* is much more common as a modifier rather than a true pronoun.

It is interesting to compare the discourse use of *ginyinggi* to the use of the English third person pronouns. Broadly, English pronouns in discourse signal character continuity. Compare, "Girrgij$_i$ lit the fire. He$_i$ brought back his fish$_j$. He$_i$ cooked them$_j$." In Bardi, however, *ginyinggi* is used to signal either the reactivation of an earlier character or the abandonment of the current active character in favour of an earlier one. It does not signal topic continuity.

Ginyinggi has a further use in referring to the action of the previous clause rather than to any particular participant. Case-marked forms of *ginyingg*, such as the ablative *ginyinggo* and locative *ginyinggon*, serve as discourse linkers. They are invariably translated as "then" and signal advances in the narrative with or without changes in the main character (this text has one example of each with *ginyinggo* "from this").

8. Summary and conclusions

We can thus summarise the preceding sections in terms of a few general principles of discourse organisation. First, recoverable participants undergo ellipsis. Characters in discourse which are mentioned overtly are first introduced initially, in the position of newsworthy information. They are then omitted except when they are either reactivated (that is, that there is a shift in the narrative) and/or they are contrasted with another character. In that case, *ginyinggi* is used for reintroduced characters or for moving along the action of the narrative, and *jarri* is used to signal prominence while not shifting viewpoint. The agreement system itself does not appear to play a large part in this system, for the tracking of discourse participants is done entirely through the different marking of free nominal items.

The verb morphology makes its own set of distinctions. Speech act participants do participate in discourse marking in verb morphology; direct objects and obliques are marked for relative prominence over the subject. Third person objects are also marked for quantification and individuation in the verb morphology. Verb morphology cross-references person and number, and is often the only exponence of argument structure in the clause. However, it is not strictly "pronominal", since it need not be anaphoric. Furthermore, we have seen that Bardi free pronouns do not have many of the characteristics of English pronouns either. For example, they are never used to track topics through discourse. In short, most (but not all) discourse marking is achieved at the clause level, and most (but not all) grammatical and quantificational marking is done on the verb.

Therefore we are left with a very intriguing problem. Although Bardi shows many of the characteristics of a nonconfigurational, pronominal argument language, the "adjunct" status of overt nominal material runs counter to the usual analyses of such languages. The interplay between referentiality, ellipsis, and topic marking spans both free and verb-marked material, and analyses of nonconfigurationality which do not address the role played by overt nominal material in the clause will not be able to account sufficiently for the behaviour exhibited by Bardi.

Let us briefly consider what such a solution might look like. One way we might proceed is to modify the Pronominal Argument Hypothesis to take Bardi into account. I make a suggestion for how this might be done in Bowern (2005). A second direction we could pursue would be to treat Bardi verb marking as agreement marking rather than pronominal argument marking. We would then need an alternative explanation for Bardi's nonconfigurational properties for free nominal material. A third possibility would be to recognise that many of the problems described here only arise because of the type of model used. Investigating Bardi syntax in the framework of LFG, for example, would allows to account for most of the behaviour noted here quite elegantly. The same applies to any framework where phrase structure need not play a greater role than modelling constituency. However, these are all questions for further research.

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Appendix: Girrgij, Giido and Ganbaliny

Glosses are schematic (that is, not every morpheme is individually glossed). Single slashes indicate a short pause. Double slashes mark major phrase boundaries.

1. *Giido Ganbaliny ingarralanana / injidoron //*
   Giido Ganbaliny they lived husband and wife
   Giido and Ganbaliny were husband and wife.

2. *Ginyinggo / goonkoordoo ingarralanana / mangir irrgoordoomarra*
   then smoke they saw always every-when
   booroo / mooyoon ingarralanan biila Girrgiji jina noorroo //
   time morning they saw it again G. his fire.
   They saw smoke each morning, every morning they would see Girrgij's fire.

3. *arra nyoonoo irrgoordoomarra booroo.*
   thus there every time
   It was there all the time.

4. *"Arra nyoonoo anggiyoon goonkoordoo darnan," / ingirrinijin*
   thus here what from smoke coming they said to each other
   "arra barda jawa," injoonin Giidonim injidar.
   Hey away us he said to her Giido spouse
   "Why is there smoke here?" they asked each other. "Let's go and look," Giido said.

5. *"Anggala goonkoordoo nyoon anggiyoon goonkoordoo darnan,"*
   we will go smoke there what for smoke coming
   injoonoojin.
   he said to her.
   "We'll go and see what the source of the smoke is," he said.

6. *"Waygi gala jawa."*
   come on go us
   "Come on! Let's go!" They walked.

7. *Roowil ingirrinyan nyoonoo ingarralana Girrgiji / inyjarrmina gardino /*
   Walk they did there they saw Girrgij he flew out from cave
   noorroo ingooloorroonan. Bijorro ingarrjalginijin //
   fire it was burning from there they hid themselves
   They saw Girrgij fly out of the cave and light a fire. They hid themselves.

8. *Ingarralalan boonoo roowil innyana. //*
   they watched him from there walk he did
   They watched Girrgij go away.

9. *Bardi ingarralalana gardo nyoonoo / inambanyin aarli nyalab*
   Away they watched him still there he killed them fish then
   jarr injoon.
   come he did
   They watched him there. He speared some fish and returned home.

10. *Inooloorroonoo noorroo. // Inamarramarranirr aarli. //*
he lit fire he cooked all of them fish
He kindled a fire. He cooked all the fish.

11. *Nyin Giido agal Gambaliny injidar gardo ingarralanan*
here Giido and Gambaliny husband still they lived
garnkanyarr barnangga niwarda /
with raw shell fish meat rock oyster
Giido and his wife Ganbaliny still ate raw shellfish and oysters.

12. *Anggirrgoordoo arang barnangga gardo garnka ingarralinan. //*
something other shell fish meat still raw they ate it

13. *Nganyjal irrgoordoo aalga / ingarralanana namard.*
How many every day they / lived just
We don't know how long they lived that way [without fire].[22]

14. *Aralgamin gala lalin imbanyin=arda jirr //*
another day thus lalin season it finished when to them
The Lalin season had finished.

15. *Barn injoonin Ganbalinynim aamba barn injoonajin*
tell she said to him Ganbaliny husband tell she did to him
Giido / aamba jin,
Giido man her
Ganbaliny said to Giido her husband:

16. *"barda jawa anggal=amba nyirroogoordoo inman noorroo*
off our we see=then how he makes fire
anggiyoon goonkoordoo darnanjin" injoonoojin. "Ngoorriji=amba
what from smoke coming he said to her tomorrow=thus
anggarrmi mooyoon," injoonoojin.
we'll get up morning she said to him
"We'll go and see how he makes fire, where the smoke's coming from," he said.
"Tomorrow we'll get up and do it," she said.

17. *Ingarrjarrmini maankarngoon=kard. Garra garra garra*[23] *roowil ingirrinyan*
They got up night time=when walk they did
nyoonoo.
there
They got up when it was dark. They walked there.

18. *Ingarrjalginin goolboon baybirrony.*
they hid rock behind
They hid behind a rock.

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22. *Nganyjal* is the interrogative particle and the indefinite suffix; it is used to introduce a clause of doubt and is best translated as "we don't know…"

23. *Garra* could be translated as "do thus"; it is a particle which when repeated (as here) signifies a gap in the story where the action continues for a while. There is another example in line 28.

19. *Ingarralanana inyjarrminna iina / ingarralanan iina*
they saw he got up fire stick they saw it fire stick he picked
injooloonganarr bardag. //
them up sticks
They saw him get up, they saw him pick up the fire sticks.

20. *Bajibaj injoonirr garra garra garra inamana gooljoon noorroo //*
rub together he did to them kept on doing it he put it in dry grass fire
He rubbed and rubbed them and put dry grass in the fire.

21. *Bijorro inamanirr bardag goona iina. //*
from there he put them sticks back fire stick
From there, he put the sticks back.

22. *Innyana gooljoo / boo inamana ingarralanana goonkoordoo darr inarna.*
he got grass blow he did they saw smoke come it did
Ginyingg barn inmanirr bardaga. // Ingirrinjin.
This do he did stick. They saw
He got grass and blew on it. They saw smoke coming out. He did this with the sticks. They thought about it.

23. *Inooloorroonoo noorroo. // Ginyinggo inyjarrmin biila / barda / aarlingan.*
he lit fire then he got up again away fishing
Balaboo jarr injoonoo. Goonaba roowil innyana ginyingg Girrgij.
away come he did away there walk he did this Girrigj
He lit the fire, then he got up and went off for fish. He went away. Girrgij walked away from there.

24. *Ginyinggo ingarrjarralana Giido injidar Ganbaliny.*
then they ran Giido husband and wife Ganbaliny
Then Giido and Ganbaliny ran.

25. *Ingarralanarra "jarri gorna giija," ingirrinijin. /*
they saw this good really they said to each other
They looked at them and said "these are really good".

26. *Ingirriloongananirr ginyingg iina.*
they picked up them this fire stick
They picked up those firesticks.

27. *Diird ingirrinin / barda ingarralginarr nyalaboomin jarr injoonoo*
run away they did away they hid them this way come he did
ginyingg Girrgij. Boor injalanajirr iina, arrajirr.
this Girrigj place he looked for them fire stick nothing of them
They ran away and hid them, and as they did so, Girrgij came back. He looked for the firesticks and found nothing.

28. *Injalana arrjambala jarr injidar irr Giido Ganbaliny.*
he saw their tracks this spouse they Giido Ganbaliny.
He saw the tracks of the husband and wife Giido and Ganbaliny._

Diverging paths

Variation in Garrwa tense/aspect clitic placement

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This paper presents an account of variations in the clausal position of two tense/aspect markers in the Garrwa language, primarily whether they occur before or after a pronoun as part of a second position clitic cluster. The analysis considers how different paths of grammaticalisation in the development of Garrwa tense/aspect markers may impact on their contemporary usage. An account of discourse-pragmatic factors associated with tense/aspect clitic placement in narrative discourse is also presented. The analysis demonstrates a range of factors, both historical and pragmatic, which may motivate grammatical variation in discourse.

1. Introduction[1]

This paper is concerned with what motivates the placement of Garrwa tense/aspect (TA) markers within a second position clitic complex where sometimes TA markers are directly encliticised to pronouns and at other times directly attached to the element in initial position (usually a verb), followed by a pronoun. This variation is illustrated in (1a) and (1b) below (from the same narrative text).[2]

(1) a. *jungku=**ngay**=**i*** *nana-nyina*
sit=1SG=PAST that-LOC
'I was living there' (4.5.01.3.DG)

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2. The following abbreviations are used: 1SG – 1st person singular, 1PL – 1st person plural, 2SG – 2nd person singular, 3DU – 3rd person dual, 3PL – 3rd person plural, ABS – absolutive, ACC – accusative, ALL – allative, CONJ – conjunction, DAT – dative, DEC – deceased, DM – discourse marker, DS – different subject, ERG – ergative. EXCL – exclusive, FUT – future, HAB – habitual, INCL – inclusive, IND – indicative, LOC – locative, NEG – negative, NOM – nominative, PAST – past tense, PRES – present tense, PURP – purposive, REFL - reflexive TR – transitive.

b. *jungku=**yi**=**nurru*** *muningka*
sit=PAST=1PLEXCL anyway
'We sat down anyway' (4.5.01.3.DG)

The pattern seen in (1a) is what is given in elicitation, suggesting that this is the default or unmarked structure. The degree of variation found in actual discourse however indicates a far more fluid syntax for TA markers than is indicated in elicitation. While there are several TA markers that show such variation, here I restrict discussion to two realis TA forms: the past marker *=yi* and the (past) habitual marker *=yili*. I show that differing patterns of variation between *=yi* and *=yili* in their placement in second position clitic complexes may be symptomatic of diverging paths of grammatical change brought on by a combination of their semantics and their relative sensitivities to pragmatic pressures. I also suggest that some of the behaviours observed in the Garrwa data may be symptomatic of processes of language death or decline. I am interested here in both the overall patterns of variation across a large corpus of textual data, as well as the patterns of variation found across clauses within the same discourse.

Bound pronominal enclitic complexes constitute an areal phenomenon across the north-central region of Australia (Dixon 2002; Mushin 2005a). This "package" of grammatical information mostly follows the first clausal constituent,[3] which itself has been associated with certain kinds of pragmatic markedness (e.g., McConvell 1996; Laughren 2002; Mushin 2005b; Mushin 2006). There is thus a relationship between properties of information-packaging, "… the speaker's assessment of how the addressee is able to process what he is saying against a background of a particular context." (Chafe 1976: 27), and the position of the clitic complex in these languages.[4]

The most well-known examples of Australian second position phenomena are those found in Pama-Nyungan languages, and especially Ngumpin-Yapa languages (e.g., McConvell 1996; Laughren 2002). However a few suffixing non-Pama-Nyungan languages on the periphery of the Ngumpin-Yapa area also show this phenomenon. These include Garrwa, but also the unrelated languages Wambaya (Mirndi) and Yukulta (Tangkic). In these languages, pronominal information expressing person, number (and gender) of core arguments together

3. They may therefore be classified in the family of "Wackernagel" clitics, following Wackernagel's (1892) observation that many Indo-European clitics occur after the first word or constituent in a sentence.

4. In some of these languages, clitic-placement has been syntacticised to certain degrees such that they are associated with particular word-categories (e.g., verbs or auxiliaries) rather than second position per se. See McConvell (1996) and Laughren (2002) for further discussion.

with other grammatical information including tense/aspect, directionality and transitivity are encoded in an enclitic complex or "auxiliary" that occurs following the first clausal constituent. These are illustrated in (2)–(4) below. Note that all of these languages have minimal or no verb inflectional morphology so that the clitic complex can be analysed as expressing much of the basic grammatical information of the clause.

(2) *Garrwa* (Mushin field notes)
*kuyu=**nurri-ny=i*** *waydbala-wanyi.*
take=1PLEXCL-ACC=PAST European-ERG
'The whitefellow (station manager) took us.' (28.3.00.3)

(3) *Wambaya* (Nordlinger 1998)
jiyawu ***ngirr-aji*** *marndanga* *nyanyalu*
give 1PLEXCL.A-HAB.PAST white.woman.II(ACC) tea.IV(ACC)
'We'd give tea to the white lady'

(4) *Yukulta* (Keen 1983: 242)
*miyarlta=**yikanta*** *kurija*
spear-ABS=you-TR-PAST see-IND
'You saw the spear'

The Garrwa second position clitic complex differs from the similar constructions found in Wambaya and Yukulta in two important ways: formal differences between free and enclitic pronominal forms; and degree to which the ordering of elements within the clitic complex is fixed (see Mushin 2006 for a more detailed account of the differences between Garrwa and Wambaya second position clitic complexes).

Like most languages with bound pronouns, both Wambaya and Yukulta have different forms for free and enclitic pronouns. In Garrwa there are no significant formal differences between free pronouns (which may be stressed and occur in various clausal positions), and second position pronouns, which are always unstressed and at times slightly phonologically reduced.[5] The example in (5) illustrates the use of pronouns outside of the second position clitic complex, preceding the verb. Here they are stressed. Unlike many other languages which have second position bound pronouns, Garrwa does not allow doubling of pronouns, as illustrated in (5) where the presence of the stressed pronoun necessitates the absence of the unstressed pronoun. Note that the TA marker *=yi* "past" attaches directly to the verb in this context, even though the pronoun appears to occur in first position – the

5. Indeed Garrwa has not previously been analysed as having bound pronouns at all (Furby 1972; Dixon 2002).

most frequent site for clitic attachment – and pronouns the word class most likely to host tense/aspect clitic attachment.

(5) *baki* ***nurru*** *bardajba=yi* / *nana-mungkuji*
and 1PLEXCL come=PAST / that-origin
baki ***ninji*** *bardajba=yi* *jibiya,* / *Wínmirrina*
and 2SG come=PAST stay / Calvert Hills
'And we came (to) our country, and you came staying at Calvert Hills Station.'

In Wambaya and Yukulta, the clitic complex forms a relatively tight grammatical unit, one in which the order of pronominal information with respect to other grammatical information is fixed and the tense/aspect information can only occur in this complex. In Garrwa however, the relationship between the elements of the clitic complex is somewhat looser and the tense/aspect morphemes may occur attached to non-pronominal forms. This is the property to be accounted for here.[6]

There is good evidence that the development of the second position clitic complex predates any linguistic interest in the language. Data from Ken Hale's 1960–62 field notes indicates the robustness of the second position clitic complex as his elicited clauses all follow a basic pattern of verb=pronoun=TA marker. Most of these are transcribed as one word, indicating that Hale considered Garrwa to have bound pronouns. These are illustrated in (6).

(6) a. *janyba=**ngay=i** darlu*
'I threw a stone' (PAST)

b. *janyba=**ngayi=ja** darlu*
'I will throw a stone' (FUTURE)

c. *janyba=**ngay=a** darlu*
'I'm throwing a stone' (PRESENT)

d. *rangimba=**ngay=ili***
'I used to shoot (them)' (PAST HABITUAL)

(Examples from Hale's fieldnotes – orthography and segmentation modified by IM)

Third person singular nominative and accusative arguments are not coded in the clitic complex (there is no independent third person singular accusative pronoun, and the independent third person singular nominative *nyulu* only occurs

6. The closely related language Wanyi also has minimally reduced unstressed pronouns in second position but does not have any tense/aspect marking of the kind examined in this paper (Laughren, Pensalfini & Mylne 2005).

in emphatic and contrastive contexts). In third person singular contexts, the clitic complex consists only of a TA marker, as in (7).

(7) a. *janyba=**yi** darlu*
'He threw a stone'

b. *janyba=**ja** darlu*
'He will throw a stone'

c. *janyba=**ka** darlu*
'He's throwing a stone'

d. *janyba=**yili** darlu*
'He used to throw a stone'

These patterns are still those found in elicited Garrwa data, and also comprise the most frequent overall structural pattern in discourse. However a significant number of utterances have the structure *verb=TA*(=)*unstressed pronoun*, illustrated in (8) and (9) below. Here an unstressed pronoun is found in second position where it would normally be expected to host the TA clitic.

(8) *ngajaka=**yi**=**ngayu** kangku-yurru / kangku-yurru ngaki*
ask=PAST=1SG FF-DEC / FF-DEC 1SGDAT
I asked grandfather, my grandfather (15.5.01.1.DG)

(9) *yundijba=**yili**=**nurri** mama*
cook=HAB=1PLEXCL bread
we used to cook bread. (28.3.00.1.KS)

Work on Garrwa grammar by Ted and Christine Furby in the late 1960s and early 1970s indicates the presence of the kinds of variation discussed here, although no attempt was made at the time to determine motivations for this variation. This is clear from the following quotes: "When the verb is unmarked for tense, the tense is indicated on the … pronouns." (Furby 1972: 10)

> Aspect clitics may be suffixed to any word within the clause, or may occasionally occur as free words …Present tense is indicated by the used of an uninflected verb stem, or by the suffix (–ngka) on the verb. Past tense is indicated by the changing to "i" of the final vowel of a pronoun … while the verb stem remains uninflected. Alternatively, the affix –yi occurs with the verb stem while the pronoun remains unchanged. (Furby & Furby 1977: 51)

The rest of the paper is structured as follows: In section 2 I describe in more detail the relationship between syntax and pragmatics with respect to the placement of the second position clitic complex; in section 3 I use a corpus of Garrwa narrative discourse to examine different patterns of TA clitic placement. In section 4 I examine what motivates variation in individual texts.

2. Word order, information structure and the second position clitic complex

Like most Australian languages, Garrwa word order does not function to code grammatical relations, and may therefore be analysed as syntactically "free". However there are clear pragmatic principles that underlie word order preferences. Of particular interest here is what attracts the second position clitic complex, usually corresponding with what occurs in "initial" position.

As argued in Mushin (2005a), the clitic complex is attracted to a first position constituent that is "pragmatically marked", in Payne's (1992: 141) sense:

> …when the speaker assumes that the information, or information network in which the speaker wishes to establish the information, will directly contradict the hearer's current expectations or presuppositions… The use of a pragmatically marked structure is essentially a type of speech act in which the speaker says: "I hearby instruct you, the hearer, to change what I assume are your current expectations deriving from the current state of your knowledge network".

Classes of meanings that can be construed as "pragmatically marked" in this sense include contrasts, answers to information questions, negatives, new topics and topic shifts. This characterisation corresponds closely with other subsequent semantically oriented accounts of pragmatic categories. For example Vallduví & Vilkuna (1998: 80) identify *kontrast* as, "an operator-like element … for example, exhaustiveness …, contrastiveness …, identificational operator…". *Kontrast* is distinguished from *rheme*, which refers to new information – expressions can be both kontrastive and rhematic, in this framework just as "pragmatically marked" information can be new or old, in Payne's (1992) characterisation.

Kontrastive expressions include interrogatives, negatives, elements of contrast and certain other kinds of quantifier expressions. In Garrwa, the grammatical markers of kontrast include interrogatives, illustrated in (10) and (11), the negative marker *miku*, illustrated in (12), and the contrastive conjunction *ngala* "but, while", illustrated in (13).[7] All of these obligatorily occur in first position, followed by the clitic complex.

(10) ***wanya***=*yalu* *yabimba* *ba*
what=3PL make ?
'what were they making?' (8.5.01.1.KS)

(11) ***wanyimbala***=*ja*=*ninji* *karri* *balba*
when=FUT=2SG east go
'When are you going east (to Robinson River)?' (25.8.03.1.ER)

7. See Mushin (2005c) for a discussion of the contrastive properties of *ngala*.

(12) ***miku***=*nurr=ili* *jarr-kanyi* / *mukawu*
NEG=1PLEXCL=HAB eat-NEG COW
'We didn't eat beef.' (2.5.01.1.KS)

(13) *ngardijba=yi* *nangka* *there* *bula-ngi* / ***ngala***=*bula* *kujba*
hide=PAST 3SGREFL 3DU-DAT / CONJ=3DU hunt
'He hid himself from them while they were out hunting' (8.9.01.1.KS)

Noun phrases occur in initial position when they are answers to questions and when they express a contrast. In (14), which is from a narrative about how the speaker used to live in the old days, *nukami-na* "foot-LOC" occurs in implicit contrast with other modes of transportation, like cars or horseback.

(14) ***nukami-na***=*nurr=ili* *jilajba*
foot-LOC=1PLEXCL=HAB go
ON FOOT, we would walk. (25.8.03.1.ER)

In clauses which lack a kontrastive expression, the predicate (usually a verb or nominal predicate) occurs in initial position, resulting in verb-initial ordering, illustrated in (15) and (16).[8] In (15) the nominal *wajili* "(ground) sugarbag" had already been mentioned in the discourse as food that the speaker was looking for in this particular hunt. This information is therefore not kontrastive. Verb-initial ordering is the most common order in Garrwa discourse and is the order most often found in sentence elicitation contexts (Mushin 2005b).

(15) ***kurrijba***=*nurr=i* *wajili*
dig=1PLEXCL=PAST ground.sugarbag
'We dug out the sugarbag.' (1.5.01.2.TD)

(16) ***mudujba***=*ngay=a*
be.crazy=1SG=PRES
'I'm crazy' (25.8.03.1.ER)

The association of initial (i.e., clitic host) position with a particular pragmatic profile, associated with kontrastive operations like interrogation, negation and contrast, has been claimed for other languages which have second position grammatical coding, both in Australia and elsewhere (e.g., McConvell 1996 for Ngumpin languages; Laughren 2002 for Warlpiri; Martin 2004 for Tagalog; Payne 1992 for "O'odham; Condoravdi & Kiparsky 2001 for Greek; Cysouw 2003 provides the preliminaries of a global typological survey which includes Iranian and

8. See Laughren et al. (2005) for a syntactic analysis of verb-initial ordering in the closely related Wanyi. Garrwa syntax is very similar in this respect.

Munda languages). The initial/clitic host position in both Wambaya and Yukulta also appears to follow this pattern.[9]

The ordering patterns in Garrwa can therefore be viewed as another example of this particular association between pragmatics and syntax – one in which core clausal grammatical information is attracted to pragmatically marked expressions, or *kontrast*, which also coincides with clause initial position (Mushin 2006; Simpson and Mushin, this volume).[10] In this context, the variation in TA placement (discussed in detail in the following sections) is a distinguishing feature of Garrwa grammar. The question explored in this chapter is whether TA markers retain some of the pragmatic properties inherited from their canonical place in the second position clitic complex (i.e., as signals of pragmatic markedness or kontrast), or whether they lose their pragmatic weight in the move, becoming instead associated with particular grammatical categories (e.g., as verbal inflections).

3. Variation in TA attachment

3.1 Grammatical status of variation

While the combination *initial position=pronoun=TA* was identified in section 1 as the commonest grammatical combination in Garrwa, other orderings are found regularly in discourse. The elicited examples in (17) and (18) attest to the grammaticality of the different combinations. The (a) examples show the *initial position=pronoun=TA* combination, analogous to the ordering found in Wambaya and Yukulta. The (b) examples show the TA attached to the verb *ngarrkadaba* "spear", the pronoun remaining in its expected second position slot. This ordering can be represented as *initial position=TA=pronoun*. When asked, speakers considered both to be grammatical and to express the same meaning.

(17) *=yili*

a. *ngarrkadaba=nurr=**ili*** *waliji*
spear=1PLEXCL=HAB kangaroo
'We all (not you) used to spear kangaroo.'

b. *ngarrkadaba=**yili**=nurru* *waliji*
spear=HAB=1PLEXCL kangaroo
'We all (not you) used to spear kangaroo.'

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9. Neither Nordlinger (1998) nor Keen (1983) explicitly make this claim but similar patterns can be adduced from text and sentence examples in the respective grammars.

10. In some languages, pragmatically marked contexts are associated with preverbal rather than initial position, although the two may often coincide.

(18) *=yi*

a. *ngarrkadaba=**ngay**=**i*** *waliji* *wulani*
spear=1SG=PAST kangaroo yesterday
'I speared (a) kangaroo yesterday.'

b. *ngarrkadaba=**yi**=ngayu* *waliji* *wulani*
spear=PAST=1SG kangaroo yesterday
'I speared (a) kangaroo yesterday.'

However while there is consistent agreement on the overall grammaticality of these two TA orders, speakers do show different attitudes towards them. The strict placement of TA clitics on pronouns is commonly associated with "how old people used to talk" and "heavy Garrwa" (=a more archaic variety of the language, also associated with Eastern dialects from Wollogorang to Doomagee) vs "light Garrwa" (=more contemporary variety of the language, associated with Western Dialects spoken closer to Borroloola at Robinson River and Wandangula).[11] These attitudinal differences are matched with clear individual differences in the degree to which speakers use different orderings in actual discourse. The individual differences observed seem to correspond with age and time spent away from the Garrwa speaking community – older speakers who have spent most of their adult lives within the Garrwa community show a greater tendency towards consistent *pronoun=TA* ordering than younger speakers and older speakers who had spent much of their adult lives away from the Garrwa community (e.g., in towns in rural Queensland). These speakers make more use of *TA=pronoun* orderings.

The indications are therefore that the extent of variation seen in today's Garrwa is symptomatic of language change in progress. That the variation has been observed for at least two generations prior to the generation recorded for this study suggests that the grammatical status of the tense/aspect system has been in flux for sometime. Current speaker attitudes and individual speaker variation suggests however that the patterns observed in the current data is somewhat affected by the decline of Garrwa as an everyday language of conversation, and may even be affected by the rise of Aboriginal English in the community.[12]

For the rest of this paper I use a corpus of Garrwa narrative texts to explore the patterns of clitic variation for these two TA clitics: the past marker *=yi* and past

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11. Most speakers I have worked with claim to speak "light Garrwa" or "Western Garrwa". One of my informants is from Wollogorang and speaks "heavy Garrwa".

12. It should be noted that the tense/aspect system itself remains robust in the sense that speakers still use these markers, regardless of where they put them in utterances, and utterances are mostly considered ungrammatical or incomplete without some kind of tense/aspect designation.

habitual marker *=yili*. These were the most frequently used TA markers. Table 1 presents the respective distributions of these two TA markers in this corpus.[13]

Table 1. Distributions of *=yi* and *=yili* in narrative corpus

	***=yi* "PAST"**	***=yili* "HABitual"**
Total number of tokens	422	218
Verb=Pronoun=TA	171	60
Verb=TA (no pronoun)	162	21
Verb=TA=pronoun	83	88
Other=TA	6	49

As table 1 shows, there are some considerable differences between the distributions of *=yi* and *=yili* in the corpus, notably the higher proportion of *=yi* in the *Verb=TA* pattern (as well as a higher proportion in the "default" *pronoun=TA* pattern), and the wider distribution of orderings when *=yili* is the TA marker. I suggest that these differences are a result of diverging paths of language change: *=yi* is becoming less pragmatically sensitive and more grammaticalised as a verbal inflection, while *=yili* is becoming more pragmatically sensitive and is attaining pragmatic properties that are independent of the pragmatics of the second position clitic complex as a whole. As argued in sections 3.2 and 3.3, these differences are related to historical differences between *=yili* and *=yi*.

There are twice as many tokens of *=yi* as *=yili* and this is an artefact of the nature of the texts collected: *=yi* occurred more frequently in historical, traditional and personal narratives while *=yili* occurred more frequently in narratives about "how we used to live". Similarly, the much higher number of tokens of *=yi* attached to verbs when there was no pronoun present (162 vs. 21) can be attributed to the fact that the *=yi* type narratives were often third person stories, where the form of reference to 3SG participants is mostly zero, while the *=yili* type narratives were stories about what I/we used to do, requiring a pronoun.

An important distibutional difference between *=yi* and *=yili* occurs in clauses which have both a verb and a pronoun (260 tokens for *=yi*, 197 for *=yili*). Given the hypothesis that attachment to the pronoun in second position is the default or unmarked position for TA clitics, we might expect an overall preference for clitics to follow pronouns rather than verbs directly. In clauses which had both a verb and a pronoun as possible sites for attachment, *=yi* was found attached to pronouns

13. The corpus consists of narratives of various types including personal histories, traditional stories and stories of "how we used to live" recorded in 2000, 2001 and 2003. Six Garrwa speakers (4 women and 2 men) aged over 60 contributed texts to this corpus.

171/260 times (66% of *=yi* clauses with both a verb and a pronoun). In contrast, *=yili* was found attached to pronouns 60/197 times (30% of *=yili* clauses with both a verb and a pronoun). It appears then that despite the overall freqency of *=yi* attached to verbs, speakers still prefer the more conservative *verb=pronoun=TA* template for *=yi* when there is a pronoun to attach to. In contrast, there seems to be a dispreference for *=yili* in this slot, although since it occurs a third of the time in this position, the pronominal slot is still clearly considered a grammatical option for speakers.

The second important distributional difference between *=yi* and *=yili* occurs in those cases where the TA clitic is not attached to the pronoun. In 83/89 cases (93%), if *=yi* was not attached to the pronoun in the expected position, it was found directly attached to the verb.[14] In contrast, *=yili* was regularly found attached to word classes other than verbs, attaching to verbs in 88/137 cases (64%). The other third of the time, *=yili* was found attached to a range of other word classes. This will be discussed in section 3.2 below.

The differences between the distributions of *=yi* and *=yili* can be summarised as follows: While both demonstrate variation in attachment possibilities, *=yi* showed more affinity with what I am analysing as the default pattern (*verb=pronoun=TA*) and the variation restricted to attachment to the verb in preference to the pronoun in some cases. In contrast, *=yili* displayed a much wider range of attachment possibilities, fairly evenly distributed between the *verb=pronoun=TA* pattern, *verb=TA(=)pronoun* pattern and TA attachment to other word classes.

In the next sections, I consider in more detail the nature of these distributions, and the possible motivations for the distinctive distributional profiles of *=yili* and *=yi*.

3.2 Variations with *=yili*

The past habitual clitic *=yili* was the only TA clitic to occur directly attached to word classes other than verbs and pronouns. These are illustrated in (19)–(22) where *=yili* is found attached to a quantifier, the negative particle *miku*, a coordinate conjunction, a location word, and a nominal respectively.

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14. The 6 cases where *=yi* was found not attached to another category were all cases of the conjunction *jali*, which, in keeping with the Furby's analysis, I have analysed as *jala=yi*. This form rarely occurs in my corpus, compared with other conjunctions, and so it is difficult to determine whether this form is still analysable. If this were the case, then it could be argued that *=yi* only occurs attached to verbs and pronouns.

(19) *miku=nurr=ili* *jarr-kanyi,* *mukawu* ***ngawamba=yili=nurri***
NEG=1PLEXCL=HAB eat-NEG cow only=HAB=1PLEXCL
jarrba, *munjimunji-nyi* *wada*
eat bush-DAT food
'We didn't eat beef. We only would eat bush food' (2.5.01.1.KS)

(20) ***miku=yili=nurri*** *jilajba-nyi* *kujba*
NEG=HAB=1PLEXCL walk-NEG hunt
'We couldn't go hunting' (4.5.01.5.KS)

(21) ***baki=li=ngambala*** *yarrijba* *wayka* / *nganyaku*
and=HAB=1PLINCL put down / sweet.potato
nana-nkurri=yili=nurri *yarrijba* *jamba-na*
that-ALL=HAB=1PLEXCL put ground-LOC
'And we planted sweet potatoes. There we would put (the sweet potato seeds) in the ground' (28.3.00.1.KS)

(22) *balba=yili=nurri* *kalawunyi* */yundi-ji* / *mama*
go=HAB=1PLEXCL inside /cook-PURP / bread
murrku=yili=nurri *jungku*
three=HAB=1PLEXCL sit
'We (would) go inside to cook bread. There were three of us.' (28.3.00.1.KS)

Note that whatever the word class, the clitic host is itself in initial position. This suggests that it is not the word class, PER se, but the position (i.e., second position) that appears to be motivating the attachment pattern for *=yili*. This makes *=yili* look a little more like modal clitics in Garrwa which cannot occur clause-initially and which mostly occur attached to the first constituent, as in (23) (deontic modality) and (24) (epistemic modality).

(23) *wijba=**kiyi*** *yundi-ji* *mama* *bayilimba=**kiyi*** *di* *niya-nga*
return-SHOULD cook-PURP food boil-SHOULD tea 1DUEXCL-DAT
'He had to come back to cook food (and) boil tea for us' (HB p77)

(24) *wudumba=**wali*** *ngayu* *ngalurr*
get=MIGHT 1SG cold
'I might be catching a cold.' (Mushin field notes)

The Furbys' work treats the past habitual *=yili* as a different category from tense, one called "aspect-mood" and they do acknowledge that "Tense is rather different from aspect-mood in the ways in which it is marked in a clause" (Furby 1972: 10). The bisyllabic structure of *=yili* is also suggestive of a close association with modal categories, which are also bisyllabic, in contrast with the other tense categories (past, present and future), which are monosyllabic. One possibility raised by the synchronic distribution of *=yili* is that it began life as a modal

clitic in the same paradigm as forms like *=kiyi* and *=wali*. This would account for its preference for attachment to the initial constituent rather than to the pronominal clitic.

It should be noted that *=yili* appears to be a recently lenited version of the original form *=kili*. This is form given by both Hale and the Furbys for the "habitual suffix", with *=ili* as the allomorph for pronominal attachment. Breen (2003: 453) notes that *=kili*/*=yili* is absent entirely in the eastern dialect of Garrwa. I have almost no tokens of *=kili* in my corpus, which suggests a near complete lenition of the initial consonant to k~y in all environments.[15] It is unclear whether this lenition has been motivated by an association between past habitual and past (*=yi*). However the original /ki/ initial syllable makes synchronic *=yili* look more like a modal form.

The association of *=yili* with past time contexts is noted in Breen (2003: 453), based on the Furby's work. However, they provide several examples of *=yili* occuring in non-past contexts, as in (25). In my own field notes, *=yili* is used in past time contexts almost without exception. The only clear counterexample is given in (26).

(25) *yanyba* *ngali-ngk=**ili*** *Garrwa* *jangkurr*
talk 1DUEXCL-REFL=HAB Garrwa word
'We two always talk Garrwa'
(Breen 2003: 453, ex96, from Furby & Furby 1977)

(26) *karu=**yili*** *nga-ninji* / *ngujbal-jaji*
tell=HAB 1SGACC-2SGNOM / stinking-eater
'You keep calling me 'Stinking-eater'. (11.5.01.1.KS)

It is possible that as *=yili* has become more associated with a particular temporal deictic reading (i.e., past), it has become more paradigmatically associated with the tense morphemes and acquired some of their distributional features (i.e., attachment to pronominal clitic rather than directly to intial constituent). Both Hale in his 1962 fieldnotes and Belfrage (1992, 2003) clearly place *=yili* in the same paradigm as the other tense forms. That *=yili* is treated as an "aspect-mood" marker in the Furby's work, and as a tense morpheme in Hale's fieldnotes suggests that the association of *=yili* (*=kili*) with the tense paradigm predates any recording of the language. We might consider *=yili* to be a paradigm "orphan" in this respect.

The historical development of *=yili* goes some of the way to explaining its distributional differences with *=yi*, accounting for both its direct attachment to an initial constituent (regardless of word class), and its attachment to pronominal

15. Only one male informant has used *=kili* with any regularity in my own field experience.

clitics in second position. Clearly speakers do both, as the first clause in (19) and (20) above attests. In (19) *=yili* is found attached to the pronoun following the negative particle, a canonical kontrastive context, while in (20) it is found directly attached to the negative particle in second position. The pragmatic factors that motivate *=yili* to occur directly attached to the initial constituent, rather than following a pronoun are clearly complicated: *=yili* does not simply substitute for the pronoun complex in contexts of kontrast, otherwise we might expect *=yili* to always occur attached to the negative particle, as true modal clitics do.

As discussed in section 4 below, I analyse the placement of *=yili* in true second position as sensitive to online discourse-pragmatic factors, such as perspective shift and elaboration, which can only be analysed post facto knowing the full discourse contexts in which they occur (cf. some predetermined pragmatic categories like "kontrast"). The main point of this section has been to propose a historical account for the particular distributional profile of *=yili* in contemporary Garrwa.

3.3 Variations with *=yi*

Of all the TA markers, *=yi* shows the greatest tendency to occur directly following verbs. 245/422 (58%) tokens of *=yi* occurred directly following verbs in total, even in contexts when there was a suitable pronoun present. In most cases, the verbs were themselves in initial position, the pragmatically neutral position for Garrwa verbs, so that *=yi* attached directly to the initial consituent. However unlike *=yili*, *=yi* did not occur attached to other word classes, even those in initial position. Therefore *=yi* can be analysed as associating with the word class "verb" outside of the clitic complex, rather than positionally with second position.

In some "pragmatically marked" contexts, *=yi* tended to remain attached to the verb, regardless of verb position. The example in (27) is a question/answer pair (between two speakers in conversation), a canonical pragmatically marked context. The pronouns are found in the expected second position, with the verb occurring post-pronominally. Here the *=yi* occurs attached to the verb, rather than either preceding or following the pronoun as we have seen in other examples.

(27) DG: *wanya=ninji* *wurdumba=**yi*** *bayungu*
what=2SG catch=PAST west
What did you catch?

KS: *wurumul=ngayu* *wurdumba=**yi*** *bayangarri*
bait=1SG catch=PAST west
I caught bait over in the west. (27.3.00.1.DG/KS)

The example in (28) is the first line of a narrative, a "pragmatically marked" context as it setting the scene for the proceeding narrative. As in (27) above, the

pronoun remains in canonical second position but the TA marker *=yi* is attached to the post pronominal verb.

(28) *mungkubayi=ngayu* *jungku=**yi***
Burketown=1SG sit=PAST
I was living in Burketown (4.5.01.3.DG)

These examples suggest that outside of the clitic complex, *=yi* does not have any association with pragmatic markedness. Its association with verbs alone of word classes perhaps indicates a shift towards verbal tense inflection, an inflectional category lacking in Garrwa but present in many Australian languages.

3.4 Summary

Evidence from the distribution of TA variation in the Garrwa corpus suggests that a number of factors weigh into the motivation for clitic placement, not all of them directly related to discourse-pragmatics.

- differing attitudes towards TA placement and individual variations suggest that TA placement within the second position clitic complex is associated with older, more conservative forms of Garrwa, and perhaps also with Eastern rather than Western Garrwa.
- The distributional differences between *=yili* and *=yi* when they are not found in the second position clitic complex are related to their historical differences as different grammatical categories.
- *=yili* functions as a second position clitic, like Garrwa modal clitics, when not found within the clitic complex
- *=yi* functions as a verb clitic, which suggests a movement towards verbal inflection.

The divergent patterns of *=yili* and *=yi* when they do not occur within the second position clitic complex raise some interesting issues for the patterns of grammatical change in Garrwa. It suggests that the second position clitic complex may not have been fully grammaticalised at any previous stage of Garrwa (cf. Wambaya and Yukulta), as the TA markers have retained properties associated with different grammatical categories (aspect/mood and tense). The transparency of the pronominal forms in the clitic complex is further evidence that while Garrwa may have been moving towards a grammatical structure like that found in Wambaya, it had not reached it yet. The convergence of *=yili* and *=yi* within the second position clitic complex is perhaps evidence that *=yili* was shifting over to become a tense marker, possibly because of the regular past tense component of its meaning. Given the severely endangered state of the language, it is unlikely

that there will be further grammatical development of the second position clitic complex in Garrwa.

The above discussion has proposed some reasons for the divergent properties of *=yi* and *=yili* when they occur outside of the second position pronominal clitic complex. This does not explain however what motivates these forms to occur attached to pronouns in the second position clitic complex, and what motivates their occurrence elsewhere. This question is addressed in the next section.

4. Discourse functions of TA-clitic placement variation

The hypothesised different origins of *=yili* and *=yi* account for their different behaviours with respect to what they can attach to, but it does not explain what motivates speakers to shift TA placement within an individual text. In this section I will show how variation of TA placement, whether *=yili* or *=yi*, coincides with particular discourse contexts. I do not claim that the variations uniquely signal the discourse functions I discuss here. Rather, I suspect that they contribute to overall rhetorical or textual effects that are also coded in other ways in Garrwa grammar (e.g., through other deictic and referential systems).

In the previous section I noted that there are some individual differences in preferences for TA clitic placement related to age and dialect of speaker. Some speakers preferred a *pronoun=TA* ordering more than others. All of the texts in the corpus used here showed some degree of variation between *pronoun=TA* and some other TA placement pattern. Of interest here therefore is not what particular order is preferred but rather what motivates variation in the placement of TA between to its position within the second position clitic complex, or somewhere else in the clause.

As will be shown below, the pragmatics of TA variation can be described independently of the pragmatics of second position clitic attachment, which was characterised in section 2 as a reflection of "pragmatic markedness" and "kontrast". Variation in TA clitic attachment seems to have more text-related functions associated with certain kinds of perspective shifts (section 4.1) and elaboration (section 4.2). In the context of the corpus used for this study, I can only discuss these functions in relation to narrative structure and coherence. It remains to be seen how these functions manifest in interaction.

4.1 Perspective shifts

"Narrative perspective" concerns the deictic orientation of the narrative, enabling interpretation of narrative information from different "subjective" and "objective"

viewpoints, including different narrative characters, the narrator, and even noone in particular. Narrative perspective is also concerned with the degree to which information is perspectivised, as direct subjective representations of characters" speech and thought, or "objective" reports of events and states of affairs in a narrative storyworld. Cross-linguistically, narrative perspective is signalled through a constellation of canonical deictic devices (including choice of person, tense, and spatial deixis) but also through a raft of other grammatical choices, including choice of evaluative expressions (including modality and expressive devices), word order, voice and choice of referring expressions (Zubin & Hewitt 1995). In Garrwa, both word order choices (Mushin 2005b) and choice of clause connective (Mushin 2005c) have been shown to contribute to narrative perspective.

The following examples of shifts in TA placement within individual texts indicate that choice of TA placement also contributes to the structuring of narrative perspective by signalling a shift. Here I analyse shifts in TA placement from a "default" placement for an individual text, corresponding with the most frequent ordering for a given text, to some other ordering which occurs far less frequently in that text. This analysis applies to both *=yi* and *=yili*, transcending the different patterns of attachment outlined in the previous section.

(29) *yarrijba=yi* / *dalamba=yi* *wayka* *barri* /
put.down=PAST / untie=PAST down DM /
najba=yi *bula-(nya)*[16]
see=PAST 3DU-(ACC)
'He put it down, untied it. He saw them'

a. ***walaj(ba)=bul=i*** *waykalinya* *mulyamulya*
get.up=3DU=PAST upwards sack
They got out of the sack

b. ***daba=yi*** *barri* *bula-nya*
kill=PAST DM 3DU-ACC
He killed them. (8.5.01.1.KS)

The narrative from which (29) is an extract is a traditional non-personal story. There are 52 tokens of *=yi* in this text, 47 of which are found directly attached to verbs. The other 5 are found within the clitic complex attached to pronouns. As most of this narrative involves a third person singular protagonist (mostly tracked with zero anaphora), we expect that most of the instances of *=yi* in this text will

16. The speaker originally used the nominative form of the pronoun *bula* rather than accusative *bulanya*. This was later corrected during a checking session (with other speakers) as the only acceptable interpretation (i.e., that the man saw the couple, not the couple saw the man).

be found directly attached to the verb. However there are some parts of the narrative where perspective shifts to a pair of protagonists (a man and woman who are eloping), which are tracked using the third person dual pronoun *bula*. The boldface clauses in this example are all clauses where the speaker theoretically has a choice between placement of *=yi* on the pronoun (as she does in (a)), and placement on the verb. (as she does in (b)).

In (29), the speaker shifts from a verb=TA=pronoun ordering to verb=pronoun =TA ordering and then back again. In terms of narrative perspective, this passage represents a maintenance of one character as the object of perspective (signalled with zero anaphora). This character puts down and unties a sack in which the eloping man and woman are hiding. At (a), the perspective shifts to the these two protagonists as they get out of the sack. Note the shift in spatial deixis from looking down on the sack (*wayka* "down") to emerging upwards from the sack (*waykalinya* "upwards"). This shift in perspective also coincides with a shift in the placement of the TA marker *=yi* from directly attached to the verb to attachment to the pronoun in a second position clitic complex. At (b) the perspective shifts back to the man from whom they were hiding (he has been looking for them to kill them), and the TA placement returns to the verb.

The extract in (30) provides an example of perspective shift in a text mostly told in habitual aspect, using *=yili.*

(30) *baki / jilajba=**nurr=ili** munjimunji waki=**nurr=ili** yabimba*
and / walk=1PLEXCL=HAB bush work=1PLEXCL=HAB make

*nga=**nurr=ili** barriki / buluki-nyi*
?=1PLEXCL=HAB fence / cattle-DAT

'And we would go out bush. We all would work. We would make fences for cattle.'

a. ***wijba=yili**=ngayu / yingijba=**ngay=ili** ngaki*
return=HAB=1SG / leave=1SG=HAB 1SGDAT

wawarra / barrawu-na / yaji-na
child / house-LOC / place-LOC
'I used to come back. I used to leave my child at the house – at the place' (28.3.00.2.DG)

The extract in (30) is from a story about what the speaker used to do when she was a young girl working on the cattle station. There are 19 tokens of *=yili* in this text, 12 of which occur within a second position clitic complex (i.e., attached to pronouns) and 7 of which occur directly attached to verbs. The passage in (30) illustrates a section of the text where there is a shift in TA placement from pronominal attachment to verbal attachment (at (a)). The shift in TA placement coincides with a shift in perspective from what a group of people used to do (including the

speaker), to what the speaker used to do as an individual. This shift is signalled in part with a shift in pronominal reference from first person plural exclusive (*nurru*) to first person singular (*ngayu*). Note that the shift in TA placement from pronoun to verb only occurs in the clause where the shift takes place. Once the speaker alone is established as the centre of perspective, the TA marking shifts back to the pronominal clitic complex – its default position for this text.

The passage in (31) provides another example of the TA attachment shift in the context of perspective shift.

(31) *jungku=yi=nurri* *bayayawa* *wakiba=**nurri-ny=ili*** *waydbala-wanyi*
sit=PAST=1PLEXCL kids work=1PLEXCL-ACC=HAB whitefella-ERG
*yundijba=**yili**=nurri* *mama*
cook=HAB=1PLEXCL bread
'We were kids. Whitefellas were working us. We used to cook bread.'
(28.3.00.1.KS)

This is another personal story about what the speaker (a different speaker from the extract used in (30) above) used to do when she was a young girl. There are 19 tokens of *=yili* in this text, only 4 of which occur attached to the pronoun in a clitic complex, the remaining 15 tokens of *=yili* occur directly attached to verbs (11), a nominal, a demonstrative and two conjunctions. This text thus represents the converse of the one in (30), where *=yili* occurred directly attached to pronouns far more frequently than other word classes. In the passage in (31), from the beginning of this narrative, the shift in TA placement cooccurs with a shift in perspective from what the speaker and others were doing to what the whitefellows were doing to them. Garrwa lacks voice alternations, which may be used in other languages to highlight experiencer roles and thereby affect perspective interpretations. The variation in TA placement here may be considered an alternative strategy to highlight the experiencer role in the clause.

The perspective shifts that cooccur with TA shifts, illustrated in the above examples are of a particular type and represent a fairly minimal shift in narrative representation, namely a shift from a focus on the activities of one character to another, or from a group of established characters to a member of the group (as in (30)). In (31) above, the shift occurs in conjunction with the introduction of a new character (the whitefellas), but there does not seem to be any requirement that perspective shifts that are partially coded with TA variation involve new narrative information, such as the introduction of a new character or a shift in location to a different scene. The kinds of perspective shifts seen in the above examples also do not seem to involve a shift in *degree* of perspectivisation. That is, they all occur in passages of "objective" narration which describe what characters are doing without subjectively representing aspects of that characters thoughts, feelings or emotions with respect to those events.

This discourse function of TA variation seems to apply to both *=yili* and *=yi*, despite their different overall profiles and histories, and also applies whether or not a pronoun=TA combination is the preferred structure. This suggests that the discourse function of minimal perspective shift is served by the fact of change from a "default" ordering to a less usual ordering in the context of that particular speaker's preference.

4.2 Elaboration

Another discourse context that exhibited a high rate of TA variation is where the same event (coded with the same predicate) is repeated in the retelling, possibly followed by a further elaboration of the event. While the precise function of such repetition is unclear, it seems to serve some kind of rhetorical or stylistic purpose. The variation in placement of the TA marker (*=yi* or *=yili*) serves in this context to highlight some difference between the two otherwise identically expressed events. These are illustrated in (32) and (33) where shifts in both directions are attested (i.e., from within the pronominal clitic complex to direct verb attachement and vice versa), apparently in the same discourse context.

(32) ***balba=bul=i*** *barri* / ***balba=yi=bula,*** *najba=yi bula-nya* *nanama*
go=3DU=PAST DM / go-PAST=3DU see=PAST 3DU-ACC there
'They two went off. The two of them went. He saw them there'

…

najba=yi *bula-nya* / ***najba=bula-ny=i*** *wayka* *bibin-bikurri eee*
see=PAST 3DU-ACC / see=3DU-ACC=PAST down have.sex-DS
'He saw them. He saw them down there having sex' (8.9.01.1.KS)

(33) ***kirrijba=ngambal=ili*** *kingkarri* /
climb=1PLINCL=HAB up /
kirrijba=yili=ngamba(la) *naniku* /
climb=HAB=1PLINCL goat
yardim(baku) *nani*
put.in.yard that
'We were climbing up, the goats, we put (them) there in the yard.' (4.5.01.1.KS)

Clearly there is a relationship between the kinds of perspective shifts and the kinds of elaborations associated with TA variation. Neither function represents a sharp break in narrative timeline, location or character involvement. On the contrary, such variations seem to occur when there is minimal contrast between two events, two characters and/or two locations – as perspective shifts within a narrative scene (in (29) and (30) above), or a repetition of a narrative event (in (32)). Such functions are independent of the pragmatic functions identified for the second position pronominal clitic complex (i.e., association with kontrast). This is evident from the fact that all of the variation examples discussed in this

section show an alternation between pronominal clitic complex attached to an initial verb, and direct attachement to an initial verb – reflecting precisely those contexts which were described as "non-kontrastive".

5. Conclusions

The evidence presented here suggests that while the Garrwa tense/aspect system may appear in elicitation to form a regular paradigm as part of a second position clitic complex analagous to those found in neighbouring languages, the distribution of such marking in texts shows a system in flux. The evidence points to the analysis of the Garrwa second position complex as less grammatically fixed than neighbouring languages. This evidence includes the transparency of the pronouns and case marking within the complex, in addition to the flexibility of TA attachment. While it is not clear how recent this development is in Garrwa, it certainly predates European contact with the language. The fact that the closely related language Wanyi has second position pronominal clitics but not TA marking suggests that pronouns have been grammaticalised in second position for some time and perhaps then it is the addition of TA marking into a cluster that is more recent. In addition, the fact that variability in TA attachment has been observed since European contact suggests that the second position complex was never fully grammaticalised in the language. Subsequent affects of language decline have meant that such formalisation is not likely to take place.

The synchronic patterns of *=yili* and *=yi* attachment tell an interesting story of convergence and divergence of two grammatical paradigms in Garrwa. It is hypothesised that *=yili* began life as part of a modal paradigm that consisted of bisyllabic second position clitics. As the second position pronominal complex developed, comprising of pronouns + tense marking, *=yili* attained paradigmatic properties of a tense marker, perhaps due to its PAST tense and realis semantics, and alone of the modal markers occurred as enclitic to pronouns. The FACT that *=yili* can be used as a default tense marker in certain kinds of narratives also marks its difference from the other modal categories which do not occur in sequences of utterances. The result is a form which when not coded within the second position pronominal complex, functions itself as a second position clitic, attracted to the kontrastive initial position regardless of word class.

In contrast, *=yi* clearly originated as a tense marker in paradigmatic contrast at least with present tense *=a/=ngka* (not discussed here). *=yi* is clearly equally as unfixed in the pronominal clitic complex as *=yili*, and its behaviour outside of this structure is reflective of its different paradigmatic status. The distinctive lack of tense marking on verbs in Garrwa (and the closely related Wanyi) suggests

that the gravitation of *=yi* to verbs, regardless of position might be the inception of such inflectional marking. Certainly there is no evidence that Garrwa used to mark tense on verbs and that tense marking shifted from verbs to pronouns under the influence of the neighbouring languages. Any shift towards a regularisation of the verb=TA marking must be regarded as a more recent paradigm shift.[17] That *=yi* and *=yili* share discourse functions of variation within narratives is evidence that despite the general flux of the system as a grammatical paradigm allowing different patterns of attachment outside of the pronominal clitic complex, the two clitic forms have converged within a system to some degree.

On the surface, the apparent randomness of TA clitic variation in Garrwa poses some real problems for the analysis of the system as a system. In this paper I have tried to tease apart some of the factors that motivate the different patterns ot TA placement we find in contemporary Garrwa syntax. In paying attention to detail in the use of variation, we find a complex and dynamic system that is a great illustration of the continuing processes of language change both internally motivated and affected by other languages. While clearly more work needs to be done to uncover the precise pragmatic contexts that motivate packaging TA within a second position clitic complex, as opposed to placement of the TA clitic elsewhere in the clause, this paper has made a start by demonstrating how a state of paradigmatic flux might be utilised by speakers for discourse-pragmatic purposes.

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17. The fact that the present tense is almost never marked pronominally in present day Garrwa (cf. The system described in Furby 1972) is consistent with the analysis of tense marking moving towards a verb association, rather than the converse).

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Pragmatically case-marked

Non-syntactic functions of the Kuuk Thaayorre ergative suffix

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In Kuuk Thaayorre, ergative marking is of both syntactic and pragmatic import. Syntactically, ergative inflection marks a noun phrase as the subject of a transitive clause. Though this may be considered definitional of an ergative morpheme, Kuuk Thaayorre joins a growing number of languages in which ergative marking is documented to be "optional"; not obligatorily present in all transitive clauses. Conversely – and more unusually – the subject of a Kuuk Thaayorre intransitive clause may in some cases be ergative-marked. This chapter proposes that as well as signifying the ergative case relation, the ergative morpheme's presence in an intransitive clause signals that the subject referent is "unexpected", and its absence from a transitive clause signals that the subject referent is "expected".

1. Introduction[1]

Researchers have long recognised that both syntactic context and morphological form must be taken into account when identifying the case array of any language. This paper examines cases of mismatch between the syntactic licensing of ergative case and the distribution of the formal markers of ergativity in one Australian

1. This paper was produced with the collaboration of Gilbert Jack, who worked with me tirelessly in transcribing and translating many hours of videos of conversation and stories told by Alfred Charlie, Molly Edwards, Esther Foote, Myrtle Foote, Albert Jack, Gilbert Jack and Donald William. All of my research on Kuuk Thaayorre has been generously supported by the Pormpuraaw Community Council and other members of the Pormpuraaw Community. The research reported here was funded by the University of Melbourne and the Max Planck Institute for Psycholinguistics. Bill McGregor made numerous pertinent and very helpful comments on earlier drafts, but also led by example with his excellent treatments of optional Ergativity in Warrwa and Gooniyandi. Jean-Christophe Verstraete, Brett Baker, Ilana Mushin, Nick Evans and Rachel Nordlinger also gave extremely useful feedback and helped to refine the argument presented here. Remaining errors are of course my own.

language, Kuuk Thaayorre. It argues that this discord between syntactic case assignment and morphological case-marking can only be explained if we allow that discourse context and pragmatics also play a role in determining the distribution of case markers.

At first glance, Kuuk Thaayorre appears to be a straightforwardly morphologically ergative language, possessing a set of morphs that attach to the subject of a transitive clause. However, these same morphs are sometimes found on the subjects of intransitive clauses, and may in other cases be omitted from the subjects of transitive clauses. This chapter argues that in such contexts Kuuk Thaayorre speakers employ ergative case morphology for pragmatic rather than syntactic ends. Specifically, the ergative morpheme may be affixed to any subject that is pragmatically marked, and omitted where the subject is pragmatically unmarked, regardless of clausal transitivity. For the purposes of this paper, a subject can be considered pragmatically (and consequently morphologically) unmarked if the addressee can be expected to correctly map the referent of an unmarked NP to the subject function purely on the basis of the preceding discourse and/or world knowledge. Where the identification of the subject participant is less straightforward, the subject is pragmatically marked. This question of pragmatic markedness crucially revolves around the mapping of referents to grammatical function, and not the retrievability of referents per se. A NP whose reference is "given" in the particular context will typically be elided, rendering moot the question of ergative marking.

Following a brief discussion of the distinction between (syntactic) case and case form in section 2, sections 3–4 outline the respective contributions of discourse context and world knowledge in determining the case marking of the subject. I argue that without reference to these two pragmatic factors, it is impossible to accurately predict the distribution of ergative case-marking. The fact that pragmatic context plays a role in determining ergative case-marking begs the question of whether the "ergative" morpheme can rightly be considered a case in the first place. This question is explored in section 5. Pragmatic functions of case morphology have been documented in a growing number of Australian languages (Pensalfini 1999; McGregor 1998; McGregor 2006; Meakins & O'Shannessy 2004 – see section 7), and the data reported here contribute to the understanding of case as a multi-stratal phenomenon.

1.1 Language background

Kuuk Thaayorre is a Paman language spoken on the west coast of Cape York Peninsula, Australia. Predominantly dependent-marking, Kuuk Thaayorre is located at the non-configurational end of the spectrum (Austin & Bresnan 1996), with

extremely flexible ordering of constituents and common ellipsis of arguments (and other constituents). Word order within the noun phrase is more fixed, but permutations motivated by focus or speech style are common in natural speech. An argument (if not elided entirely) may take the form of one or more noun phrases apposed in the same case, as in (1).[2] Case is realised on the last constituent of the NP (or rather N' – cf. Gaby 2006: 290). Each NP constituent of a (complex) conjoined NP or inclusory construction inflects for case independently. The repetition of pronouns is common, in both full and reduced (encliticised) forms:[3]

(1) *ngali I. C. ngali yat, kuthirr*
1DU:EXCL(NOM) I. C.(NOM) 1DU:EXCL(NOM) go:P.PFV two(NOM)
'I. C. and I went, the two of us.'

Note that (1) contains an inclusory construction, in which a non-singular pronoun is apposed to a noun phrase denoting a subset of the participants represented by the pronoun.[4]

Syntactically, Kuuk Thaayorre possesses a tripartite case system, distinguishing nominative, ergative and accusative arguments. Morphologically, however, there is a split between the pronominal paradigm (in which the syncretism of nominative and ergative case forms results in a nominative-accusative marking pattern) and full noun phrases (in which nominative/accusative syncretism gives rise to a ergative-absolutive marking pattern). Following Goddard (1982), the syntactic case of unmarked nominals and pronouns is glossed in brackets. As this paper is concerned with the ergative case marker, our focus will be on the case marking of nouns and not pronouns.[5]

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2. Note that apposed NPs are frequently not contiguous.

3. The following abbreviations are used: 1 – 1st person, 2 – second person, 3 – third person, ABL – ablative, ACC – accusative, DAT – dative, DU – dual, ERG – ergative, ERG^ – ergative inflection of an "unexpected" intransitive subject, #ERG – omission of ergative inflection of an "expected" transitive subject, EXCL – exclusive of addresee, FOC – focus, IMP – imperative, NOM – nominative, NPST – non-past tense, P.IPFV – past imperfective tense/aspect, P.PFV – past perfective tense/aspect, PERM – permissive, PL – plural number, RDP – reduplication, SG – singular number, VBR – verbaliser, THE – addressee-proximal demonstrative, THAT – distal demonstrative.

4. In this case, there is also an additional apposed noun phrase (*kuthirr* "two") which refers to the superset (i.e., the speaker and I. C.) denoted by the pronoun. See Gaby (2005, 2006) for a definition of the noun phrase in Kuuk Thaayorre.

5. Note that there is no parallel "optional accusativity" in the Thaayorre pronominal paradigm, such as that found in Dyirbal (Dixon 1972). This may be attributable to the fact that though Thaayorre pronouns inflect for case, they are not marked by easily segmentable case affixes (my thanks to Bill MacGregor, p.c., who pointed this out).

Case is marked on the phrase-final element of the noun phrase only, as is fairly common across the Australian continent (cf., for example, Diyari (Austin 1981), Yankunytjatjara (Goddard 1985), Ngarinyin (Rumsey 1982) and Wik Mungkan (Dench & Evans 1988: 5)). Such phrasal marking might be taken to suggest that the case morphs are postpositional enclitics, yet their formal irregularity is more characteristic of inflectional affixes. Compare, for example, the forms of the following ergative morphs:

Table 1. Comparison of nominative and ergative forms of ten Kuuk Thaayorre nouns

	Nominative	**Ergative**
"meat"	*minh*	*minhal*
"good"	*min*	*minthurr*
"tooth"	*kiin*	*kiina*
"dog"	*kuta*	*kutaku*
"woman"	*paanth*	*paanthu*
"eye"	*meer*	*mere*
"cat"	*thok*	*thokun*
"saltwater croc."	*pinc*	*pinci*
"child"	*parr_r*	*parran*
"boomerang"	*werngr*	*werngarr*

Neither phonological environment nor semantics (i.e., noun classes) can fully predict the form of the ergative morph.[6] As such lexically-determined allomorphy cannot be reconciled with an analysis of the ergative morpheme as an independent grammatical unit, I will continue to refer to the ergative markers as (inflectional) case suffixes.[7] It should be noted that it is these same lexeme-specific morphs that are used pragmatically to mark an "unexpected subject", as described in section 3.

In addition to the three core cases, Kuuk Thaayorre nouns and pronouns inflect for the genitive, dative and ablative cases. Instrumental adjuncts take ergative case. Comitative, proprietive and privative "cases" are encoded by enclitics. It is important to note for later discussion that the ergative and comitative cases are formally distinguished.

6. See Gaby (2006) for a fuller description of case allomorphy in Kuuk Thaayorre and Gaby (under review) for a discussion of the likely historical processes that gave rise to the present situation.

7. That is to say, although the noun on which ergative case is realised is determined by its position in the noun phrase, this ergative marking must be analysed as an inflectional affix rather than a postpositional enclitic. See Anderson, Brown, Gaby and Lecarme (2006) for a fuller justification of viewing the Thaayorre ergative morpheme as a phrasal suffix.

Table 2. Case forms of nouns and pronouns

Case	Noun form "woman"	Pronoun form "3SG"
Ergative	*paanth-u*	*nhul*
Nominative	*paanth*	*nhul*
Accusative	*paanth*	*nhunh*
Genitive	*paanthak*	*nhangan*
Dative	*paanthun*	*nhangun*
Ablative	*paanthum*	*nhanganma*
Comitative	*paanth=kak*	(*nhangun*)[8]
Proprietive	*paanth=(k)*[9]*aak*	–
Privative	*paanth=(k)aar*	–

1.2 Data

The data presented in this paper were collected during three visits made by the author to the community of Pormpuraaw (home to the majority of Kuuk Thaayorre speakers) over seven months in total. The contexts in which they were elicited may be roughly classified as either: (a) elicited narrative; or (b) prompted natural speech. Elicited narratives in this corpus were gathered by negotiating a particular topic upon which the consultants would expound without further interference. Prompted natural speech arose from presenting consultants with a visual (usually video) stimuli to describe. Alternatively, a pair or group of consultants might be asked to play a game or attend to a task requiring verbal interchange. The responses of the consultant(s) in these cases are usually lengthy and fluent. However, the fact that the subject matter has been manipulated by the linguist may affect language use. Unmonitored natural speech might be assumed to represent a language most accurately (being language as it is really used), but it is also prone to speech errors. Decontextualised elicited data, on the other hand, may suffer from a particular form of "judgement hypercorrection"; with consultants rejecting sentences as ungrammatical because they are not provided with the discourse context in which they might be uttered. For these reasons, I have decided to focus upon elicited narratives and prompted natural speech, which are sufficiently fluent and lengthy

8. The dative form of the pronoun is used in many comitative contexts.

9. Kuuk Thaayorre distinguishes the adnominal and relational functions of both the proprietive and privative case enclitics; the relational function is signaled by the inclusion of /*k*/ clitic-initially, while the adnominal function is signaled by its omission (cf. Gaby 2006: 196-199 for fuller discussion).

(as well as being contextually anchored) to be pragmatically rich, while also being controlled enough to allow for error detection.

The data set analysed here is in places supplemented by that reported in Hall (1972) and Foote & Hall (1992).

2. Case vs case-form

It is widely recognised that the formal manifestation of case must be distinguished from syntactic case categories (e.g., Mel'čuk 1979; Goddard 1982; Blake 1994 and Spencer 2006). Clearly, though, there must be some alignment between the distribution of case morphs and the syntactic function of the arguments to which they attach if these morphs are to be labelled case-markers in the first place. In Kuuk Thaayorre, for instance, the ergative morpheme is labelled such because of the regularity with which it attaches to the subjects of transitive clauses but not the subjects of intransitive clauses. This can be seen in the elicited – and thus decontextualised – examples (2)–(4):

(2) *pam* *ith* *Cairns-na* *yat*
man(NOM) that Cairns-DAT go:P.PFV
'That man went to Cairns.'

(3) *pam* *minhal* *patha-rr*
man(ACC) animal:ERG bite-P.PFV
'The animal bit the man.'

(4) *pam-al* *minh* *patha-rr*
man-ERG animal(ACC) bite-P.PFV
'The man bit the meat.'

As we would expect of a morphologically ergative language, the unmarked form *pam* "man" occurs as both the subject of an intransitive verb (*yan* "go" in (2)) and the object of a transitive verb (*path* "bite" in (3)), while the marked form *pamal* occurs with the function of transitive subject in (4). The distribution of marked and unmarked pronominal forms differs, however:

(5) *ngay* *Cairns-na* *yat*
1SG(NOM) Cairns-DAT go:P.PFV
'I went to Cairns.'

(6) *ngay* *nhunh* *patha-rr*
1SG(ERG) 3SGACC bite-P.PFV
'I bit him.'

(7) *nhul* *nganh* *patha-rr*
3SG(NOM) 1SGACC bite-P.PFV
'He bit me.'

In the pronominal paradigm, the direct object function is distinguished by the accusative case form (e.g., *nganh* in (7)) which stands in opposition to a single subject pronoun (e.g., *ngay* in (5) and (6)). Since each of these three core cases (nominative, ergative and accusative) is morphologically distinguished in at least a subpart of the nominal system,[10] they are analysed as syntactically distinct across the board.

However, a syntax-based account of ergative case-marking in Kuuk Thaayorre is challenged by examples such as (8). Here we find an ergative-marked subject of an intransitive clause. For clarity, the gloss "ERG^" will be employed where the morph occurs in such syntactically non-ergative contexts. In (9) the transitive subject is unmarked (where ergative marking would be expected – this absence of ergative marking in syntactically ergative contexts will be signalled by the gloss "#ERG").

(8) *Parr-an* *pul* *kuta-ku* *ngok-eln* *wontr*
child-ERG^ 3DU(NOM) dog-ERG^ water-DAT fall:NPST
'The child and the dog fall into the water [together].'

(9) *minh* *patp* *piinth.kat* *waawath*
animal hawk(#ERG) scrap(ACC) search:RDP:NPST
'Hawks fossick for scraps.'

In examples such as these, the morphological case forms found in the clause are out of alignment with the syntactic case of the arguments they mark. Following from this, it can be seen that the syntactic case of arguments does not solely determine morphological marking. Instead, I contend, pragmatic considerations contribute to the inclusion or omission of the ergative morpheme. In §3, I outline the range of pragmatic factors that shape whether a subject is "marked" or "unmarked".

3. Pragmatic case

3.1 Marked intransitive subject

It has already been suggested that the ergative suffix may (occasionally) be attached to the subject of an intransitive verb to mark an "unexpected" subject; one for which the

10. This is further demonstrated by referring to Table 1 above.

referent is ambiguous or potentially difficult to retrieve. Most commonly, the subject is marked as unexpected because of a change in protagonist, or topic chain.[11] This fits with McGregor's (1998: 516) "Expected Actor Principle",[12] which states that:

> *The episode protagonist is – once it has been established – the expected* (*and unmarked*) *Actor of each foregrounded narrative clause of the episode; any other Actor is unexpected.*

The use of ergative marking where the membership of the protagonist group is in flux is illustrated by (10). The key protagonists throughout the text from which (10) is excerpted are the speaker and his siblings, denoted by *ngancin* "we (plural, exclusive)". However, in the second and third lines, the set of referents denoted by *ngancin* expands to include the parents of the original protagonists. In line 2, the enlarged referent group is signalled by an inclusory construction, composed of the unchanged pronoun *ngancin* "we (plural, exclusive)" apposed to noun phrases singling out each of the parents. Crucially, each of these noun phrases is ergative-marked, despite the intransitivity of the clause as a whole:

(10) a. *ngancin* *kanangkarr* *parr_r* *mant*
3PL:EXCL(NOM) long.ago child small(NOM)
'When we used to be small kids,'

b. *ngul* *ngancin* *nganip-i* *ngancin,* *mami*
then 1PL:EXCL(NOM) father-ERG^ 1PL:EXCL(NOM) mum
ngathan-man *ngancin …* *ngancin* *irrkaw* *yat*
1SG:POS-ERG^ 1PL:EXCL(NOM) 1PL:EXCL(NOM) to:West go:P.PFV
'we, including Dad and Mum, went out bush.'

c. *ngul* *ngancin* *parr_r* *mant* *ngancin* *yuk-un*
then 1PL:EXCL(NOM) child small 1PL:EXCL(NOM) tree-DAT
thaangkm *ngancin*
climb:P.IPFV 1PL:EXCL(NOM)
'Then we small children were climbing a tree.'

d. *thowolnam* *ngancin* *parr_r* *mant*
play:P.IPFV 1PL:EXCL(NOM) child small
'We small children were playing.'

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11. For the remainder of this paper, the term "topic" will be avoided due to its inconsistent usage in the literature. Instead, I refer to the "protagonist" of a story, by which I mean the participant who the story is about, who is the primary actor across multiple clauses (and thus tending to be in transitive or intransitive subject function throughout the text).

12. Note, though, that McGregor's (1998) Expected Actor Principle (applicable only to narratives) only deals with one component of what I argue makes a subject-participant alignment "expected" in Kuuk Thaayorre, namely the discourse context.

e. *ngul* *ngancin …* *nganip-i* *ngancan* *thakarr*
then 1PL:EXCL(NOM) father-ERG 1PL:EXCL:ACC leave:P.PFV
pul *nganam-u*
3DU(NOM) mother-ERG^
'Then we … father and mother left us [to go fishing].'

The fact that the form of the subject pronoun (*ngancin* "we") does not change – despite the variation in the set of individuals denoted by it across clauses – makes the tracking of discourse participants particularly problematic. I argue that it is for this reason that the speaker marks the unexpected protagonists (*nganip* "father" and *mami* "mum" in (10b)) with ergative case, despite their function as subject of a strictly intransitive verb (*yan* "go"). In addition to this emphatic case marking, the frequent repetition of the subject pronoun (*ngancin* "we") – four times in the single clause in line b – no doubt serves to reinforce the fact that these unexpected actors are now included within the reference of this subject pronoun, where they had previously been (and would be again) excluded from it. This is also made clear in subsequent clauses ((10c) and (10d)), where the reference of *ngancin* reverts back to the children alone. In both of these clauses, the full noun phrase *parr_r mant* "small children" is included in addition to the pronoun, in order to ensure that the (once again) reduced reference set of the subject is understood. This repetition of a full noun phrase for an established discourse participant is marked (though not unusual) in Kuuk Thaayorre discourse, and can be considered alongside ergative marking as a complementary strategy for signalling a problematic subject-to-referent mapping.

Note also that although the ergative-marked noun phrases (*nganipi* and *mami ngathanman* (in 10b) and *nganipi* and *nganamu* (in 10e)) are apposed to unmarked subject pronouns (glossed as "nominative"), this does not necessarily signal case disagreement. Because the nominative and ergative cases are not formally distinguished in the pronominal paradigm, *ngancin* (in 10b) and *pul* (in 10e) could alternatively be glossed "ERG^" (i.e., syntactically nominative but formally ergative).

Turning now to example (11), the ergative case is again employed where two participants, who had been acting independently in the preceding text, now come to act as a unit (i.e., a single protagonist group). This excerpt is taken from a description of the Frog Story,[13] at the point at where the boy and the dog (who had

13. The "Frog Story" is a widely used elicitation tool, in which a picture story book (with no words) is shown to a consultant who then tells the story depicted. The narrative analysed in this paper was supplied by a consultant in her sixties, with the purpose of creating a Thaayorre text that could be placed in the school library. The narrative was transcribed by me, and this transcription checked both with the original consultant and a younger Thaayorre speaker.

been having independent adventures in the preceding text) both end up falling into the same pool:

(11) a. *Minh-al* *thunpirr* *parr_r* *ngotonci-ntam*
animal-ERG propel:P.PFV child(ACC) hill-ABL
'The bull throws the boy from the hill.'

b. *Kuta* *yokun.manorrp* *wontr*
dog(NOM) same.way fall:NPST
'The dog also falls.'

c. *Parr-an* *pul* *kuta-ku* *ngok-eln* *wontr*
child-ERG^ 3DU(NOM) dog-ERG^ water-DAT fall:NPST
'The child and the dog fall into the water [together].'

That the ergative morpheme in (11c) is not marking syntactic function is clear from its absence in (11b), where the unmarked NP *kuta* "dog" functions as subject of the intransitive verb *wontr* "falls" just as do the marked NPs *kutaku* "dog" and *parran* in (11c)

Example (12) similarly includes ergative marking on a noun phrase functioning as intransitive subject:

(12) *G. Y.* *nhul* *driver* *Ngali* *mit* *rirk* *E.-nthurr*
G.Y. 3SG(NOM) driver 2DU:EXCL work DO[14]:NPST E.-ERG^
'G. Y. is the driver. We two work, [me and] E.'

This level of scrutiny might be expected to produce "hyper-correct" speech, however, there remained several instances of ergative marking on intransitive subjects and unmarked transitive subjects. In this case, the higher level of editorial care by native speakers was particularly useful in ruling out speech error. The structure of the narrative (i.e., as a series of multi-clausal descriptions of pictures to be written down and placed in a library, rather than a flowing interpersonal dialogue), also prompted the speaker to include many full noun phrases in place of the ubiquitous argument ellipsis that characterises Thaayorre speech. So, while not necessarily representative of natural speech, it is an extremely valuable resource for investigating the case marking of introduced, repeated, expected and unexpected arguments.

14. The verb *rirkr* (which, in its basic sense, means "arise"), commonly combines with Thaayorre nouns or loan verbs to produce a complex predicate. The transitivity of this predicate is determined by the first element, thus: *fly-m rirk* "fly (intrans)", *love-m rirk* "love (trans)", *pancr rirk* "be shame (intrans)" (nb. *pancr* is a noun meaning "body hair") and *mit rirk* "work (intrans)" (*mit* being a noun meaning "work" or "job"). In this construction, *mit* "work" does in some respects resemble a direct object, for example in that it can be modified:

(i) mit pork rirk ngancin
work big DO:NPST 1pl:excl(NOM)
'we work hard'

The referent of the ergative-marked NP (E.) is a perfectly plausible subject according to world knowledge (i.e., highly animate, and likely to be engaged in the activity of working), but is "unexpected" (in McGregor's sense) due to his not having been mentioned previously. Accordingly, he is introduced by a NP placed within an inclusory construction in order to clarify that the speaker is not referring (by means of the second person dual exclusive pronoun, *ngali*) to himself and the protagonist of the preceding clause (G. Y.). The ergative case morph can therefore be viewed as emphatically marking the noun phrase as part of the subject, in contradistinction to the subject of the preceding clause.

As noted above, the ergative morpheme is not used to express the comitative case (as found in some other Australian languages, e.g., Wambaya (Nordlinger 1998)). The comitative relation that obtains between the speaker and "E." in (12) is expressed by the inclusory construction (i.e., the apposition of the non-singular pronoun *ngali* "we two, exclusive" and a noun phrase denoting a subset thereof, i.e., *E.*). If the speaker wished to highlight the comitative relation, this could be done by attaching "comitative" *-kak* to *E.*, in place of the ergative morpheme. The ergative suffix on the subset noun phrase is unrelated to (and uncalled for by) the inclusory construction in this context.

3.2 Unmarked transitive subject

Just as the ergative morph may be affixed to the subject of an intransitive clause, ergative marking may be omitted from transitive clauses in certain pragmatic contexts. Once again, the key to predicting where the ergative morpheme may be omitted lies with the degree to which the identity of the subject corresponds to the addressee's expectations; expectations built by the interaction of discourse context and world knowledge. Turning first to the role of world knowledge in constructing and decoding argument structure, a subject is more likely to be "expected" where it is: (a) high in animacy (and significantly higher in animacy than its object); and (b) engaged in an activity with which an entity of its type is likely to be engaged. These two criteria are illustrated by (9′) and (13):

(9′) *minh* *patp* *piinth.kat* *waawath*
animal hawk(#ERG) scrap(ACC) RDP:search
'Hawks fossick for scraps.'

However, in an elicitation context the subject of mit rirk is always nominative in form, suggesting the predicate as a whole is intransitive:

(ii) S. mit rirk-m
S. work DO-P.IPFV
'S. was working'

(13) *pam* *peln* *mong werngr* *ulp* *thunpm*
man(#ERG) 3PL(ERG) many boomerang(ACC) THE throw:P.IPFV
'Many men threw the boomerang.'

It is clear that hawks are more animate than scraps and men are more animate than boomerangs. It is also entirely consistent with our knowledge of the world for hawks to be engaged in foraging and men to be engaged in throwing boomerangs (particularly in contrast with scraps foraging or boomerangs throwing). Additionally, the hawks and men respectively appear as actors in the preceding discourse. Accordingly, the association of *minh patp* "hawk" (in (9)) and *pam mong* "many men" (in (13)) with the grammatical function of subject is straightforward even in the absence of overt case marking. The SOV constituent order in both of these examples may also be significant. Further investigation (and the course of time) may reveal an increasing reliance on word order for the interpretation of grammatical functions in the absence of obligatory case-marking. It should be noted, however, that examples (9) and (13) were uttered by an elder of seventy-four, whose first language is (a conservative variety of) Kuuk Thaayorre, and whose speech generally exhibits flexible constituent order.

The omission of ergative marking due to discourse context is further exemplified by the narrative excerpt (14). The speaker here is describing his trip to Darwin shortly after cyclone Tracy. He tells of a taxi driver he met who had been injured in the cyclone while trying to lead a group of tourists to safety:

(14) a. *glass-n* *ke'e-rr=unh*.
glass-ERG spear-P.PFV=3SGACC
'He was cut by glass.'

b. *Taxi driver,* *pam* *ngotn*.
taxi driver man black
'The taxi driver, a black man,'

c. *Taxi driver* *glass-n* *ke'e-rr*.
Taxi driver(ACC) glass-ERG spear-P.PFV
'the taxi driver got cut by glass.'

d. *glass-n* *ulp* *aka* *ke'e-rr*
glass-ERG THE here spear-P.PFV
'That glass cut [him] here.' [points to arm]

e. *nhul* *taxi driver* *pam* *guide-m* *rirk-m*
3SG(ERG) taxi driver(#ERG) man(ACC) guide-VBR DO-P.IPFV
'That taxi driver was guiding people.'

If the clause in (14e) were considered in isolation, it would be impossible to justify the omission of the ergative case marker from the subject NP. There is no

difference in animacy between the subject ("taxi driver") and object ("people") of the clause, and since number is not marked on nouns, either of the NPs *taxi driver* and *pam* "man"/"people" could be in syntactic apposition to the subject pronoun *nhul* "3SG".[15] However, given discourse context, it is straightforward to associate the enduring protagonist of the previous clauses (*taxi driver*) with the subject function.

In example (15), the same participant group is represented as subject in each clause, but the ergative marking present in the first two clauses is omitted in the third:

(15) a. *paanth-u* *wanhwanhrrul* *yak* *ii*
woman-ERG how.many.people:ERG snake there
theerngarr=unh
kill:P.PFV=3SGACC
'How many women killed that snake?'

b. *paanth* *pinalam-thurr* *theerngarr* *yak* *ulp*
woman three-ERG kill:P.PFV snake(ACC) THE
'Three women killed the snake …'

c. *paanth* *ii* *peln* *pinalam=unh*
woman(#ERG) there 3PL(ERG) three=3SGACC
theerngarr *yak* *ulp*
kill:P.PFV snake(ACC) THE
'[Those] three women there killed that snake.'

Here, as in examples (9) and (13), several pragmatic and semantic factors conspire to unambiguously identify each of the unmarked arguments with the relevant syntactic function. Firstly, women are higher in animacy than snakes, making it more congruent with world knowledge for the women to act upon the snake than the reverse. This factor is not particularly strong, however, as it is just as plausible for a snake to kill a woman as a woman to kill a snake (particularly in the taipan-infested territory of the Thaayorre). More critical, in this case, are the discourse context and verbal semantics. Taking first of all the discourse context, it is is clear that the preceding discourse (in which the women do receive ergative marking) establishes the respective roles of the participants sufficiently clearly for case marking to be omitted in the final clause (which may be regarded as a summary of the preceding clauses) without any resultant ambiguity. Additionally, the verb employed – *theerng* "kill" – more precisely describes the act of killing by

15. In pragmatically unmarked clauses, however, coreferential pronouns and NPs would typically be adjacent.

striking, and as such would not be used with a limbless creature (such as a snake[16]) as subject. Thus verbal semantics further disambiguates the mapping of participants to syntactic functions.

Finally, excerpt (16) from the Frog Story demonstrates the interplay of world knowledge and discourse context over a series of clauses:

(16) a. *parr_r* *nhul* *thamr* *puut* *nhaanham*
child(#ERG) 3SG(ERG) foot boot(ACC) look:RDP:NPST
'The boy looks in the boot.'

b. '*Thatr* *wanthan* *yat?'*
frog(NOM) to.where go:P.PFV
'[He thinks:] 'Where has the frog gone?'

c. *nhul* *thatr* *ngaathirr* *waawath-r*
3SG(ERG) frog(ACC) still search:RDP-NPST
'He's still looking for the frog.'

d. *Kuta-ku* *nhul* *glass* *nhaanham*
dog-ERG 3SG(ERG) glass(ACC) look:RDP:NPST
'[Now] the dog looks in the jar.'

In (16a), the human subject (already introduced in the preceding text) acts upon an inanimate object. Here world knowledge (strengthened by the interclausal topicality of the boy) is more than ample to establish the syntactic function of arguments. In clauses (16b) (which implicitly reports thought) and (16c), the boy remains the (implied or articulated) topic. In (16d), though, attention shifts to the dog. This protagonist shift (possibly combined with the lower animacy of the dog) renders it an "unexpected" subject, further requiring the presence of ergative case assigned by the transitive verb.

4. Analysis

The influence of pragmatics on the employment of the Thaayore ergative morpheme is significant in several respects. To begin with, it shows the much discussed "animacy hierarchy" (attributed to, and emergent from the ideas of, Silverstein 1976[17]) to be played out not in Kuuk Thaayorre morphosyntax, but rather in pragmatics. In Kuuk Thaayorre morphosyntax (as described in 1.2), there is a split between pronouns (which are marked on a nominative-accusative pattern) and

16. The verb *path* "bite" is used to describe a snake killing a person or animal.

17. See also Heath (1976).

nouns (which follow the ergative-absolutive pattern). Within the nominal category, however, there is no division with respect to which semantic categories of noun may receive ergative marking in the appropriate syntactic context. As shown in §3, though, there is a difference in the level of markedness of subjects (which filters through to optional ergative marking), according to their level of animacy. This is exemplified by comparing (16a′) (which has an unmarked human subject) with (16d′) (in which the ergative-marked subject is a dog):

(16) a′. *parr_r* *nhul* *thamr* *puut*
child(#ERG) 3SG(ERG) foot boot(ACC)
nhaanham
look:RDP:NPST
'The boy looks in the boot.'

(16) d′. *Kuta-ku* *nhul* *glass* *nhaanham*
dog-ERG 3SG(ERG) glass(ACC) look:RDP:NPST
'[Now] the dog looks in the jar.'

The relative animacy of subject and object also plays a role as the comparison of (17) with (18) shows:

(17) *nhul* *parr-an* *kuta* *mi'irr*
3SG(ERG) child-ERG dog(ACC) pick.UP:NPST
'The boy picks up the dog.'

(18) *parr_r* *nhul* *thatr* *mi'irr* *yuur-un*
child(#ERG) 3SG(ERG) frog(ACC) pick.UP:NPST hand-DAT
'The boy holds the frog in his hand.'

While the subject of both clauses is human, in (17) *parran* "child" receives the ergative marking its syntactic function warrants, while in (18) the marker is omitted. This can be attributed to the fact that in (18) the highly animate subject participant is acting upon a significantly less animate entity (the frog), which has not, throughout the preceding text, been accorded much in the way of personality. In (17), by contrast, the boy is acting upon an only slightly less animate being (the dog), who has been a major protagonist (alongside the boy) throughout the text.[18] The pragmatic employment of ergative marking thus reveals a cline of animate – inanimate nouns. This cline is also manifest in existential and ascriptive constructions, as described in Gaby (2006). In that case, too, dogs and "social animals" form an intermediate category between humans, animate non-humans and inanimate entities, in terms of

18. There is thus greater potential for ambiguity where the Undergoer is higher in animacy, despite world knowledge suggesting that a dog is unlikely to pick up a boy.

the posture and movement verbs with which they can combine. Silverstein (1976)[19] similarly proposes a "global" case-marking system for Dalabon, in which the suffixation of *-yi* to a transitive subject NP purportedly depends on "the Agent being below or at the same feature-level as the Patient" (Silverstein 1976: 129).

The distribution of ergative marking cannot be attributed to animacy alone (as per semantically-based case marking), however. Example (19) (taken from the very beginning of the Frog Story), for instance, shows the expected ergative marking of the subject of a transitive clause with exactly the same configuration of participants as in (18) (i.e., a boy acting upon a frog):

(19) a. *That nhul glass-ak nhiinhin*
frog(NOM) 3SG(NOM) glass-DAT sit:RDP:NPST
'A frog is sitting in a jar.'

b. *Parr-an pul kuta-ku nhaanham nhunh* thatr
boy-ERG 3DU(ERG) dog-ERG see:P.IPFV 3SGACC frog(ACC)
'A boy and a dog are looking at the frog.'

The opening clause introduces the frog, suggesting to the addressee that this will be the main protagonist. The enduring protagonists of the story (i.e., the boy and the dog) are at this point a truly "unexpected" subject of the second clause, this being their first mention. It is hardly surprising, then, that they each receive syntactically appropriate ergative marking, highlighting their role as agents of the event. The fact that the presence or absence of the ergative morph cannot be predicted by the relative animacy of participants alone, reinforces the argument that ergative marking is (partially) pragmatically conditioned, rather than simply based on semantics.

The tendency for the ergative morpheme to be omitted where the subject is highly animate runs counter to what we might predict from Hopper and Thompson's (1980) theory of transitivity. According to their parameters of volitionality and agency, we would expect that clauses with human subjects would rate more highly on the transitivity scale (and therefore be more likely to include ergative marking) than those in which the subject is lower in animacy. Instead, we find the reverse. This can be accounted for in two ways. Firstly, it has often been suggested that the primary function of ergative markers is to distinguish the two arguments of a transitive clause (cf. Comrie 1989; Heath 1976; Wierzbicka 1981). The use of Kuuk Thaayorre ergative marking in intransitive clauses (discussed in 3.1) can be seen as distinguishing the subject not from an object (as there is none), but from other potential subjects. As such, the ergative morpheme could be analysed as marking the syntactic function of subject rather than the syntactic case of transitive subject

19. Cf. also Heath (1976: 177).

(making the label "ergative" somewhat misapplied). This possibility is explored further in section 5.

DuBois's (1987, 2003) account of "preferred argument structure" offers a second, alternative analysis of how ergative case morphemes could come to be associated with marked subjects more generally. DuBois finds that speakers tend to avoid representing agents lexically, and tend not to introduce new participants as agents. Accordingly, where an agent is overtly realised, it must be pragmatically marked for some reason (and hence likely to be morphologically marked). This explains how the majority of lexical agents (i.e., transitive subjects) could come to be ergative-marked for pragmatic reasons, rather than purely because of their grammatical function.

5. Theoretical implications

As raised in section 4, several alternative analyses of the function(s) of the ergative morpheme suggest themselves. First of all, it would be possible to propose two homophonous (sets of) morphs, one of which is a straightforward ergative case marker, the other being a discourse marker of "unexpected subjects". This analysis is attractive because it allows us to retain a tripartite case system, while also allowing the distribution of the "unexpected subject" marker to be conditioned wholly by pragmatics. The downfall of this analysis, though, is the fact that the ergative morph may be omitted from transitive subjects. If there is a fully grammaticised ergative case morpheme, this should be present in all syntactically ergative contexts. If the "unexpected subject" marker is an entirely separate morpheme, we would be required to independently explain the deletion of the ergative morpheme in contexts where a transitive subject is expected. Such an analysis is clearly not parsimonious. Also problematic for this analysis, is the extreme formal irregularity of the morphs in question, shared exactly by both putative functions. We would not normally expect such complete isomorphism between distinct morphemes in the context of such irregularity.

Alternatively, the (hitherto labelled) "ergative" morpheme could be analysed as monosemous, encoding simply "unexpected subject". This "unexpected subject" function could be framed as a marked nominative case (versus the unmarked nominative form used in pragmatically neutral or expected contexts).[20] Under such an analysis, the morpheme has some characteristics of a case marker (in that

20. This is somewhat similar to the Warrwa "focal ergative marker" (McGregor 2006), in that a single core syntactic case may be expressed by two alternative (pragmatically-conditioned) forms.

it marks a dependent noun for the relationship it bears to the head – cf. Blake 1994[21]). However, it is unlike case marking in that it is only applied where there is a need to clarify or emphasise the syntactic function of the subject argument, rather than being obligatory in particular syntactic contexts. The statistical correlation between ergative marking and being the subject of a transitive clause (rather than an intransitive subject) can be attributed to the fact that there tends to be greater potential for ambiguity in clauses with multiple arguments.

To analyse this morpheme as a "marked nominative" case does not, however, capture the strong association between this morpheme and the subject of a decontextualised transitive clause (as opposed to a decontextualised intransitive clause). This is borne out by the near-complete correlation between transitive subjects and ergative-marking (and conversely intransitive subjects and absence of the ergative) in decontextualized elicitation. Moreover, all consultants rejected as ungrammatical out-of-context intransitive clauses with ergative-marked subjects proposed by the author. The vast majority of proposed transitive clauses with unmarked subject NPs were also corrected to contain the ergative marker. A final problem with the "marked nominative" analysis is the fact that the distribution of, and motivating factors for, ergative marking differs significantly between transitive and intransitive clauses.

I therefore conclude that the ergative morpheme is indeed associated with the syntactic ergative case, in spite of its distribution being influenced by pragmatics. As already stated, its function of marking a dependent NP for its relation to the head predicate establishes the morpheme's status within the case system. The question becomes, then, how exactly to characterise the function of this case morpheme in light of its distribution. In order to tackle this question, let us return to the arguments put forward by Meľčuk (1979), Goddard (1982) and Blake (1994) in distinguishing (morphological) case form from (syntactic) case function. Applying their analysis to Kuuk Thaayorre (ignoring, for the moment, the pragmatically-conditioned distribution of the ergative morpheme), we can see how three core syntactic cases (ergative, nominative and accusative) emerge from the comparison of pronouns and nouns, each of which display only only two case forms:

Table 3. Comparison of syntactic case function and morphological case form

	Pronoun ("3SG")	**Noun ("man")**
Ergative	*nhul*	*pamal*
Nominative	*nhul*	*pam*
Accusative	*nhunh*	*pam*

21. Note, though, that this does not apply to the emphatic function of one ergative morph (*-thurr*), as described in §6.

Despite the syncretism of ergative and nominative pronominal forms, and nominative and accusative noun forms, the distinction between each of the three syntactic cases is morphologically encoded by at least some subpart of the system and is therefore analytically maintained for the case system as a whole.

If we then extend this analysis to differentiate between the three relevant pragmatic contexts (expected subject, pragmatically neutral, unexpected subject) in which subject arguments are verbalised, it remains equally clear that the ergative, nominative and accusative cases are a syntactic reality in Kuuk Thaayorre. Note that we are now concerned only with noun forms:

Table 4. The interaction between syntactic case and pragmatics in determining case form

	Expected subject	**Decontextualised**	**Unexpected subject**
Ergative	*pam*	*pamal*	*pamal*
Nominative	*pam*	*pam*	*pamal*
Accusative	*pam*	*pam*	*pam*

This time, however, there is syncretism between all three core cases where the subject is expected (i.e., where the syntactic function of a NP is predictable it is formally unmarked, regardless of case), between nominative and accusative cases in decontextualised clauses and between the nominative and ergative cases where the subject is unexpected. Again, each of the three core syntactic cases is somewhere differentiated from the other two. The distribution of morphological forms, however, is conditioned by the interaction between syntactically-assigned case (varied in table 4 by row) and pragmatics (varied by column). This should not be a particularly shocking proposition, as Australianist linguists have long accepted that semantic and/or pragmatic features of animacy can condition the distribution of case morphs (since Silverstein 1976 and Heath 1976). We are familiar, too, with languages in which case markers simultaneously encode non-case information (e.g., number in Latin, or modal information in Kayardild (Evans 1995)[22]). Analogously, then, the Kuuk Thaayorre ergative case morpheme explicitly encodes syntactic case, while its (non-)employment signals the degree of pragmatic markedness.[23]

22. This analogy was drawn by Bill McGregor (p.c.).

23. The reader is reminded that "pragmatic markedness" here refers to the obviousness of the subject – participant **mapping**, rather than to the ease with which the subject's **identity** can be retrieved from context. So "expected subject" is shorthand for "NP referent is expected to have the grammatical function of subject', not that the referent of the NP is expected in itself. If we

The homophony of core case forms in Kuuk Thaayorre (as presented in table 4) does not increase the potential for mis-mapping grammatical relations to argument NPs for two reasons. Firstly, because a NP in nominative case – isomorphous with the accusative case in neutral and expected contexts and with the ergative case in unexpected contexts – is never copresent with a transitive subject or direct object in the same clause. Secondly, the presence of two unmarked NPs (in nominative and accusative case respectively) in transitive clauses with an expected subject does not give rise to ambiguity since the pragmatically expected context is, by definition, one in which the mapping of grammatical relations to argument NPs should be obvious.

In summary, then, I argue that Kuuk Thaayorre has a tripartite core syntactic case system (distinguishing ergative, nominative and accusative cases). The morphological expression of these cases is determined jointly by: (a) the underlying syntactic case of the argument; (b) the word class of the nominal form (i.e., whether it is a pronoun or a noun); and (c), if it is a noun, the pragmatic status of the argument (i.e., how easily the addressee is expected to match it to the relevant syntactic function).

6. Pragmatic case marking in other languages

There are a growing number of languages in which pragmatic factors have been demonstrated to co-condition ergative inflection. This section surveys the most detailed recent analyses of such systems, highlighting both similarities and differences between the distribution, functions and inferred diachronic development of optional ergativity cross-linguistically.

From his detailed analysis of a large corpus of Gooniyandi texts, McGregor (1998) identifies several etic characteristics of clauses in which the agent is

are to add into equation whether or not the addressee is expected to know the subject's identity, table 4 should be modified to include the ellipsis of arguments, as follows:

Table 4b. The interaction between syntactic case and pragmatics in determining **argument** form

	Referentiality in question			Referentially given
	Expected subject	**Pragmatically neutral**	**Unexpected subject**	
Ergative	*pam*	*pam-al*	*pam-al*	–
Nominative	*pam*	*pam*	*pam-al*	–
Accusative	*pam*	*pam*	*pam*	–

ergatively marked. Of particular relevance to the data described in §3, he finds that ergative marking may be prompted by an "unforeseen Agent given narrative context" or when the "Agent contrasts with other (potential) Agents" (1998: 503). McGregor also finds that the level of agentivity of the subject participant in large part determines the presence or omission of ergative marking, though his definition of agentivity as "goal-directed" does not seem to be a relevant parameter for Kuuk Thaayorre pragmatic case.

Warrwa also permits the omission of the ergative postposition in transitive clauses where the subject is "both expected and low in agentivity" (McGregor 2006: 393). It possesses two "ordinary ergative markers" as well as a "focal ergative marker" that signals an unexpected subject (in transitive, intransitive, verbless and other clauses). There is thus a pragmatic contrast between case morphemes with the same syntactic function. McGregor argues that both the syntactic "ergative" case and pragmatic "focus" are inherent to the meaning of the Warrwa focal ergative postposition, an assertion that might also be made of the Kuuk Thaayorre ergative morpheme. The Warrwa situation is especially complex, however, as there is the contrast between an elided subject NP, an unmarked subject NP, a subject NP marked with an ordinary ergative morph as well as a subject marked by the focal ergative morph. Nevertheless, there are many commonalities in the conditions under which ergative marking may be employed or omitted in Warrwa and Kuuk Thaayorre, particularly with respect to the marked status of subjects that are "unexpected" due to their not being the main protagonist of the relevant episode. In Warrwa, though, McGregor (2006: 410) finds that "potent" agents are more likely to receive focal ergative marking (with human agents being more potent than lower animate or inanimate agents), while in Kuuk Thaayorre (and Gurindji Kriol, see below) a subject participant that rates lowly on the animacy scale is more likely to be ergative-marked.

The Jingulu focus markers (a subset of which are homophonous with, and most likely derived from, the ergative case markers) can be attached to oblique as well as core arguments (rather than just the subject, as in Kuuk Thaayorre) and may be suffixed to noun stems already inflected for case (Pensalfini 1999: 6). Significantly, the Jingulu focus markers operate in parallel to the case system, with ergative case marking remaining obligatory for transitive subjects. This is very different to the Kuuk Thaayorre case, in which pragmatic considerations are embedded in the core case-marking system itself. The focal function of Jingulu case-markers is analysed as a recent innovation, occuring as part of the process of language obsolescence. Pensalfini (1999: 26–27) argues that, in pro-drop languages such as Jingulu, the presence of noun phrases is pragmatically marked and "overt nominal arguments are therefore generally associated with focus". He proposes that more recent learners of Jingulu might have initially reanalysed the case system as nominative-accusative (by analogy with English), and ascribed a focus-marking function to the ergative

morpheme. This phase of acquisition would then leave an imprint on the fully proficient speakers" variety of Jingulu.

Like Kuuk Thaayorre, Warrwa and Gooniyandi, the emergent mixed languages Gurindji Kriol and Light Warlpiri allow the optional omission of ergative-marking in transitive clauses (Meakins & O'Shannessy 2004). In Gurindji Kriol, ergative morphology is also found in some intransitive clauses, and is associated with the pragmatic functions of contrastive focus and topic marking. The rigidification of word order in Gurindji Kriol seems to have contributed to the reanalysis of the ergative morpheme (Meakins & O'Shannessy 2004) since the semiotic burden of the ergative morpheme is lessened by the coding of grammatical relations in the ordering of constituents. Such an explanation is not available for Kuuk Thaayorre, as the ergative morpheme is used pragmatically even in the conservative speech of elders, for whom constituent order remains flexible. A final point of interest is the increased tendency in both Gurindji Kriol and light Warlpiri (as in Kuuk Thaayorre) for less animate participants to receive ergative marking (Meakins & O'Shannessy 2004).

While Pensalfini (1999) and Meakins & O'Shannessy (2004) attribute the association of syntactic case markers with discourse function to the forces of language contact, this is not so clearly the case with Kuuk Thaayorre. Pormpuraaw (home to the vast majority of Kuuk Thaayorre speakers) was established as an Anglican mission in 1938. Prior to this, almost all of the Thaayorre led a traditional life with little or no contact with English speakers. The pragmatic usage of the ergative morpheme, however, is found in old texts and throughout the speech of Thaayorre people of all ages, many of whom were raised monolingual. Moreover, Gaby (Ms) proposes that the function of marking pragmatic focus preceded the syntactic function of marking a transitive subject for at least some of the Kuuk Thaayorre ergative allomorphs.

7. Conclusion

This paper has shown that if the preceding discourse and/or interlocutors" world knowledge do not lead the addressee to expect a particular participant to be represented as subject, then the speaker is likely to mark this subject argument as "unexpected" by affixing the ergative morpheme. As shown in §3.1, this may lead to the ergative marking of subjects in intransitive clauses. Conversely, where the previous discourse and/or world knowledge leave the addressee in no doubt as to the assignation of grammatical relations to arguments, ergative marking may be omitted. In both instances, it is clear that the employment of case morphology is motivated not by syntax, but by pragmatics. §5 considered the theoretical implications

of the data presented herein, concluding that Kuuk Thaayorre should be analysed as a language with a syntactic ergative case (alongside the nominative and accusative syntactic cases), but in which the distribution of case morphology is co-conditioned by pragmatics.

It has been suggested by Pensalfini (1999) and Meakins & O'Shannessy (2004) that discourse functions of case markers arise from situations of language obsolescence in the context of contact with a dominant language. The pragmatic use of the Kuuk Thaayorre ergative morpheme, however, appears to have originated at a stage of the language's relative fortitude. The fate of this morpheme, under the pressure of enduring contact with English, remains to be seen.

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The interpretation of complex nominal expressions in Southeast Arnhem Land languages

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In this chapter, I examine the function of noun class prefixes in several non-Pama-Nyungan languages. In these languages, prefixes show several alternants. I show that these alternants are distributed according to discourse functions "topic" and "focus", making them somewhat like articles in European languages (or better, the topic marking clitics in Japanese and Korean). The topic marker is also found in a number of polarity contexts: under the scope of negative and interrogative operators in the clause. In order to understand this highly unusual phenomenon, we need to understand the nature of references to kinds, and the realisation of number and quantification in these languages. This examination reveals that topics serve to enable operators to bind variables without a well-defined configurational phrase structure. The adaptation of the tools of formal semantics to nonconfigurational languages is in its infancy. This paper represents an initial step in understanding the similarities and differences between the semantics of such languages, and the better-described languages of Western Europe.

1. Introduction[1]

It is often claimed that Australian languages in general lack a well-defined class corresponding to "article":

> 'Australian languages seldom have anything that could reasonably be described as "articles" … Definite specification can be achieved by the use of demonstratives, but is often established simply by the context' (Dixon 1980; 2002: 66).

1. Many thanks to my Ngalakgan, Wubuy, and Marra teachers †*Golokgurndu*, †*Gerrepbere*, †*Nyulpbu*, Didamain Uibo, *Langayina* and Anne Rami, and Angelina George, Betty and Freda Roberts. This paper was much improved by discussions with Cliff Goddard, Mark Harvey, Ilana Mushin, Andrea Schalley, Jane Simpson, and Lesley Stirling, and the insightful comments of Emmon Bach. Nevertheless, the content remains my own responsibility.

Several languages of Northern Australia have prefixal noun class (NC) systems wherein more than one prefix morpheme is found for a given noun class category. In some cases, this alternate prefixal morphology has been linked to case functions (e.g., Marra: Heath 1981; Alawa: Sharpe 1972; Yanyuwa: Kirton 1971). In other cases, notably Ngalakgan and Wubuy, the functions of alternant NC prefix forms remain obscure.

I propose here that the NC prefix alternants of Ngalakgan, Marra and Wubuy (which I will refer to as "the Southeast Arnhem languages") function much like the articles of European languages. Unlike the latter however, the NC prefixes do not directly realise distinctions of definiteness, specificity or deixis, except as implicatures. Rather, the alternations in prefix form have discourse-linked interpretations that we can characterise as "topic" and "focus" (along the lines proposed in e.g., Myhill 1992; and Lyons 1999). The more or less direct encoding of topic and focus status is unusual among determiner systems, though clitics with discourse-linked interpretations are found in Japanese and Korean (Lyons 1999; Shibatani 1990).

Unusually, the "topic" article form is also found in certain nonspecific contexts: involving complex nominal expressions under the scope of polarity operators or Wh-pronouns. I argue that this use can also be explained in terms of the discourse referentiality function: the topic article serves to delimit (or restrict) the scope of the operator. Nouns marked as topics in this way relate one nominal expression to another nominal expression, making in turn a more complex nominal expression. This enables scope to be expressed even though these languages are fully non-configurational.

Apart from the topic-marking prefixes themselves, there are other relevant aspects of nominal reference in these languages that make these polarity constructions comparable to those that we find in other, better-known, languages. In particular, the fact that nouns referring to non-humans can optionally (for animates) or obligatorily (for inanimates) lack number agreement morphology enables them to be construed as groups, collectivities, or mass entities, depending on the referent and the context. The non-singular interpretation of these nouns licenses a non-specific reference under the scope of polarity operators. Secondly, the topic-marked form is also used for references to "kinds" in generic sentences. Non-specific nominal expressions under the scope of polarity can have the same form as kind references in languages such as French (Lyons 1999). Kinds are characteristically marked as topics in other languages with topic markers (such as Japanese: Shibatani 1990, see also Cohen & Erteschik-Shir 2002), though the reasons for this relationship are not entirely clear.

The alternations in NC prefix form found in these languages are clearly more significant for the interpretation of nominal expressions than merely indicating class membership. Far from the rather sparse and under-determined picture of

nominal expressions that usually characterise descriptions of Australian languages (e.g., Dixon, op.cit.), I argue that speakers of Ngalakgan, Marra and Wubuy derive much of the rich interpretation of reference from the morphology.

In what follows I first discuss briefly the NC morphology of both languages, in section 2. In section 3, I discuss the distribution of NC forms in "polarity" contexts, involving negation or interrogation, and compare these constructions with those found in English and other languages. I conclude that nominals in these contexts are generic or "kind" references. In section 4, I examine the nature of number marking in SE Arnhem languages, which, like Australian languages in general, is obligatorily contrastive only for humans. In section 5 I examine nominals in generic contexts in SE Arnhem languages and show that the distribution of NC forms is dependent on animacy. At the same time, I discuss the characteristic associations between NC form and information status of the referent, showing that what I call the "topic" form of the article is in fact associated with discourse topics of a typical kind. In section 6, I propose that the topic form functions as a "restrictor" of variables introduced by operators in polarity contexts, such as interrogative pronouns (following Cohen & Erteschik-Shir 2002). We can think of this pattern as deriving from the non-configurationality of SE Arnhem languages. Because there is no NP or DP structure, complex nominal expressions must be formed through apposition. This hypothesis is examined in section 7. The conclusion is in section 8.

2. The article systems of Ngalakgan, Wubuy and Marra

In this paper my focus is on three languages of the Southeastern Arnhem Land region. My primary source of data is Ngalakgan (['ŋalakkan]), a Gunwinyguan language (Alpher, Evans & Harvey 2003) formerly spoken in the middle Roper region of the Northern Territory, along the southern Arnhem Land border. It is now effectively moribund. The standard reference grammar is Merlan (1983); Baker (2008) presents an analysis of the word structure and phonology of the language. Wubuy (['wʊbʊɪ]) was traditionally spoken on the coast of the Gulf, in eastern Arnhem Land, between the mouth of the Rose River and Blue Mud Bay to the north. It is still widely used as a first language in the community of Numbulwar, and is acquired by children, though most children's preferred first language these days is Kriol, an English-lexified creole.[2] Marra (['maːra]; Heath 1981), formerly

2. Wubuy is more commonly known as "Nunggubuyu" as in Heath (1984). Technically, "Wubuy" is the indigenous name for the language while "Nunggubuyu" is the name for the people who speak Wubuy.

spoken along the coast of the Gulf south of the Roper, is now spoken by just a handful of old people.[3]

In all three languages, nouns may take prefixes indicating the class to which a noun belongs, and other elements of the utterance – nominal modifiers or determiners, and the predicate – take prefixes in agreement with that class. The tables in (1)–(3) show the prefixal morphology of nouns in Ngalakgan, Wubuy, and Marra, respectively.[4] All three languages contrast Masculine (M), Feminine (F) and Neuter (NEUT) class. Ngalakgan and Wubuy in addition have a Vegetable class (VEG), and Wubuy has a further class labelled "Plural" here (PL).[5]

Table 1. Noun class prefixes in Ngalakgan

Prefix forms			NC category
Topic	**Non-topic**	**Other**	
ŋu-ku-	Ø-	ŋu-	M
cu-ku-	Ø-	cu-	F
mun-ku-	mu- ~ Ø-	mu-	VEG
kun-ku-	ku- ~ Ø-	ku-	NEUT

3. All examples except where otherwise indicated are from my own fieldnotes. I carried out fieldwork with Ngalakgan speakers between 1994 and 2004, shortly before the last speaker passed away. I have carried out some original fieldwork on Wubuy, most intensively in 2004, 2005 and 2007, and on Marra, in 2005.

4. I have represented all examples phonemically, rather than in the adopted orthographies (partly because the latter tend to obscure the similarities between the languages). As is typical of Australian languages, all three languages contrast the following places of articulation in stops and nasals: bilabial, apico-alveolar, apico-postalveolar (retroflex), lamino-postalveolar, and dorso-velar. In addition, Wubuy has a contrastive lamino-dental stop and lateral (though the nasal is only marginally contrastive); Marra also has a few words involving lamino-dental sounds, probably borrowings from neighbouring languages, see Heath (1981: 9). There are laterals corresponding to every contrastive coronal place of articulation, and in addition a contrast between an apical tap /r/ (sometimes realised as a trill syllable-finally) and retroflex glide /ɻ/. Loanwords from Kriol or English are italicised in the examples /ku-*t̪i*/ "NEUT-tea". Abbreviations are presented at the end of the paper.

5. The semantics of assignment of nouns to classes in these languages is not straightforward, outside the realm of humans (which are standardly assigned to M and F classes on the basis of biological sex). In Ngalakgan and Marra, all inanimates are assigned to the NEUT (or, in Ngalakgan, alternatively the VEG) class. Class assignment of non-humans in Wubuy is complex; see Heath (1984: 177–93) for discussion.

Table 2. Noun class prefixes in Wubuy

Prefix forms			NC category
Topic	**Non-topic**	**Oblique**	
na-	Ø-	jii-	M
ŋara-	Ø-	jii-	F
mana-	Ø-	ama-	VEG
ana-	Ø-	a-	NEUT/ANIM[6]
wara-	Ø-	waa- ~ wara-	PL

Table 3. Articles and prefixes in Marra[7]

Article + prefix forms			NC category
Topic	**Non-topic**	**Oblique**	
ŋana	Ø-	ŋani … ŋa-	M
ŋana … n-	Ø … n-	jani … ja-	F
n-kana … n-	Ø … n-	ŋani … ŋa-	NEUT
wara … wur-	Ø … wur-	wiri … wiri-	DU
wala … wul-	Ø … wul-	wili … wili-	PL

The salient fact about Ngalakgan and Wubuy is that both languages show an opposition between an overt prefixal form, which I call the "topic" form, and a "non-topic" form which in most cases is zero.[8] In Marra, where NC prefixes are obligatory, the opposition is marked slightly differently. Here, a distinct word class which Heath (1981) calls "article" co-occurs with the NC prefixes within noun

6. On heads, Wubuy has collapsed the distinction between the historical Neuter class taking a */ku(n)-/ prefix (like Ngandi, Ngalakgan, Bininj Gun-Wok, etc.) and another Neuter class taking a prefix */ŋa-/ (like Ngandi, Warndarrang, etc.). In verb agreement prefixes, the two classes are (partly) distinguished however: objects from the old */ku-/ head class take prefixes reflecting */ku-/ while */ŋa-/ class objects take Ø. Where these are distinguished in the verbs, I will reserve the label "NEUT" for the historical */ku-/ class, using "ANIM" for the */ŋa-/ class. This has some justification, since fauna terms tend to occur in the */ŋa-/ class rather than the */ku-/ class in both Wubuy and (closely related) Ngandi.

7. The forms in the table consist of the article followed by the prefix. Overt noun class prefixes are obligatory in Marra, with a few exceptions for specific grammatical contexts. However, while articles must be followed by a nominal prefixed for noun class, the article does not need to *immediately* precede the nominal: demonstratives and adjectives may intervene, hence the elipses in the table.

8. The zero-marked form has a number of uses, including marking focus and contrast (as I show in section 5), but is also the form of nouns used predicatively and in citation.

phrases (though not necessarily immediately preceding them).[9] The same basic opposition between topic and non-topic uses in Marra is marked by the presence vs absence of the article. All three languages also have other NC prefix forms which do not participate in the discourse-related system to the same degree. Both Wubuy and Marra have special "Oblique" case forms of the prefixes (and articles, in Marra) which are used for NPs in specific case roles. Ngalakgan has a series of "short" prefixes which, for inanimate referents, are used to some extent like the non-topic zero forms.

It is the conditions determining the realisation of these various forms that concern us in what follows. To the extent that we can see a resemblance in the distribution of articles between the three languages then, this is how it works:

Table 4. Article correspondences in Ngalakgan, Wubuy, and Marra

Ngalakgan, Wubuy	TOP	(non-TOP), Ø	Inanimates/Non-humans
Ngalakgan, Wubuy	TOP	Ø	Animates/Humans
Marra	TOP	Ø	

At this stage of research, it is unclear to what extent this system operates as well on modifiers and determiners of heads of nominal expressions.[10] Heath (1984: 171, 526) claims that in Wubuy, modifiers and determiners of nouns agree in terms of this opposition beween topic and non-topic prefixes (what he calls "continuous" vs. "punctual", respectively).

2.1 Characteristics of articles

I have characterised the NC prefix systems of Ngalakgan, Wubuy and Marra as an "article" system. In order to evaluate this claim, it is important to understand what I mean by "article". Here, I follow Himmelmann (2001) and Lyons (1999). But first, an aside on my use of the term "NP". Here and throughout I use the term "NP" very loosely with reference to SE Arnhem Languages. In §7 I argue that these languages do not, in fact, have a well-defined phrase of this kind (following Heath 1986). Until then, the reader should understand "NP" as a loose abbreviation for

9. See section 2.1 immediately below for my use of the term "NP" in this chapter. Essentially, I have abstracted away from the distinction drawn by Abney (1987) and many others since between NP and DP.

10. Thanks to Emmon Bach for this important question.

"nominal expression"; i.e., a string of (not necessarily contiguous) words co-referring to an entity.[11]

Himmelmann's first formal criterion for distinguishing articles from other grammatical elements is that they "occur only in nominal expressions". NC morphology in all three languages occurs both in NPs and on verbs. However, the NC morphology of verbs differs from that in NPs. In particular, the alternations shown in tables 1–3 above are found only in constituents of NPs. This is what we would expect of an article system.

Crucially, articles differ generally from other determiners such as demonstratives in being unable to be used independently of some nominal head (Himmelmann 2001):

(1) a. *I've* see*n the/that position paper somewhere round here.*
b. *I've* see*n *the/that Ø somewhere round here.*

This characteristic is also true of the noun class marking forms in these three languages. In Wubuy and Ngalakgan, the articles are bound elements ("prefixes"). In Marra, the article is a word, but one which cannot occur independently (Heath 1981: 64). In all three languages, the article must precede the nominal head, thus satisfying Himmelmann's second criterion (2001: 832), that articles occupy a fixed position with respect to the head.[12] In this respect, they differ from both demonstrative and adjectival modifiers in Southeast Arnhem languages, which can either precede or follow the head.

In addition, articles are said to differ again from demonstratives and quantifiers in being obligatory for all noun phrases, though Himmelmann (2001: 832) qualifies this by limiting it to "grammatically definable contexts". It is difficult to evaluate such a claim in all cases. For one thing, many languages allow zero articles under certain discourse conditions. For instance, English allows a zero determiner for indefinite plural and mass NPs. Ngalakgan and Wubuy both allow a zero NC prefix. What I claim here is that this form is not without an interpretative function. As in English, the lack of an article means that the speaker intends the hearer to understand

11. The traditional Australianist analysis of such constructions is that the constituents are related through apposition; see Sadler & Nordlinger (2006) for a recent formal analysis within LFG.

12. Emmon Bach points out that Himmelmann's criterion might rule out systems such as that in some continental Scandinavian varieties, where the article can be realised either as a proclitic or as a suffix/enclitic, depending on syntactic factors (see, e.g., Haugen 1982 for the origins of this system).

the referent in a certain way.[13] I identify three contexts below where particular forms of the article in Southeast Arnhem languages are grammatically required.

Thirdly, articles commonly encode two kinds of discourse-related meanings. The first I will refer to as "discourse identifiability" (one component of "definiteness"). This refers to the extent to which the speaker can infer that the hearer will be able to identify the referent s/he has in mind (cf. Heim 1982). In English and some other European languages, discourse identifiability is typically marked by the contrast between indefinite and definite noun phrases. A speaker uses a definite noun phrase when s/he infers that the referent of the noun phrase is identifiable to the hearer.

The second notion commonly encoded by article systems is "referentiality" (or "specificity") (Lyons 1999). This is the extent to which the speaker has a specific individual in mind in using an NP. In European languages, specificity is not commonly encoded directly in article systems, though it is a feature of other article systems (e.g., St'at'imcets, a Salishan language: Matthewson 1998, as well as many creoles: Romaine 1988: 260–261).

In the three languages under consideration here, we find the following contexts determine the form of articles, to a greater or lesser extent.

(2) a. Polarity contexts (negatives, questions)
b. Information structure ("topic", "focus")
c. Case function of the NP (Wubuy and Marra only)

An example of (2a), form determined by polarity context is in (3). In these contexts, we see topic prefixes used, often obligatorily depending on the nature of the polarity and the semantic category of the referent:

(3) a. **ana-marja** num-paŋaka+na? [Wubuy]
NEUT.TOP-food 2SS > 3SO-have+NP
'Have you got any food?'

b. ku-ŋa-ka-luji **ŋana**-kumpi [Marra]
NEG-1SS-3SO-have.PPOT MASC.TOP-beef
'I don't have any beef'

These constructions are discussed in section 3, which follows.

In discourse, the topic forms are characteristically associated with discourse topics, and the zero forms with items under focus or contrast. In example (4),

13. I have grossly oversimplified the contexts for omission of an article in English here. Articles are also unexpressed with proper names and (in some contexts) mass nouns. This is a syntactically-, rather than a semantically-, determined condition of article usage, and hence the lack of an article in these two contexts does not carry an interpretive force of the same kind as it does for common count nouns.

from the beginning of a short spoken text, we find the main topic of the text, tea, introduced with short (non-topic) NC prefixes as an item in focus: by which I mean the speaker infers that the information is new and salient to the hearer. In the second clause, when the speaker refers back to this participant, she uses the long, topic prefixes.

(4) a. **ku**-janippi **ku**-peḷɲʔ **ku**-weʔ ku-meʔme [Ngalakgan]
NEUT-whatsit NEUT-leaf NEUT-water NEUT-get.PP
'(he) got whatsit, (some) [tea]leaves [and] (some) water …'

b. *en* ku-mili-ŋe+ɲ **kun-ku**-janippi **kun-ku**-peḷɲʔ
and NEUT-water-COOK+PP NEUT-TOP-whatsit NEUT-TOP-leaf
'and he boiled water [for] the tea' [30/5/96]

This kind of behaviour is reminiscent of the distribution of indefinite and definite articles in English. I examine the nature of topic and focus in Ngalakgan more carefully in section 5.

Lastly, in Wubuy and Marra, but not Ngalakgan, the occurrence of the "Oblique" forms is determined by particular case relations.[14] In both languages, an NP in a purposive role takes an Oblique NC prefix.

(5) a. ŋa-jari **a**-marja-wuj [Wubuy]
1SG-go.NP NEUT.OBL-veg.food-PURP
'I'm going for food'

b. ŋaja ŋa-ŋuji Ø-marja
1SG 1SG-eat.NP Ø-veg.food
I'm going to eat [some] food

(6) a. ŋa-cura **ŋa**-waḷca [Marra]
1SG-go.PR MASC.OBL-dugong
'I'm going for dugong.'

I will have no more to say about this context here; see Heath (1984) and Merlan (1983) for claims that case relations determine NC prefix forms more extensively.

In this paper, I will concentrate on the type (2a) cases, those determined by polarity contexts. I will argue that we can unify the behaviour of the articles that occur in Southeast Arnhem languages in both polarity contexts and in particular discourse functions by referring to them as "topic" markers.

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14. Merlan (1983: 37) argues that Ngalakgan NC prefix forms are similarly determined at least in part by grammatical function, on the basis of a quantitative investigation of texts. However, her attested results suggest at best a tendency, rather than a consistent pattern.

What is of interest in the Southeast Arnhem languages, is that it is the article which is used for assumed information, corresponding to "topic", that is also used for certain nonspecific referents, where English uses "any" as a determiner. Polarity operators have been much studied in the formal semantics literature (e.g., Ladusaw 2002), but the use of what is otherwise a marker of "topic" in polarity contexts is unknown in the literature and deserves further comment.

3. Non-specific referents in Ngalakgan, Wubuy and Marra

The clearest place to find oppositions in the use of the article forms is in nominals under the scope of polarity operators: yes/no questions and negation. In all three languages, nominals under the scope of these operators take *topic* articles. (7) is an example from Ngalakgan.[15]

(7) a. **ŋu-ku-ceɲ** cu-koʔ+ŋaŋ? [Ngalakgan]
M-TOP-fish 2SS-have+SEE.NP
'Have you got **any fish**?'

b. ŋu-ku-ceɲ ŋu-koʔ+ŋani-kkoro
M-TOP-fish 1SS-have+SEE.POT-PR.NEG
'I don't have **any fish**'

We find the same phenomenon in Wubuy and Marra. While the topic form is typical in all three languages, it is not obligatory for polarity questions.[16]

(8) juka nu-ŋu-kuṯiɲ **ana-/Ø-ŋucica**? [Wubuy]
INTERR 2SS-NEUT-get.PC NEUT.TOP-/Ø-fish
'Did you get any fish?'

(9) ŋi-ka-luntiji **ŋana-/Ø-kumpi** [Marra]
2SS-3SO-have.PR M.TOP-/Ø-beef
'Have you got any beef?'

Just the use of the topic article with the appropriate intonation is enough to realise a yes/no question of this kind:

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15. Verb glosses in small caps as in these examples indicate finite verbs used as "light verbs" (without their full independent meaning) with cooccurring "coverbs": an open class of nonfinite verbs found in many northern Australian languages; see Amberber et al. (2007) for discussion.

16. It is possible to use the non-topic form (Ø), though this is infrequent in practice. Ordinarily, in speakers' first responses to prompts eliciting such constructions we find the topic article used. It is unclear what conditions the variation that exists.

(10) jekke mokkol, jekke **mun-ku-maj?** [Ngalakgan]
INTERR father INTERR VEG-TOP-food
'Hey dad, [is there] any vegetable food?'

I now examine two other contexts involving polarity and topic articles.

3.1 Negative contexts

In negative contexts, use of the topic form is obligatory *with the polarity meaning* in Wubuy and Marra.[17] Use of the zero form is ungrammatical in both languages, according to my informants.

(11) waaɻi ŋa-ŋu-kuʈaŋi *(**ana-**)**ŋucica** [Wubuy]
nothing 1SSB-NEUT-catch.PC NEUT.TOP-fish
'I didn't get any fish'

(12) ku-ŋa-ka-luji *(**ŋana-**)**kumpi** [Marra]
NEG-1SG-3SO-have.PPOT M.TOP-beef
'I don't have any beef'

In Wubuy at least (where I have tested this), the non-topic form is also possible within the scope of a negative. But in this case, the nominal no longer has a polarity interpretation. Rather, it has a specific interpretation, according to my informants.

(13) waaɻi ŋan-tani Ø-**ŋucica** [Wubuy]
nothing 1SSB > ANIM-spear.PC Ø-fish
'I didn't spear a fish (one in particular)'

The contrast between these two interpretations can be represented formally as in (14). (14a) represents the polarity meaning. Here, the negative has scope over the existential, and therefore over all arguments of the existential, including the entity under discussion. In (14b) we see the specific meaning. Here, the negative only scopes over the conjoined predicate. The entity satisfying the variable is still asserted to exist.

(14) a. ¬∃x [fish(x) & got(I, x)]
'There is no x, x a fish, such that I got x.'

b. ∃x [fish(x) & ¬[got(I, x)]]
'There is an x, x a fish. I did not get x.'

17. I did not specifically test this in Ngalakgan, and such testing is now impossible, but there are no convincing examples of a *non*-topic nominal under the scope of a negative in my Ngalakgan data.

In some cases, then, the variation in noun class morphology can be manipulated by speakers to encode differences in referentiality. This indicates that the variation in these elements is both meaningful and (apparently) compositional. This compels us to understand what kinds of semantic and pragmatic oppositions these grammatical elements encode.

3.2 Content questions

Nominal expressions under the scope of Wh-pronouns also tend to take topic articles, though again this is not obligatory in Ngalakgan and Wubuy, at least for certain classes of nouns.

(15) janaʔ-pa cu-koʔ+ŋa+n, **kun-ku-parakkaɭ** [Ngalakgan]
what-INTERR 2ss-have+SEE+NP NEUT-TOP-spear
'What kind of spear have you got?' (Lit. 'What have you got, spear-wise?')

(16) ma-jamiŋkarina **mana-ɭarta** [Wubuy]
VEG-do.what.PR VEG.TOP-spear
'What kind of spear [did you get]?' (Lit. 'It does like what, spear-wise?')

In Marra, according to my informants, the topic article is obligatory in content questions for certain referents, though not others.

(17) ŋankuniɾŋa *(ŋana-)**tuŋal** [Marra]
what.kind M.TOP-spear
'What kind of spear [is that]?'

I do not have sufficient data to figure out what the difference between these classes is, though the mass/count distinction may be relevant. The nouns that allowed a zero article were /mama/ "vegetable food", and /ɳʈawaj/ "language"; those that required the article were "spear", /kalwiɻi/ "dog", /walaɲan/ "fish", and/ɻaji/ "small game animal". So the difference is not one of animacy, though it may be one of individuation. I examine this notion further in section 4 below.

By themselves, topic NPs do not have to have a polarity interpretation, even in questions. Where the NP does not form a complex constituent with the Wh-pronoun, as in (18), the NP has the typical interpretation of topic NPs: a discourse-familiar entity. In this case, I have included the speaker's translation in Kriol, which uses the Kriol definite article *thet* (Munro 2004).[18]

18. Nicholls (to appear) shows that this determiner behaves in a similar fashion to the topic articles of Wubuy, Marra and Ngalakgan, which are three of Kriol's substrate languages.

(18) jirkkaʔ-pako **ŋu-ku-ceɲ** cu-pawunʔ-miɲ, mokkol! [Ngalakgan]
why-indeed M-TOP-fish 2SS-leave-PP father
*Dedi wai **thet fish** yu bin libim?*
'Dad, why did you leave the fish?'

What makes the distribution of articles in these languages unusual is that it is the topic article in all three which is associated with topical, definite referents on the one hand, but with non-specific referents on the other. We can demonstrate the distinction between topic and non-topic forms with several standard tests. Firstly, topic articles are excluded from referents in presentational or thetic contexts:

(19) wu-ŋa ŋaŋkaja (*ŋ**ana**) **Ø-ʈawar**! [Marra]
2SS-look there (*M.TOP) M-**snake**
'Look, there's a snake!'

This is an effect known as the "definiteness restriction" in English (Milsark 1977). In English, we find the following contrasts in acceptability of NP types in thetic contexts:

(20) a. *There is/are {a certain/some/a few} cow(s) in the backyard.*
b. *#There is/are {all/the/every/Fred's/that} cow(s) in the backyard.*

Milsark calls NP types in the first set, which are compatible with thetic contexts, "weak NPs". The other set, which are incompatible with thetic contexts, he calls "strong NPs". Therefore, the topic article looks like a "strong" determiner, in Milsark's terms, like the English definite, and unlike the English indefinite article. If this comparison is legitimate, then what is it doing in polarity contexts? In the next section, I examine polarity contexts in English to establish some of its characteristic features.

3.3 Polarity in English

In English, the determiner most closely associated with polarity is *any*. There are two subtypes of *any* in English (Lyons 1999: 39). The reduced form of *any* [ṇi] is restricted to negative, interrogative, and hypothetical contexts, as in (21).[19] It cannot be used in ordinary declaratives (22a,b) (Lyons 1999: 39). Furthermore, this *any* can only take mass or count plural nominals as complements (23).

(21) a. *Do you have **any** food?*
b. *Have you got **any** money?*
c. *I don't have **any** students.*

(22) a. **I have **any** food.*
b. ***Any** food is left in the fridge.*

19. Lyons (1999: 39) also distinguishes a relatively "full" form of *any* [ɛni], used in declarative sentences with a "random" interpretation. e.g., "Take any book you want".

(23) a. **Do you have **any** book?*
b. **I don't have **any** book.*

There are two mysteries then. The first is why the Southeast Arnhem languages should use something that otherwise looks like a strong determiner in polarity contexts. The second is whether the Southeast Arnhem languages, like English, also require an NP in polarity contexts to be obligatorily non-singular.

In French, we find the definite article used in polarity contexts also, again with mass or plural nouns as complements. So the "any" interpretation of the topic prefix in examples such as (24) below can be compared to the use of *de* "of" + definite article in French expressions having a similar range of meanings in (25).

(24) Jekke, ŋu-ku-ceŋ/caŋku cu-koʔ+ŋa+n? [Ngalakgan]
INTERR M-TOP-fish/meat 2SS-have+SEE+PR
'You got any fish/meat?'

(25) a. *Vous avez **des** chambres/livres/arbres*? [French]
you have+PR of+DEF+PL rooms/books/trees
'Do you have any rooms?'

b. *Vous avez **du** poisson/pain/boeuf*?
you have+PR of+DEF fish/bread/beef
'Do you have any fish/bread/beef?'

The French expressions are licensed in these contexts by the partitive operator, the genitive preposition (Lyons 1999: 100). The nominal expression that follows has the same form as a generic expression (a "kind reference") in French:

(26) ***Le lion** est une féline.*
The lion is a cat/Lions are cats.

However, unlike French and English, Ngalakgan does not require nominals under the scope of polarity operators to be *overtly* either plural or mass. If we believe that the interpretation of these expressions is more or less the same in each language, then we need to understand two things: the nature of number marking in Southeast Arnhem languages, and the related question of the nature of generic reference.

4. Number and quantification of nouns

In Ngalakgan, with the exception of nouns referring to kin relations, there is no obligatory overt number marking on nouns themselves.[20] What forces the

20. As in Wubuy, both human and non-human nouns in Ngalakgan can take the DUAL suffix /-ppiraʔ/, but the PLURAL suffix /-ppulu/ is restricted to kinship nouns. Dual number marking

interpretation of a common noun like /miɻppara/ "child/children" as singular or plural is the occurrence of pronominal agreement on the verb.

(27) a. ŋu-ku-miɻppara-jiʔ **pur**-Ø-ŋaniɲ
M-TOP-child/children-ERG 3PS-3SO-see.PC
'The **children** saw him/her/it.'

b. ŋu-ku-miɻppara-jiʔ **Ø**-ŋaniɲ
M-TOP-child/children-ERG 3SS > 3SO-see.PC
'The **child** saw him/her/it.'

Overt number marking is simply not possible for nouns referring to non-humans, most of the time. In (28), for instance, we find Ø agreement for subject on the verb, even though the referent of the subject is clearly plural (Baker 2002: 63):[21]

(28) a. ceɲ-jarʔ ŋu-ŋaʔŋa ku-**Ø**-ɻapon-ʔkon
fish-many 1SS-see.PP NP-3SS-go.PR-REL
'I saw lots of fish moving around.'

Even where explicitly quantified, nonhuman (especially inanimate) nouns may lack plural agreement:

(29) ku-Ø-wac-jereʈ-ʈa
NP-3SS-each-grow-FUT
tubala wana gro
'They two [trees] will grow.' [3/9/97]

However, in special circumstances, for "higher animates", plural agreement is an option available to speakers (Baker 2002: 59):

(30) waʔ-waŋkiɲ **puru**-wulup ŋu-ku-cerk
ITER-one 3PS-swim M-TOP-bird
'The birds are bathing one by one.' [12/7/96]

In Wubuy, in a common pattern, *only human nouns are able to or required to* take overt nominal number marking (Heath 1984: 195).[22]

(31) wu-kuru oo-'pa-ni a-waɻak [Wubuy]
NEUT-PRO NEUT-ANAPH-NEUT NEUT-coffin

on non-human nouns is optional however, and even where marked for dual, inanimate nouns can nevertheless still not take dual agreement on verbs, though "higher" animates occasionally can take plural agreement; see example (30) below.

21. The NONPAST prefix /ku-/ is restricted to 3rd person "singular" subjects, in PR, FUT and PRNEG tenses/moods of non-nominal verbs in Ngalakgan. That is, to subjects which are either not overtly marked for number or which are interpreted as singular.

22. As in Ngalakgan, non-human nouns in Wubuy can take the DUAL suffix, though verbs will still lack dual agreement for such nouns. So dual agreement in verbs is restricted to humans.

wara-pu-puŋkawa **wii**-naraŋi-wukic
PL-DUP-boss 3PS > ANIM-watch.PC-just
'**Some bosses** watched over that coffin' (Heath 1984: text 52.7.2)

Essentially the same system operates in Marra (Heath 1981: 73–75). As in Ngalakgan, non-human number must be inferred from context. I propose that the way that speakers do this is to use a principle of interpretation like that in (32):

(32) **Default interpretation principle for referents:**
The default interpretation of NP mentions from the inanimate classes is non-individuated, for humans it is individuated. The interpretation for mentions of animates is optionally individuated, depending on discourse prominence.

Inanimates are commonly *restricted* from taking plural agreement in many Australian languages.[23] The difference then between European languages like English, and Australian languages like Ngalakgan and Wubuy, is in the range of obligatory number marking. I have represented this difference schematically in Table (5). What we find is that in English, number is obligatorily marked across the nominal lexicon for all classes of count nouns regardless of animacy. Only mass nouns and *pluralia tantum* lack plural marking. In Ngalakgan and most other Australian languages by contrast, number marking is either restricted or optional for all nominal classes with the exception of nouns referring to humans.

Table 5. Domain of obligatory number marking in English and Ngalakgan

	Mass	***Pluralia tantum***	**Count: inanimate**	**Count: animate**	**Count: human**
English	No	No	Yes	Yes	Yes
Ngalakgan	No	No	No	Sometimes	Yes

We therefore predict that, with the exception of NPs referring to humans, NPs in Australian languages should be compatible with interpretations of singular,

23. 'The three nonhuman categories (MSg, FSg, Ne) could, in theory, each permit DU and PL class/case prefixes … In practise [sic], nonhuman nouns tend to occur in "SG" form (MSg, FSg, Ne) regardless of actual number, though this is not an absolute rule. The usual way to refer to two antelope kangaroos (/pa⌊inkama/), for example, is to juxtapose the numeral /wuruca/ "two" to the formally MSg noun /wuruca pa⌊inkama/ "two antelope kangaroos" …The Pl form, e.g., /(wala) wul-pa⌊inkama/ (PL.TOP PL-antelope.k) "antelope kangaroos", while not totally ungrammatical, is even less used … **Informants were hesitant even to approve such Pl-marked nouns when the linguist pronounced them**.' (Marra: Heath 1981: 76)[My emphasis and phonemic representations]

mass or plural wherever these restrictions are observed in other languages, for instance in NPs in polarity contexts in English and French. We found that in French, the form of these expressions was the same as generic references. It is therefore worth examining the characteristics of these expressions in Southeast Arnhem languages in more detail, to see whether we can find the same correspondence between generic NPs, and NPs in polarity contexts, as in French.

5. Generics

In English, the types of NPs allowed as generic (or "kind") references in subject position are quite restricted – bare plurals, mass terms, and definite singular NPs are the most generally available types in this context:

(33) a. *The echidna is common around these parts.*
b. *Echidnas are common around these parts.*
c. *#An echidna is common around these parts.*

When we examine generic references in Southeast Arnhem languages, we find that both topic and non-topic NPs are permitted, with the distribution determined by information packaging factors, as in ordinary narrative. However, the short NC prefix in Ngalakgan is permitted only with inanimate referents, not with animates. I suggest below that we can explain this restriction with respect to the principle of interpretation of number proposed above in (32).

I will now discuss some of the characteristic distributions of articles according to discourse function. My comments will be restricted to Ngalakgan, since the majority of my research has been in that language. In the case of animate referents, we find that **topical** referents (/ʈukuɭaʔ/ in line (34a) below) are realised with a topic prefix in right-dislocated position. I take topics to be "what the sentence is about" (Vallduví & Vilkuna 1998), while noting that this is an unsatisfactory definition. I will have more to say about topics below. Referents in **contrast** in Ngalakgan are typically preposed, and typically take a zero article, as does /wanar/ in line b. Here, the contrast is with the preceding topic, /ʈukuɭaʔ/. Hence, these are more specifically **contrastive topics** in the sense of Myhill (1992) or Vallduví and Vilkuna (1998). The content of the contrast (the "comment"), is their typical habitats – trees, in the case of ringtailed possums, /ʈukuɭaʔ/, and caves, in the case of rock ringtailed possums, /wanar/. These latter elements I identify with **focus**: the locus of New information in the clause, or what the speaker wants the hearer to know about the topic.

(34) a. cantaʔ-kaʔ ku-joŋo+n, **ŋu-ku-tukuɭaʔ** [Ngalakgan]
tree-LOC NP-lie+PR, M-TOP-possum
'it lives in trees, the ringtailed possum.'

b. **wanar**, miɻʔ-kaʔ ku-joŋo+n
[marsupial.sp] cave-LOC NP-lie+PR
'[but] the rock ringtailed possum lives in caves,'

c. miɻʔ-kaʔ ku-joŋo+n, **ŋu-ku-wanar**
cave-LOC NP-lie+PR, M-TOP-[marsupial.sp]
'it lives in caves, the rock ringtailed possum,'

d. **tukuɭaʔ** cantaʔ-kaʔ ku-joŋo+n
possum tree-LOC NP-lie+PR
wanarr im lib langa keib, dugurlah im lib langa tri
'[but] ringtailed possums live in trees.'

We can identify these parts of the information in this short excerpt from natural speech with corresponding information structures in English. For instance, a translation which highlights the roles of each part of the information structure could take the form in (35).

(35) a. Speaking of ringtailed possums, they live in TREES.
b. As for rock ringtailed possums, it's CAVES that they live in.
c. They live in CAVES, those rock ringtailed ones.
d. But [ordinary] ringtailed possums, they live in TREES.

Here, capitals indicate "focal accent", typically associated with both New and Contrastive information in English. A fundamentally similar kind of structure is used by the speaker in his Kriol translation, involving an initial statement of topic, followed by what is an independent clause starting with a 3rd person singular subject pronoun *im*, and also involving focal accent on the locus of New information: *tri* "tree" and *keib* "cave". What differs is the associated word order: in Ngalakgan, both topics and focus precede the verb, whereas in English, focus commonly occurs on postverbal NPs.

This particular kind of structure, involving a direct contrast in both topics and comments, is associated with a specific intonation pattern in English, the so-called "B-accent" (Bolinger 1965; Jackendoff 1972; Rooth 2005). This involves a rise on the contrastive topic, and a fall on the comment. In Ngalakgan too, there is a distinctive intonation pattern associated with such structures, which is very similar to the English pattern: as in English, the topic ends on a High tone, and the comment ends with a fall.

Wubuy has similar characteristics, as far as I can determine. Both Wubuy and Ngalakgan have a suffix meaning "only", whose purpose is to restrict reference to one of a set of potential alternatives, in a very similar manner to contrastive focus in English (cf. Rooth 1985; Vallduví & Vilkuna 1998). In such contexts, nouns

must take zero in Wubuy (Heath 1984: 217), and zero or (if inanimate) a short prefix in Ngalakgan. Hence, topic prefixes are restricted from contexts involving either new information or contrast or both. Animate referents cannot take the non-topic (short) prefix in such contexts, but inanimate referents can, as noted:

(36) a. waŋwaŋ, kuŋjŋara [Ngalakgan]
T. grandiflora, *Syzygium* sp.

b. **ku-paɻamulk**
NEUT-[gourd.sp]

c. **ku-paɻamulk**-jiɲci, kuŋmaŋʔ ku-mu-jereʈ-Ø, ku-mu-joŋo+n
NEUT-[gourd.sp]-too, maybe NP-VEG-grow-NP, NP-VEG-lie+NP
thet baramulk tri im gro … la riba

'Terminalia, wild apple, and wild cucumber grow [there], they are [there] (sc. "by the river" from previous context) …'

d. **ku-wulara**, **mu-purunpurun**
NEUT-[plant sp.] VEG-*Cassytha filiformis*

e. ŋuruŋtuc-jiʔ ku-mu-ŋu+n kuŋmaŋʔ ku-wulara
emu(M)-ERG NP-VEG-eat+NP maybe NEUT-[plant.sp]
'Emus eat *wularra* and *Cassytha*.'

Inanimates can also take a long prefix when topical, here, "pandanus" was mentioned in the previous clause and is the topic of (37), in addition to the main topic "emu":

(37) ku-mu-ŋuni+kkoro **mun-ku-ɻok**, kacca [Ngalakgan]
NP-VEG-eat+PRNEG VEG-TOP-pandanus nothing
'It [emu] doesn't eat [the] pandanus, not at all.'

Unless contrastive, the basic form of generic subjects is the topic form, for both animates and inanimates. In Marra, as in Ngalakgan, references to kinds (when subjects) take the topic article:

(38) a. ŋapa **ŋana** **Ø-juntuɲuka** wa-Ø-ciɲca-jiɲca Ø-wiici,
also M.TOP M-turtle NP-3SS-DIST-eat.PR M-grass,
Ø-maca
M-sea.grass

ŋana **Ø-waɭca**, wa-Ø-ciɲca-jiɲca ŋana Ø-wiici
M.TOP M-dugong NP-3SS-DIST-eat.PR M.TOP M-grass
'The turtle/turtles eat grass, sea grass [that is]. And dugongs, they eat grass [too].' [Marra]

In the Marra example, the nature of these NPs as external topics is reinforced by their lack of case-marking; we would expect ergative case marking here, realised as oblique forms of the article and NC prefix: /ŋani ŋa-juntuɲuka/. We find similar examples in Ngalakgan.

The association between "topics" and generics has been noted before, most recently by Cohen & Erteschik-Shir (2002), and I discuss this association in the following section. I will argue that, whatever the reason for this association, it can help us understand why the same form appears in polarity contexts.

6. Topics as restrictors

I have suggested that a common reading of the topic NP form is as a sentence topic. In generic references, the topic refers to a kind. But in polarity contexts, I suggest, the NP with topic marking restricts the scope of the polarity operator, which in some cases is non-overt. In this way, the topic-marked noun serves to provide the context within which the operator is to be understood. This is one common way of characterising the meaning of topics: that they delimit the common ground within which a proposition – a comment – is to be understood. For instance, for Strawson (1964), topics have three properties (here I quote Erteschik-Shir 1997: 9):

Characteristics of topics

(39) a. The topic is what a statement is about.
b. The topic is used to invoke "knowledge in the possession of an audience".
c. "The statement is assessed *as* putative information *about its topic*."

And indeed, the polarity contexts can be translated quite naturally into English with left- or right-dislocated topic structures:

(40) a. *As for fish, I didn't get any. I didn't get anything, fish-wise.*
b. *As for fish, did you get any? Did you get anything, fish-wise?*
c. *As for fish, what kind did you get? What did you get, fish-wise?*

Translations with indefinite NPs, by contrast, are ill-formed:

(41) a. *#As for a/some fish, I didn't get any.*

In formal terms, we can think of the topic-marked NPs in Southeast Arnhem languages as a topic which maps to the restrictor of a quantifier, following Cohen &

Erteschik-Shir (2002), either a negative existential or a questioned existential in the case of negative polarity or polarity question contexts:[24,25]

(42) **Negative polarity items**
'I have **no fish**' is to be interpreted as
$\neg\exists_x$;**[C(x, ↑fish)]** [(have(I, x)]

'It is not the case that there exists an entity *x*, *x* a representative of the kind **↑fish**, such that I have *x*'

(43) **Interrogative polarity items**
'Did you get **any fish**?' is to be interpreted as
?$\exists_x$;**[C(x, ↑fish)]** [(got(you, x)]

The following is either true or not true (and I would like to know which): 'there exists an *x*, *x* a representative of the kind **↑fish**, such that you got *x*'

The content question is a lot trickier to figure out.[26] But it seems we need to separate out the presupposition from the actual meaning associated with the speech act.

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24. Heath (1986) similarly claims that the topic (his "continuous") form serves to indicate the scope of a negative operator, though he found no contrast in specificity such as the one in (13). Heath apparently found no correlation between the topic form and interrogative contexts. Heath (1984: 579) does identify conditionals as another context requiring the topic form obligatorily. Apart from questions and negation, conditionals are the other major grammatical context for negative polarity items (NPIs) in English, e.g., *If you find any bread, I'd quite like some toast*. The obligatory use of topic articles in conditionals in Wubuy lends further support to the contention that, in at least some functions, they have fundamental properties in common with NPIs in other languages.

25. Here I have used the notation of Cohen & Erteschik-Shir (2002) which has the general form: $Q_{x;y}$ [Ψ][Φ] where "Q is the quantifier, ψ is the restrictor, and φ is the nuclear scope. The quantifier binds the variables to the left of the semicolon (*x* in this case), and variables to the right of the semicolon (*y*) are bound by existential closure" (Cohen & Erteschik-Shir 2002: 149). Cohen & Erteschik-Shir argue that topics characteristically map to the restrictor of quantifiers, and foci to the nuclear scope. In the notation "[C(x, ↑fish)]" (for which they cite ter Meulen 1995), a kind ("↑fish") is type-shifted to an open formula containing a variable which can be bound by the quantifier. The open formula contains the "representation relation" ("C") of Carlson (1977). Hence the reading in (42).

26. I ignore here the extensive formal semantics literature, beginning with Hamblin (1973), that derives the meaning of a question from the set of felicitous answers to it.

(44) "What kind of fish did you get?"
$\exists_x$;[C(**x, ↑fish**)] [(got(you, x)] "There exists an *x*, *x* a representative of the kind ↑ **fish**, such that you got *x*" [presupposition/common ground]
→ What I want to know is, what is the **name of the subcategory** of the life-form "fish" to which x belongs?

The question in (44) has two parts, representing the intension on the one hand, and the speech act import, on the other.[27] The intension is equivalent to a declarative such as "you got some kind of fish". It equates to the presupposition element of the question (Jackendoff 2002 among others), the part of the question that can be omitted in a felicitous, but elliptical response such as "Bream". The second part of the meaning encodes the speech act: a request by the speaker for the hearer to supply a name in the taxonomic domain specified by the nominal phrase following the Wh-pronoun.[28] I am unclear about how to formalise this speech act however.

In Japanese, we find a similar restriction. Generic statements, at least without context, are ill-formed with *ga* (Nominative)-marked NP subjects, they must take *wa*, the topic clitic (examples from Inami 2005: 84; cf. Shibatani 1990: §11.2):[29]

(45) a. ***Neko*** ***wa*** *sakana* *o* *tabe-ru*
cat TOP fish ACC eat- NPST
'Cats eat fish.' (Not: 'The cat eats a fish.')

b. ***Neko*** ***ga*** *sakana* *o* *tabe-ru*
cat NOM fish ACC eat-NPST
'The cat/a cat/some cats eat(s) a fish/some fish.' (Not: 'Cats eat fish.')

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27. Here I follow Jackendoff (2002). In current predicate logic, there appears to be no way to derive the meaning of the questioned part here. The question asks for an answer of the kind "Bream", i.e., a fish species name. It does not seem possible to distinguish individuals of this kind, encompassing any individual belonging to a taxonomic species, from ordinary referents, except perhaps through a second order calculation.

28. That this is the only information requested by the question can be demonstrated by the fact that an elliptical answer such as "Bream" can felicitously be used in response to quite distinct questions, such as "What's that fish you've got there?", "What"s the fish on special today?", 'What's the fish that commonly inhabits inland rivers in Northern Australia?', and so on. What these questions have in common is that the information that is requested is the same in every case: the name for a fish species. It is not clear how to represent this kind of referent in predicate logic, since predicate logic does not appear to distinguish individuals at distinct taxonomic levels.

29. However, (45)b is acceptable as an answer to a question such as "What kinds of animals eat fish?" This is an instance of the 'exhaustive listing' use of *ga* (Shibatani 1990: 263, citing Kuno 1973: 38), which corresponds to the focus of new information (Shibatani 1990: 269–70). Thanks to Gavin Austin, Ben McInnes, Kazuko Obata and Nick Reid for discussion of these examples.

It is not immediately clear to me why it should be the case that topics are associated with generic referents, though Cohen & Erteschik-Shir (2002) is one proposal. In any case, it is relatively clear why NPs in polarity contexts in Southeast Arnhem languages have the forms that they do: because they are topics, references to kinds, and only this kind of NP can map to the restrictor of a quantifier. I suggest in what follows that this is because these languages, like Australian languages in general, do not allow complex multi-headed nominal expressions, and must instead "portion out" the head from the restrictor in this way. In this respect they contrast with English, where *any* behaves as a determiner.

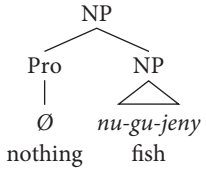
7. Complex nominal expressions in Southeast Arnhem languages

What I suggest in this section is that the polarity contexts in Southeast Arnhem languages take the form that they do because of a restriction on complex nominal expressions in these languages. It is well-known that in many Australian languages, notional NPs can be discontinuous (e.g., Hale 1983; Simpson 1983; Austin & Bresnan 1996). In Ngalakgan, complex nominal expressions can only take one of two forms: nominals in apposition, or compounds. There is nothing in Ngalakgan corresponding to the traditional notion of "Noun Phrase"; Heath (1986) makes the same claim about Wubuy.

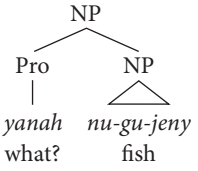
7.1 Indefiniteness operators derive complex nominal expressions

The hypothesis to be defended in this section is that nouns in the scope of negative, polarity and Wh-operators are "topic" nominals. That is, they relate one nominal expression to another nominal expression, making in turn a more complex nominal expression. In all these cases, I propose, we have a syntactico-semantic structure something like this:[30]

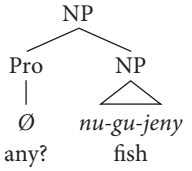
(46) a.



b.



c.



The nominal in topic form provides the name for the "kind" of which the pronominal head is a potential member (for similar analyses of English partitives

30. Here I abstract away from the potential differences between NPs and DPs. I also abstract away from the internal structure of such phrases. These tree structures are only designed to represent the relationship between two nominal expressions within a larger nominal expression.

see Heim 1987). The polarity elements are covert in the case of (a) negation and (c) polar interrogatives; these are just the cases that have covert heads in other languages such as French and Russian. Only in the case of Wh-pronouns is the pronominal element overt; again as in these other languages.

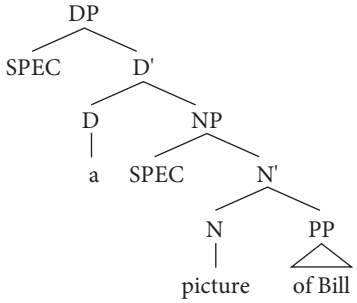
I regard the heads of these constructions as pronominal heads because of their interpretation under ellipsis of the topic nominal:

(47) Jekke, ŋu-ku-ceɲ cu-koʔ+ŋaŋ? [Ngalakgan]
INTERR M-TOP-fish 2SS-have+SEE.PR
'You got any fish?'

Kacca, ŋu-Ø-koʔ+ŋaŋi-kkoro
Nothing 1SS-3S-have+SEE-PRNEG
'No, I don't have **any**.' (Not: 'I don't have it.')

The structure of complex nominals in Ngalakgan and Wubuy is similar to the syntactic structure of complex nominals in languages such as English, as in example (48).

(48)



In these structures, the "of" is typically regarded as semantically vacuous (Heim & Kratzer 1998: 61; Jackendoff 2002). I propose that the "topic" prefixes in Ngalakgan perform much the same function as the vacuous *of* in English. In both cases, the vacuous element (preposition, topic prefix) is a signal to interpret the following nominal with respect to some coreferential nominal or pronominal head.

In all cases of complex polarity and question contexts, I propose, the nominal complement of the indefinite pronoun or operator is a referent of the type "kind". That is, the nominals in these positions do not refer to specific individuals of the given type, but rather to a class of individuals, named by the nominal. The question "Have you got any fish?" for example, is to be interpreted so that "fish" refers not to a specific fish, but to any token belonging to the kind (in this case, a "generic" or "life-form" level category). I argue in §7.3 below that these kinds of constructions in English can be used of kinds at any taxonomic level (unique beginner, life-form, generic, species) but not at the level of specific individuals. Before doing so, I address some outstanding issues.

I claimed above that part of the reason that nouns in SE Arnhem languages must take the topic article in polarity contexts is because these languages lack a well-defined NP/DP. Hence, the only way in which they can restrict the scope of the polarity operator is to use the same construction which is otherwise used for marking discourse topics in these languages. If this is the case, we might expect the same construction to be found in other contexts as well; wherever, in fact, a notional NP consists of two nominal heads. Here I examine two: quantifier constructions, and part-whole constructions. The first, I argue, can be formed in various ways, but none of them correspond to the DP structure typical of European quantifier constructions. The second is an appositional construction which does not involve the restriction of scope, and hence does not require the topic construction.

7.2 Other complex nominal expressions

Ngalakgan has several morphemes realising quantification. None of these is a determiner, many of them are bound elements in nouns and/or verbs. One quantifier which can occur as a word is /jarʔ/ "many", which occurs in examples such as (49):

(49) a. **ceŋ-jar**ʔ ŋu-ŋaʔŋa ku-ɻapon-ʔkon, [Ngalakgan]
fish-many 1SS-SEE.PP NP-go.PR-REL

b. ku-waɲcat-kaʔ ŋu-paɻeŋaniɲ
NEUT-branch-LOC 1SS-hang.PC

c. ŋu-ŋaniɲ ŋu-ku-ceŋ ku-ɻapon-ʔkon **jar**ʔ
1SS-SEE.PC M-TOP-fish NP-go.PR-REL many
ai bin klaimap langa tri ai bin luk fij bin wokabat dumaj, bigmob fij bin wokabat
'I saw many fish moving around, I was hanging on a branch and I saw lots of fish moving around.'

In the first instance of use, /jarʔ/ is compounded with the noun it modifies. Compounding of nouns with their modifiers is a characteristic feature of Gunwinyguan languages, including Wubuy and Ngalakgan. Typically such modifiers are adjectival in meaning, but quantifiers (including numerals) are also found. Baker (2008: 297–301) argues that, in such constructions, the adjective or quantifier is the head, since the compound can take verbal morphology. This is possible for the adjectival class (including quantifiers) but not for common nouns such as /ceŋ/ "fish".

There is also a bound stem /-kappul/ "all", which must be affixed to either a noun or a verb. In (50), we find it affixed to the noun "child/children", and translated

in Kriol by the determiner/quantifier *ola* (from English "all the") which indicates exhaustive reference to a plural group (Munro 2004: 190).

(50) miɻppara-kappul ŋu-pu-woʔwo jir-Ø-ŋowiŋ [Ngalakgan]
child-all 1SS-3PO-give.PP 1PS-3O-eat.PC
ai bin gibit ola biganini, [mela] bin dagat na
'I gave it [food] to all the children, and we ate.' [Txt 18/9/94]

The fact that such quantifiers in Ngalakgan can be compounded or suffixed with a nominal means that scope can be indicated directly in the morphology, in terms of locality. Where such compounds are discontinuous, as in line (c) of (49), the nominal is characteristically in the topic form.

The other kind of complex nominal expression commonly observed in both Ngalakgan and Wubuy is appositional, as in line (c) of (49), as well as generic-specific constructions as in (51) (Baker 2002: 77), or part-whole constructions as in (52).

(51) ŋun-mu-poʔpo, [Ngalakgan]
1SO-VEG-hit.PP
ku-ʈaɻʔ-jiʔ mu-**malpa**ʔ mu-ŋoɻʔ-miŋ *en* ŋun-mu-poʔpo
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]

(52) ŋu-waɻkʔwaɻk-miŋ, ku-ʈaɻʔ-jiʔ ŋun-ku-poʔpo **waɲcat**-ŋowi
1SS-DIST-go.in-AUX.PP NEUT-tree-ERG 1SO-NEUT-hit.PP branch-its
'I entered [a thicket] and a branch hit me.' [3/3/95: 1A]

In such constructions, apposition means that reference is necessarily co-extensive or at least overlapping between each constituent (see Sadler & Nordlinger 2006 for a recent analysis). For instance in (52), the speaker asserts that it is true of this proposition that he was hit by something which could be described either as "a tree" or as "a branch". The same is true of the generic-specific construction in (51). In either case, the construction does not constitute a complex nominal construction of the polarity type examined above because in the latter, reference is not coextensive. In the polarity constructions, one nominal head is a pronominal element – an overt Wh-pronoun in the case of content questions – and the other is a topic nominal. While pronouns must necessarily be able to refer contextually to any given entity (within lexical specifications of animacy and so on), it is not the case that there is a "context-free" (or lexical) relationship of hyponymy or meronymy as in the examples in (51) and (52). Rather, the reference of the complex nominal expression in polarity contexts must be constructed by application of a topic restriction on the scope of the operator, as suggested in §6. I conclude then, that there are no other

constructions of this type in Wubuy or Ngalakgan apart from those examined in §3 which would require the use of the topic form of the article.

7.3 Complements of nonspecific operators in English

I have claimed that the complements of nonspecific pronouns in Ngalakgan, Marra, and Wubuy must be interpretable as natural kinds. I now consider how well this analysis extends to English. The analysis implies that these kinds of structures would be infelicitous with nominals that could not be construed as natural kinds. While it is difficult to come up with nominal expressions that could *not* possibly be construed as natural kinds, a nominal expression that appears to be impossible in such constructions is a coordinated NP. These are very difficult to make acceptable, even where the two NPs belong to the same taxonomic class, as in (53), unless the coordinated NP itself is a natural kind of a recognised type, as in (54):

(53) a. *#Do you have any coke bottles and green bottles?*
b. *#I don't have any coke bottles and green bottles.*
c. *#What coke bottles and green bottles have you got?*

(54) a. *?Do you have any brothers and sisters?*
b. *?I don't have any brothers and sisters.*
c. *#What brothers and sisters have you got?*

The typical analysis (see e.g., Matthewson 2001 for discussion) of these operators in English is that they fill the determiner position in a DP, and take a bare NP as a complement. In formal semantics, these determiners are quantifiers that take entities of type ⟨e, t⟩ as complements. The type ⟨e, t⟩ is the type of one-place predicates (e.g., "is a fish"); which are non-referential. The analysis proposed here suggests that the complements of nonspecific operators in Ngalakgan are not referential, since they refer to kinds, but are in fact individuals – of type ⟨e⟩ – rather than predicates. I examine these analyses briefly here.

Indefiniteness operators are clearly not determiners of a straightforward kind. Unlike ordinary determiners, the complement of these determiners cannot, in fact, be any kind of noun, I have suggested. It must be a noun that can itself be interpreted as a kind reference. Moreover, these same determiners (or related forms) can stand alone, unlike articles:

(55) a. *I don't have any/one* **I don't have a*
b. *Do you have any/one?* **Do you have a?*
c. *What have you got?*

When independent, forms such as "(negative) any", "(negative) one" and "what?" seem to be usually interpreted with reference to some kind already established in discourse. Sentence (55a)is acceptable just if the discourse context contains an NP

with respect to which which "any" can be interpreted, e.g., "I'm looking for a pen".[31] Notably, although indefinite, nonspecific references are okay as antecedents of stand-alone "any", specific references (indefinite or definite) are not. While the definite, specific referent in example (56a) is definitely out as an antecedent to *any*, example (b) is marginally acceptable perhaps, under the interpretation given, making it clear that "any" must be anaphoric to an understood "kind" reference "books by Peter Carey".

(56) a. *'I'm looking for the iron.'*
**'I don't have any.'*

b. *'I'm looking for this book by Peter Carey I've heard about.'*
?*'I don't have any [books by Peter Carey]'*

As we would predict though, a preceding reference to a definite, though nonspecific reference (a generic reference), is perfectly okay as an antecedent for "any".

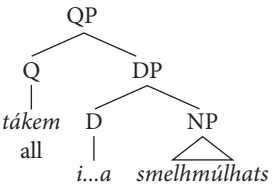
(57) *'I'm here in New England looking for the Forest Raven.'*
'There aren't any around here.'

I conclude that polarity expressions of the type examined here in English are like those found in French, Ngalakgan and other languages. They are complex NPs (or DPs) containing an indefinite element (which is ambiguous between pronominal and determiner functions) whose reference is delimited by another nominal expression referring to a kind.

In the case of Ngalakgan, the case against indefinite pronouns being determiners is even stronger, since the complements of these pronouns are themselves DPs, if we regard the NC prefixes as determiners of some kind, as I have proposed. This makes the indefinite expressions in Ngalakgan look very similar to the structure of quantified expressions in a Salishan language, St'át'imcets, discussed by Matthewson (2001). Matthewson shows that in St'át'imcets, quantified noun phrases, such as that in (58), must have the structure in (59), where a determined NP (a DP) is a sister to a quantifier word such as *tákem* "most":

(58) *tákem* *i* *smel?múl?ats-a*
all DET.PL woman(PL)-DET
'all women'

(59)



31. Note that such indefinitely determined NPs are okay as kind references (depending on the predicate and other factors, such as tense): "A pen is a kind of writing implement".

On the basis of the St'át'imcets analysis, Matthewson reanalyses quantified NPs in English. She concludes that the sister of the quantifier expression in English is not a bare NP predicate, as is usually assumed in the semantics literature, but a DP referring to a kind, as I have proposed is the case for indefinite expressions in both Ngalakgan and English.

8. Conclusion

Studies of Australian languages have shown that there are often correlations between information structure and word order (e.g., Blake 1983; Austin & Bresnan 1996; Simpson & Mushin, this volume). However, Australian languages are often claimed to lack articles of the usual European sort (e.g., Dixon 2002: 66) and, as a consequence, to lack thoroughgoing formal distinctions of discourse status –though this assumption is rarely examined in a critical fashion. The noun class prefix alternates found in Ngalakgan and Wubuy, and the articles in Marra, appear to have functions which are associated with discourse status interpretations, regardless of case function. This would make these languages relatively unusual in the Australian context. While the discourse-linked functions of what I have called articles in Ngalakgan, Marra and Wubuy are not unexpected, the occurrence of the "topic" form of the article in polarity contexts is unusual in cross-linguistic terms. I have argued that this distribution makes sense if the primary function of the "topic" prefix forms is to restrict the scope of an operator in a complex nominal expression. The topic-prefixed NPs with nonspecific interpretations are found in just those contexts where they are bound by polarity operators realised as pronominal heads, a pattern also observed in languages such as French and Japanese. This account of the semantics of articles in Ngalakgan, Marra and Wubuy makes it apparent that these languages have both a more constrained, and more richly interpreted, array of referential expressions than the existing accounts would lead us to expect.

Abbreviations

Boundary symbols, in order of increasing freedom and productivity: + ("root-level"), – ("word-level"), = ("clitic") see Baker (2008).

1, 12, 2, 3	1st exclusive, 1st inclusive, 2nd, 3rd person
ANAPH	anaphoric
ANIM	animate
B	B-Form argument prefix (Wubuy)
COM	comitative
DAT	dative

DIST	distributed
DUP	reduplication
DUR	durative
ERG	ergative
F/FUT	future
F/FEM	feminine noun class
GEN	genitive
INTERR	interrogative
LOC	locative
M	masculine noun class
NC	noun class (M, F, VEG, NEUT)
NEUT	neuter noun class
NP	non-past
O	object
P	plural
PL	"plural" noun class
PC	past continuous
PNEG/PRNEG/FNEG	past/present/future negative suffixes
POT	potential
PP	past punctual, present perfective
PR	present
PROX	proximate deixis
REL	relative/subordinated
S	singular
S	subject
TOP	topic
VEG	vegetable noun class

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"Double reference" in Kala Lagaw Ya narratives

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The label "double reference" is introduced to describe clauses which incorporate reference to the same participant in the same grammatical function via use of two distinct nominal expressions. This paper investigates the discourse-referential function of double reference in narratives in Kala Lagaw Ya, the language of the Western Islands of the Torres Strait. A distributional analysis of the reference tracking options used in the stories is reported, with particular discussion of the Givónian measures of "Referential Distance" and "Potential Interference". For referential distance the results situate "double reference" as an intermediate accessibility marker, falling between ellipsis and pronouns on the one hand and full NPs on the other, but patterning statistically with the latter. With respect to a measure of potential interference, the results are suggestive in locating double reference at the extreme positive end of the scale, although this tendency is not statistically significant. Finally, a narrative structure analysis of one story is reported, showing that double reference almost always occurs in the introductory clauses of three highlight episodes of the story.

1. Introduction[1]

One of the most important tasks speakers and writers must negotiate is the management of interpretable reference to entities they wish to talk about. This task is

1. This work is based in large part on my own field work in the Torres Strait in the 1990s (supported by a grant from the Australian Research Council), and I am very grateful to members of the Mabuiag, Saibai and Thursday Island language communities for their hospitality and help in studying the language. The work discussed in this paper, in particular, could not have been done without the help and teaching of the late Ephraim Bani, Father Michael Bani, and Mrs. Kalengo Joseph. I am also grateful to Ezra and Bessie Waigana, Dhemaga Waria, Mariana Babia, and to Rod Kennedy. Any errors are of course my own and I ask speakers of the language to forgive any inaccuracies which may have inadvertently crept in. A version of this paper was presented at the Blackwood Workshop on Australian Languages 2004, in the Discourse and Grammar Interactions session, and I am grateful for comments from the audience there. The editors of this volume and an anonymous reviewer also provided a range of helpful comments. Finally I extend particular thanks to Tim McNamara for his assistance with the statistical analyses.

a central part of the more general requirement to manage the information packaging and flow of the discourse, using the lexico-grammatical resources available within the language. Languages offer grammatically defined sets of choices for making reference, and there is a venerable tradition of work on patterns of reference tracking within discourse which has shown that selection of the appropriate option from these choice sets depends on the complex array of syntactic, semantic and discourse-pragmatic factors which apply at a particular point of reference. As part of this tradition, functionally oriented approaches to discourse analysis have incorporated qualitative and quantitative exploration of patterns in diverse genres or text types across a variety of languages (see for example Givón 1983, 1992; Fox 1986, 1987, 1996; Myhill 1992; Ariel 1990; Austin & Stirling 2001).

Investigation of patterns of reference tracking across typologically diverse languages has proceeded in tandem with the recognition that differences between languages in the choice sets of referring options they make available grammatically correlate with differences in the functional value of particular options. Thus, the discourse meaning of choosing a pronoun to refer to an entity will be different in a language like English, with relatively few options for elliptical or "zero" reference, compared with a language like Japanese, with extensive use of unexpressed arguments (Clancy 1980). Comrie (1988) and Foley & Van Valin (1984) review the range of reference tracking options which occur across typologically distinct languages. Even when languages appear to offer the same formal options for reference tracking, they may not exhibit the same patterns of preferred distribution of these options in discourse, as Leafgren (2002: 2–3) illustrates for Russian and Bulgarian. Despite these differences, as Givón, Fox, Ariel and others including Chafe (e.g., 1994) have pointed out, there do seem to be some universal generalizations we can make about reference tracking, which may be summarised in terms of the following principle of iconicity, based chiefly upon Givón's work but reflecting a number of broadly similar concepts within the literature.

> **Principle of iconicity in reference tracking**
> Generally speaking, the *lexico-grammatical weight* of a referring expression is inversely related to the perceived degree of *accessibility* of the referent to the interpreter at that point in the discourse.

Here, "lexico-grammatical weight" refers to phonological form, prosodic prominence, morpho-syntactic complexity, and semantic content. "Accessibility" is a function of a variety of factors argued to correlate with the degree of activation or cognitive prominence of the referent in the mind of the interpreter, and thus with the ease with which the interpreter can identify the intended referent. These factors include whether the referent has been mentioned previously and how long ago, the number of other referents being talked about at the same time, the relative importance of the referent

in the on-going discourse and for the interlocutors more generally, and whether the previous mention of the referent occurred across a major structural boundary within the discourse. Thus, other things being equal, more minimal referential choices such as not overtly expressing an argument or using pronominal reference will be made when the intended referent is judged to be highly accessible, and maximal choices such as use of a fully identifying NP will be made when the referent has not previously been mentioned in the discourse. As Gundel et al. (1993), Givón (1990, 1992) and others have pointed out, matters are more complex than this, in particular in considering the functions of demonstratives, but many languages seem to fit this broad general pattern.

Australian languages between them exhibit a range of characteristics which argue for detailed investigation of their reference tracking patterns. For example, some have complex split case marking systems correlating with an array of complex noun phrase structures, some have extensive noun class markers which are used in making anaphoric reference, and many have complicated kinship systems implicated in referential strategies. However, comparatively little work has been done on referential strategies and reference tracking in Australian languages. Some grammars of Australian languages have made special consideration of discourse phenomena (e.g., Heath 1984; McGregor 1990; Rose 2001), and some Australianists have published on discourse aspects of Australian languages (especially McGregor for example 1986, 1987, 1989; Swartz 1988, 1991; Mushin 2005a,b; Garde 2002; Klapproth 2004 and the papers in this volume) – with a particular focus being on word order given the number of Australian languages where this is relatively free, and pragmatically determined. On reference tracking more specifically, Austin (2001) considers the discourse functions of zero arguments in Jiwarli, and Kim, Stirling & Evans (2001) present a preliminary comparative study of reference tracking in two typologically distinct Australian languages, one of them the focus of the current paper.

In this paper I extend the preliminary investigation of Kim et al. (2001) by investigating the discourse-referential function of a particular grammatical option in Kala Lagaw Ya, the language of the Western Islands of the Torres Strait.

The phenomena to be considered here I have labelled "double reference". Most work on reference tracking in discourse individuates a particular instance of reference as corresponding to a single linguistic expression. In Kala Lagaw Ya narratives, clauses may incorporate reference to the same participant occurring in the same grammatical function via use of two distinct nominal expressions. Examples are given in (1) and (2) below.[2] These are both taken from a story about "Dhogay Ii"

2. The case marking system of Kala Lagaw Ya is described more fully in section 2. Codes in []

which will be the major focus of this paper and which is properly presented in section 2; for now it is sufficient to note that *dhogays* are powerful, witch or devil like female creatures, and that the story relates how Dhogay Ii steals away and eventually kills a small girl who has had a conflict with her mother, and is in turn hunted down by the men of the village. In (1), the agent of the event being described, the mother of the girl, is referred to by both the third person singular feminine pronoun *nadh* and the nominal *apuan* (both marked with Ergative case). In this example the two nominal expressions are adjacent. In (2), the agent of the event, the Dhogay Ii, is referred to by the pronoun *nadh* and also by a proper noun occurring at the end of the clause. These "double" reference tracking options were mentioned in Kim et al. (2001) but collapsed with pronouns in the analysis given there.[3]

(1) [DI]

Nadh	**apu+an**	waaku	nge	uma+n.
3SFERG	**mother+ERG**	mat(ACC)	then	make+NF

'The mother was making a mat then.'

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at the beginning of examples refer to the source text the example is taken from (source texts are listed at the end of the references). The following abbreviations are used in this paper:

1, 2, 3	first, second, third person
M, F	masculine, feminine gender
S, A, P	core grammatical functions
NOM	Nominative case (case of S)
ERG	Ergative case (case of A)
ACC	Accusative case (case of P)
INST	Instrumental case
GEN	Genitive case
LOC	Locative case
COM	Comitative case
DAT	Dative case
S, D, P	singular, dual, plural (of pronouns)
I, E	inclusive, exclusive (of pronouns)
DU	dual (number agreement)
PL	plural (number agreement / marker on nouns)
NF	non-future tense
RP	remote past tense
RPI	remote past imperfective
IPV	imperfective
REMDEM	remote demonstrative

3. The few minor numerical discrepancies between this paper and Kim et al. (2001) reflect revised, finer grained and more accurate analysis, as well as different analytical decisions for instance in whether or not reference to places or temporal deictic expressions are included in the analysis.

(2) [DI]
Wagel **nadh** nan sugudh nudi, **Ii.**
after **3SFERG** 3SFACC octopus roll(NF), **Ii**
'After that she rolled her like an octopus (on top of a big stone), Ii.'

Anecdotally, such uses are common in narratives in Australian languages, and they have sometimes been referred to in published work. For instance, Haviland (1979) notes that adjoined pronouns and demonstratives are used to maintain NPs as prominent topics in discourses in Guugu Yimidhirr. Blake (1979, see also 2001) describes similar cases in Pitta-Pitta. Austin (1981) gives examples in Diyari.

Somewhat similar discourse phenomena exist in English: for example in cases of "Right dislocation" as in (3) below where there is prosodically set off late specification of a referent already identified in the main part of the sentence by a pronoun.

(3) He's a mess, that guy.

A significant amount of discussion of such constructional options in particular for English in the context of topic continuity has been given by Givón (esp. 1990, 1992).

Some discussion has also been given of similar phenomena in other languages. Androulakis (1998) discusses "reduplication" or "clitic doubling" in Greek (where a pronominal object clitic is accompanied by a coreferential full NP), and Lichtenberk (1996: 379) mentions the co-occurrence of different forms of NPs in To'aba'ita narrative. However the only really detailed published exploration of this type of phenomena and in particular of the way it functions in discourse is Leafgren's (2002) discussion of Bulgarian.

Some issues of analysis arise in considering these cases which will be touched on in the body of this paper: for example, should the two cases in (1) and (2) be grouped together as instances of what is at some level a single phenomenon in discourse reference, or not? How should these constructions be analysed grammatically: are the two NPs in (1) in a relationship of apposition for instance?

However, the focus will be an examination of the narrative contexts in which this kind of "double reference" occurs, with a view to understanding what discourse-pragmatic factors are involved in speaker choice of this option for making reference over the other options available, including use of a single pronoun or nominal expression. First a detailed, quantitative distributional analysis of the reference tracking options used in these stories is reported. The results situate "double reference" as an intermediate accessibility marker, falling between ellipsis and pronouns on the one hand and full NPs on the other in terms of its mean "referential distance", but show that, statistically, double reference groups

with the full NPs. With respect to a measure of "potential interference", the results are suggestive in locating double reference at the extreme positive end of the scale – in other words, it is used in contexts where there are other potentially interfering referents – although this tendency is not statistically significantly different from other NP types. Then a narrative structure analysis of the Dhogay Ii story is reported, and it is shown that instances of double reference almost all occur in the introductory clauses of the three highlight episodes of this story.

Section 2 of the paper provides background information about Kala Lagaw Ya. Section 3 introduces reference tracking phenomena in KLY, especially "double reference", in detail. Sections 4 and 5 outline the methods used in this study and present and discuss the results.

2. Background

Kala Lagaw Ya[4] is the language of the Western Islands of the Torres Strait (see Figure 1). The language is estimated to have several thousand competent speakers, some of whom live in mainland centres such as Bamaga, Cairns and Townsville, and as such is one of the three or four largest indigenous languages spoken in Australia (Ford & Ober 1991). Historically, four closely related and mutually intelligible dialects of this language have been identified, of which the two largest and only extant dialects are Kalaw Kawaw Ya, spoken on the "upper west islands" of Saibai, Boigu and Dauan, and Kala Lagaw Ya, spoken on "central west" Mabuiag and Badu Islands. The differences between the two main extant dialects are relatively minor overall; I will distinguish them here as "Saibai" and "Mabuiag", and will henceforth use the abbreviated form KLY for the language as a whole. I focus in this paper on the dialect of the language spoken on Mabuiag Island, however the same phenomenon occurs in the Saibai Island dialect too and in fact was first noted in print for this dialect by Comrie (1981) (see below). Shnukal (1988: 87) also points out that a similar phenomenon occurs in the Torres Strait Creole, also known as "Broken", but does not give a detailed description.

4. This is the name currently most frequently used by language speakers in political and cultural contexts and is the name listed on Ethnologue. Other names which have been used for the language as a whole include Yagar-Yagar, Langgus, Kala Lagau Langgus (Bani & Klokeid 1971), Kalaw Lagaw Ya (Comrie 1981), and Western Torres Strait Language or West Torres (Dixon 2002). The dialect spoken on Saibai and neighbouring islands is often distinguished as Kalaw Kawaw Ya, hence KKY, whereas the dialect of Mabuiag and neighbouring islands is usually simply referred to as Kala Lagaw Ya.

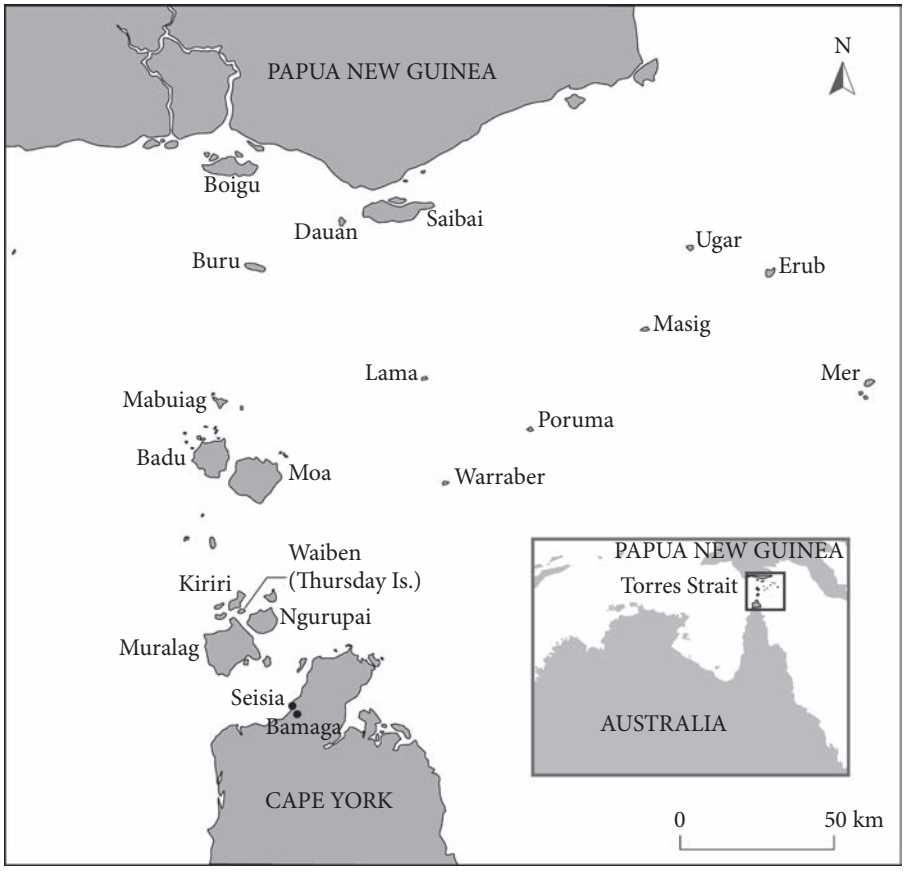

Figure 1. Map of Torres Strait Islands.

No comprehensive description of KLY exists, although there is a longstanding history of interest in it. As early as the 1890s Sidney Ray wrote extensive notes on the language as part of the Cambridge Anthropological Expedition to Torres Straits (Ray 1907, see also Shnukal 1998), and in more recent years work has been done by a number of researchers including native speakers of the language (see in particular Bani & Klokeid 1971, 1976; Bani 1976, 1979, 1987, 2001; Ford & Ober 1986, 1991; Kennedy 1981, 1984, 1985a, b, and c; and Comrie 1981). With the exception of the works by Bani and Klokeid, the recent work has focused on Kalaw Kawaw Ya, the Saibai dialect. As mentioned above, an earlier preliminary study of some reference marking patterns in KLY was reported in Kim et al. (2001), and this also focused on the Mabuiag dialect.

The linguistic situation in the Torres Strait is complex and KLY occupies an interesting position within the ranks of indigenous languages spoken in Australia. The Torres Strait Islanders are Melanesian people, physically and culturally akin to the neighbouring Papuans more than to the Aboriginal people of the Australian mainland. The language of the Eastern Islands (Mer, Erub, Ugar, Dauar and Waier) is Miriam (also called Meriam Mir). It is genetically a Papuan language, belonging to the Trans-Fly language stock, and is most closely related to languages of the nearby Papuan coast. It is genetically unrelated to and quite different typologically from KLY, although there has been significant lexical borrowing between the two languages. KLY has been classified variously as an Australian language (e.g., by Wurm 1972a: 151; Voegelin & Voegelin 1977: 279; Dixon 1980: 234) and as a Papuan language with a strong Australian substratum (Capell 1956: 108; Dixon 2002: 129–30, 239). Typologically and lexically it has some similarities with Australian languages, and some distinctive differences from them. In addition to these two languages, Torres Strait Creole (or Broken, see Shnukal 1988) and English are spoken extensively (see also Rigsby 1986; Wurm 1972b; Wurm 1975; Foley 1986). A bibliography of published writing on the Torres Strait, including on the languages of the Torres Strait, is available (Shnukal 2003).

Typologically, KLY is a head-final language, with fairly free word order, though a preference for APV (i.e., "SOV"), and relatively free omissibility of arguments. It is agglutinative and suffixing in its morphology, and does not allow case-stacking. There is a masculine-feminine gender marking system which applies to third person singular pronouns, and Bani (1987) has argued that feminine is the unmarked gender in the language. Tense/aspect/mood marking on verbs is complex and will not be fully discussed here: the two main categories found in the narratives are the non-future marker *–(V)n* or *Ø* and the remote past tense marker *–dhin*.

KLY exhibits complex "split" systems of case and number marking on NPs. These have been described in more detail elsewhere, in particular by Comrie (1981). In summary, non-plural common nouns have an "ergative" marking system which distinguishes A (Ergative case) from S and P; plural common nouns are marked for number but not case and hence have a "neutral" marking system. Singular pronouns have a "tripartite" marking system distinguishing all of S, A and P. Proper nouns and (at least for Mabuiag) non-singular pronouns have an "accusative" marking system distinguishing S and A on the one hand from P on the other.[5] Table 1 gives the complete pronoun paradigm for the Mabuiag dialect. The number marking system

5. Following Dixon (1979) and later researchers, I use here the abbreviations S, A and P (sometimes written O) to indicate the three "core grammatical functions" of the single argument of intransitive verbs (S), the more agentive argument of transitive verbs (A) and the more patient-like argument of transitive verbs (P). In Saibai non-singular pronouns have a neutral marking system.

is also said to be "split" (cf. Corbett 2000: pp. 122–3) in that common nouns optionally mark a two-way distinction between non-plural (one or two entities) and plural (more than two), while pronouns make a three-way distinction between singular (1), dual (2) and plural (more than two). Verbs mark a three-way distinction in number in agreement with core S and P arguments, that is, on an ergative basis.

Table 1. Mabuiag pronouns

	Singular			**Dual**		**Plural**	
	A	**S**	**P**	**A=S**	**P**	**A=S**	**P**
1	*nga-th*	*ngay*	*ngoe-na*	*ngalbay*	*ngalbay-n*	*ngoey*	*ngoel-mun*
1+2				*ngaba*	*ngaba-n*	*ngalpa*	*ngalp-un*
2	*ni-dh*	*ni*	*ni-n*	*ni-pel*	*ni-pe-n*	*ni-tha*	*ni-tha-mun*
3 masc	*nuy-dh*	*nuy*	*nuy-n*				
3 fem	*na-dh*	*na*	*na-n*				
3				*palay*	*pala-mun, palay*	*thana*	*thana-mun*

In this paper I focus on narratives in Mabuiag, and the data I am using comes from a number of sources, in particular from my own, largely unpublished, field notes from fieldwork in 1979, 1991 and 1992, and from the published material from the Cambridge Expedition to the Torres Straits (see sources listed in references). I have reviewed a number of narratives for examples of "double reference", but I here concentrate my analysis on two stories:

1. The story of Dhogay Ii, told to me by Mrs. Kalengo Joseph on Mabuiag in 1992 (Father Michael Bani also assisted with the transcription and translation of this story).
2. The story of Kwoiam, as written down by Ned Waria of Mabuiag for Sidney Ray and reproduced in the Report of the Cambridge Expedition (Ray 1907: 194–219).

The story of Dhogay Ii is a traditional story about a *dhogay* associated with Mabuiag Island (a short English retelling is included in Lawrie 1970: 101–4 and another version is included in Bani & Klokeid 1971: 35–37). As explained in section 1, *dhogays* are witch or devil like female characters and are associated with geographical landmarks and in some cases constellations. Physically they are held to be hideous and abnormal in appearance; they have magical powers and generally use these for ill: parents threaten their children that the *dhogay* will steal them away if they do not behave. The story here tells of a small girl who collects some sea food from the reef, and brings it to her mother to cook for her: the mother instead eats the food herself, and when the girl discovers this she cries inconsolably. The mother unfortunately mentions the name of Dhogay Ii in trying to get the girl to stop crying, and Ii hears and subsequently steals the girl away while everyone is

asleep. She flees with her to the west side of the island, torturing and eventually doing away with her, and is hotly pursued by the men of the village, who spear off her arm and use it for target practice. In the end, though, Ii regains her arm, and goes away to her hole. The most important characters in the story are the two female characters of Ii and the girl, although there are also passages where the third female character of the mother is prominent.

Kwoiam (also written as Kuiam or Kuyam) is a culture hero with magical powers and again a version of his saga is told in Lawrie (1970: 88–101). The story is very long and tells of the many dramatic events in Kwoiam's life, including his killing of his mother, and his subsequent extensive travels through the Torres Strait and New Guinea with his nephew Tomagani, head hunting as he goes. I include it, despite obvious caution needed given its much earlier provenance and the difficulties of being sure of all the details of the text, because it offers a striking number of examples of the phenomena of interest here and provides a suggestive diachronic dimension to the study. This story has been transliterated to reflect the modern orthography for KLY proposed in the 1970s by Ephraim Bani and Terry Klokeid (Bani & Klokeid 1971), and I have also provided morphemic glossing as far as I am able for the examples included here.[6]

3. Reference tracking in Kala Lagaw Ya and "double reference"

3.1 Reference tracking options in KLY

In making reference to participants in narrative, Mabuiag speakers have the following main options:

a. proper name
   e.g., *Ii, Kwoiam, Aadhi Kwoiam*[7]

6. While the "modern" orthography proposed by Bani and Klokeid is probably most widely used, it is not universally accepted and variant spellings for words do occur, as must be expected given that the language has not been completely standardised. The main differences between the "modern" orthography and the earlier "mission" spelling system is that the former distinguishes the voiced and voiceless laminodental stops dh and th, the mid-vowel oe, and for the Mabuiag dialect, long vowels e.g., aa, ii; in addition w and y are used rather than u and i for the second elements of diphthongs. In some cases traditionally accepted spellings are used for proper names regardless of what the modern orthographic form would be, in accordance with common practice (e.g., the spelling of the island name Mabuiag).

7. *Aadhi* is an honorific title meaning something like "great" or "great one".

b. lexical NP including a common noun and possibly modifiers such as adjectives
   e.g., *apu* ("mother"), *moegikaazi* ("little child"), *koey dhogay* ([a] "big dhogay")
c. genitive NP with reference anchored to a possessor
   e.g., *nanu apu* ("her mother")
d. demonstrative by itself (rare) or with a following common noun
   e.g., *senab ayday* ("that food")
e. pronoun
   e.g., *nadh* (3SFERG "she"), *thana* (3PNOM "they")
f. elliptical reference ("zero" or "null" anaphora)

   e.g.,
   Ii mangi adha,
   Ii arrive(NF) outside,

   Ø nanu kaazi muy-ngu passingu thoeriydhi.
   3SFGEN child fire-ABL alongside lift_up(NF)

   'Ii came outside, [and she: Ii] lifted up her [i.e., mother's] child from alongside the fire.'

In addition, speakers may choose one of the following possibilities, which were illustrated in examples (1) and (2) above:

"Double reference" type (i)
an adjoined pronoun and NP (one of (a)–(d) above), normally with the pronoun coming first
"Double reference" type (ii)
a pronoun in normal position with an NP (one of (a)–(d) above) following at the end of the clause ("right dislocated")

In the data I have looked at so far, type (i) double reference is by far the more commonly occurring option: across the two stories considered in detail here, there are overall 25 instances of type (i) as compared with 7 of type (ii) (3 in Dhogay Ii and 4 in Kwoiam). For this reason I will treat the two types together here, but without wishing at this stage to argue that they are altogether equivalent.[8]

8. On preliminary examination, types (i) and (ii) present no differences in any of the quantitative measures used here.

This phenomenon was noted for the Saibai dialect by Comrie (1981: 19–20): "Apposition of a personal pronoun and a noun phrase is very frequent in Saibai texts, often being used apparently as a stylistic device, though also sometimes serving a clear anaphoric function in keeping track of the reference of various pronouns". Comrie's interest in this phenomenon is chiefly as an example of the combination of two types of nominal with different case-marking systems: in general, different case marking patterns are irrelevant to syntax in KLY, with the exception that the coordination of Ergative case marked and non-Ergative NPs is dispreferred. His examples (66)–(68) are repeated below (here and below for Kennedy's examples, examples are given identically as in source except for the use of bold to indicate apposed NPs and for minor modifications to morphemic glossing to ensure consistency with that used elsewhere in this paper).

Comrie's (1981: 20) examples of "double reference" in Saibai

C(66) **Na** **githalay** si apal niparuy.
3SFNOM **mud.crab(NOM)** there down sit(NF)
'She, the mud-crab, was sitting down there.'

C(67) **Na** **muy** senaki ngapa a moeypunatha+n
3SFNOM **fire(NOM)** to.there went and burnt+NF
nan **akul**
3SFACC **mussel(ACC)**
'She, the fire, went there and burnt her, the mussel.'

C(68) **Nadh** **Adhibuya** wenewen tharamulpa wagel guythwaya+n
3SFERG **Adhibuya(NOM)** spell 3PDAT behind send.off+NF
'She, Adhibuya, sent a spell after them.'

Double referencing phenomena are also mentioned for the Saibai dialect by Kennedy (1985a: 63, 66), who gives the following examples and outlines the prosodic distinctions between appositional NPs and verbless equative constructions (such that the latter incorporate a marked pause between the two NPs).

K(8) Thana **nan** **kuyk** **sena** tri dola+pa youdha+n
3PNOM **3SFACC** **head** **there** 3 dollar+DAT sell+NF
'They sold it, that head, for three dollars for the church.'

K(24) **Thana** **kawayga+l** pathe+mi+n
3PNOM **aborigine+PL** embark+PL+NF
'These aborigines have departed (by boat or other vehicle).'

Some examples of double referencing in the two narrative texts I am using from the Mabuiag dialect are given below. For those examples taken from the Kwoiam story, I have included both the original orthography given in Ray (1907) and a "normalised" version in current orthography and with more modern morphemic glossing to better enable comparison with the current examples. The free

translation is that given in Ray in the case of the Kwoiam story and that given by the storyteller in the case of my own examples. Examples (1) and (2) are repeated here, and the examples are organised into groups of type (i) and type (ii).

Type (i) examples: Apposed pronoun and NP

In example (1), repeated below, an Ergative case marked pronoun in A grammatical function is apposed to an Ergative case marked nominal. In (4) a pronoun and nominal are again apposed, but this time in S grammatical function so both are marked for Nominative case. Note the occurrence in example (4) of the particle *gar* between the pronoun and the nominal: this is an emotive, intensifying particle indicating empathy or sympathy, and is one of only two particles I have found so far which occur between the two elements of the double reference construction (see also *sinakay* "perhaps" in example (11)).

(1) [DI]
Nadh **apu+w+an** waaku nge uma+n.
3SFERG **mother**+ERG mat(ACC) then make+NF
'The mother was making a mat then.'

(4) [DI]
Na **gar** **moekaazi** poeybi.
3SFNOM **alas** **little.girl**(NOM) make.noise(NF)
'Alas, that little girl yells out.'

Examples (5) and (6) show apposition of a pronoun with a proper name, in each case the two NPs are both in Nominative (S) case. Example (6) represents a particularly common type of double referencing construction: it is used to introduce reported speech, along with the standard reported speech introducer, *kedha*, "thus": 9 of the 22 examples of double reference in Kwoiam, or 41%, are in clauses introducing reported speech.

(5) [DI]
Na **Ii** sizi nge zilami.
3SFNOM **Ii**(NOM) from.there then run(NF)
'Ii runs from there then.'

(6) [KW]
Nuy **Aadhi** **Kuiam** kedha,
nui *Adi* *keda*
3SMNOM Aadhi Kuiam(NOM) thus
"Ama, ngay, ngay."
ngai *ngai*
Mother, 1SNOM, 1SNOM.
'Aadhi Kuiam said, "Mother, I (did it)."'
[possibly better: "Mother, [it was] me." L.S.]

In example (7), taken from another *dhogay* story, about a *dhogay* called Saurkeke, we have an Ergative case marked pronoun apposed to a Nominative case marked proper name (since proper names are marked on a Nominative-Accusative pattern).

(7) [Saurkeke]
Nuydh **Paywayn** arigal thayayk.
3SMERG **Paywayn(NOM)** fishing.line(ACC) throw(IPF)
'Paywayn throws a fishing line.'

Example (8) involves apposition of a Nominative pronoun *nuy* and a genitive NP *nungu waduam*. Example (9) is a more complex case where the "double referenced" participant is the possessor in a complex genitive NP, lit. "her – Kuiam's mother's – work": the pronoun *nanu* is the 3rd person singular feminine genitive pronoun, and the following nominal *aadhi Kuiam-an apu-aw* has the same reference and means "Aadhi Kuiam's mother's" (the possessed element being *zageth* "work"). (Note that the Genitive case marker for proper names is *–(V)n* whereas that for common nouns is *–(V)w*.)

(8) [KW]
Nuy **nungu** **waduam** si nubeka butupati
nui
3SMNOM 3SMGEN nephew these 3SMDAT prepare(NF)
'His nephew having got it ready, [….]'

(9) [KW]
Nanu **aadhi** **Kuiam+an** **apu+aw** zageth matha
Adi *apuau* *zaget* *mata*
3SFGEN Aadhi Kuiam+GEN mother+GEN work only
waku+n umay mura goygoy+nu.
umai ***goigoinu***
mat+INST plait(NF) all day+LOC
'Kuiam's mother used to work every day at plaiting mats'. [more literally: Kuiam's mother's work was just plaiting mats all day. L.S.]

Finally, examples (10) and (11) illustrate apposition of a plural pronoun with a plural nominal expression. The pronoun has Nominative case marking because, as we have seen, non-singular pronouns in Mabuiag code S+A as opposed to P. In (10) the common noun is inherently plural and so can take Ergative case marking while in (11) the plural inflection replaces case. Again note the presence of an element intervening between the two NPs in (11): *sinakay* "perhaps".

(10) [KW]
Thana **Gomulga+n** nuyn matha tawmani.
Tana *nuin* *mata* *taumani*
3PNOM Gomu.folk+ERG 3SMACC continually talk.about
'Those Gumu people continually talked about him.'

(11) [KW]
Thana sinakay **moegitiam+al** **koima** si miyar.
Tana *sinakai* *mogitiamal* *miar*
3PNOM perhaps little_boy+PL many there were
'There were probably some other boys there.'

Type (ii) examples: "right-dislocated"
Examples (12) and (2) (repeated from above) are both instances where there is a pronoun in first position of the clause, in S function in (12) and A function in (2), and a proper name in rightmost position. In example (13) it is the P argument which is repeated at the end of the clause. Example (12) is identical to the reported speech introducing examples found elsewhere but with *kedha* between the pronoun and full NP rather than following them. These examples thus show that the right dislocated NP can be a proper name or a lexical NP, and can corefer with an argument in S, A or P grammatical function.

(12) [KW]
nuy kedha **Kuiam,**
nui *keda*
3SMNOM thus Kuiam(NOM)
Kuiam said,
'Awade, gulonga kunal thayan
taian
nephew boat_things back throw
'Nephew, put the boat things in the stern.'

(2) [DI]
Wagel **nadh** nan sugudh nudi, **Ii.**
after **3SFERG** 3SFACC octopus roll(NF), **Ii**
'After that she rolled her like an octopus (on top of a big stone), Ii.'

(13) [DI]
Nadh **nan** mani **moekaazi**
3SFERG **3SFACC** take(NF) **little.girl**
'She takes the little girl.'

Example (14) represents an entire episode in the Kwoiam story and gives an idea of how these instances of reference appear in context.

(14) [KW]
A palay uzar+ma+n nge kaypapa.
Then 3DNOM go+DU+NF then to.windward
'They two then went to windward.'

Kaypun kuyku+n pathe+wma+n nge.
To.leeward head+INST cut.off+DU+NF then
'Then they cut off the heads.'

Nuy **Tomagani** gabudan pathay.
3SMNOM **Tomagani(NOM)** slowly cuts(NF)
'Tomagani cut slowly.'

Nuy kidho wamenlinga matha pathay.
3SMNOM opposite quick.thing always cuts(NF)
'He (Kuiam) always cut quickly.'

Nuy kedha **Adhi** **Kuiam**,
3SMNOM thus **Adhi** **Kuiam**
"Kame! Ni mika mika gabudan patheka,
Mate! 2SNOM why slow cut(IPF)
wamenlinga matha patheda kedha patheda."
quick.thing always keep.cutting thus keep.cutting
'He said, "Mate, why do you cut so slowly, keep cutting quick, cut so".'

Finally, it is worth including example (15), which comes from a modern expository text, in a published advisory booklet on malaria: this is written in the Saibai dialect. This example is interesting both as a naturally occurring case of double reference in modern, non-narrative writing in the language, and because the pronoun is apposed to a demonstrative NP, *sethabi moegithap uruyn* "these tiny creatures" (the example and translation are as in the original; I have added the morphemic gloss).

(15) [Malaria, p. 11]
Thana **sethabi** **moegithap** **uruy+n** poyzen
3PNOM **3PREMDEM** **tiny** **creature+ERG** poison
mabayg+aw kulka+nu wan+an.
person+GEN blood+LOC put+NF
'These tiny creatures put poison into a person's blood.'

There are a few general statements we can make about the examples given above which are generalisable for my entire corpus. In no case is a double reference used for the first mention of the participant in the discourse. The double referencing expression (or the pronoun component of it, for type (ii)) generally occurs in the discourse prominent leftmost position in the clause, and is only preceded in rare cases by temporal adverbial expressions. Virtually always, the pronoun comes first and it is the second element which is the lexical NP or proper name. Although a range of different grammatical functions is represented, with an example of a

double reference implicating a P argument and an example of an oblique (genitive) argument given above, almost all cases (66%) are S, or somewhat less frequently (19%), A arguments. Finally, as the examples given suggest, in my data, double reference tends to be used for human referents. Indeed in each story, this referencing option is pretty well restricted in its use to major human (or human-like) participants: the 10 examples in the Dhogay Ii story comprise 5 to the *dhogay*, 2 to the child, 1 to the mother, and 2 to the *dhogay's* arm; of the 22 examples in the segment of the Kwoiam story analysed here, 9 are to Kwoiam, 7 to his nephew Tomagani, 2 to his mother, and the remaining 4 to various groups of islanders. These patterns will be taken up in more detail in section 5 where the results of quantitative investigation of this reference-tracking option will be discussed.[9]

3.2 The grammatical status of the "double reference" constructions

I will focus here just on the more frequent type (i), which is also the more interesting syntactically. This type apparently involves apposition of two NPs to form a complex referring expression. The two NPs have the same reference and agree in number and gender; each is independently marked in the appropriate case for its function in the sentence (although as noted above and by Comrie, in some cases there may therefore be an apparent mismatch in case). I will not be concerned here with deciding whether these two NPs form a loosely apposed larger NP or should be analysed as two separate but co-occurring NPs (evidence for the latter could be the apparent possibility for interpolating a limited range of other expressions between them, notably *gar* "alas" and *sinakay* "perhaps", and also the presence of independent case marking; however example (9) in which two genitive NPs are apposed with a single possessor argues that these are a syntactic unit within a larger possessive phrase). I will here briefly mention a couple of related possibilities or alternative analyses, and then move on to the analysis of the discourse

9. In a small number of examples cited in the literature, e.g., those above from Comrie (1981), reference is to non-human entities and it is not clear whether the example should be analysed as double reference with the 3SFNOM pronoun *na*, or as a different construction type with a lexeme *na* yet to be properly defined. Given that as Bani argues feminine gender is unmarked in the language, the former analysis may be plausible for these cases. However some such examples occur in the Kwoiam story with *na* translated as the English definite article and apparent absence of covariation with the following NP in number. In the absence of further investigation and clarification these few examples have been excluded from consideration here: it is clear from the examples given in the body of the paper that the pronouns used are fully inflecting and therefore that we are not dealing here with a simple invariant definiteness marker.

function of these kinds of constructions (see Stirling & Baker 2007 for more detailed grammatical discussion).

First, these constructions are somewhat reminiscent of but I believe distinct from the inclusory construction (see in particular Singer 2001). In typical inclusory constructions, a non-singular pronoun referring to a group of entities co-occurs with a nominal making specific reference to a member of this group. This kind of construction also occurs in KLY, as exemplified in (16) (from Comrie 1981: 21). (The included nominal must have the case marker *–(V)w*, which is homophonic with Common Noun Genitive case, but since it must also occur on proper names which normally have a Genitive in *–(V)n*, should probably be analysed as a separate marker.)

(16) ngalbe kala-w uzar+ma+n
1DNOM kala-COM go.away+DU+NF
'Kala and I went away.'

Another similar construction is formed with conjoined non-case-marked NPs, followed by a non-singular pronoun, case-marked for the appropriate grammatical function, and representing the set comprised of the referents of the conjoined NPs, for example as in (17) (Comrie 1981: 21).

(17) Kala a moeginakaz palay uzar+ma+n.
Kala and boy 3DNOM go.away+DU+NF
'Kala and the boy went away.'

These construction types are seemingly rare in KLY and not attested in the texts considered here.

Second, Blake (2001), following on from work by Hale (1973), describes a range of phenomena which seem very similar as representing a determiner usage of pronouns with the function of "rendering a noun phrase definite". To me the prevalence of examples where the pronoun is apposed with a proper name, a very complex NP such as a genitive NP as in (9), or indeed a Demonstrative NP as in (15), suggests that analysis of the pronoun as a determiner is not helpful here. In other words, while some of the examples Blake discusses seem similar to the English (18) as Blake points out, those from KLY seem to be more akin in function to the English (19).

(18) We linguists are always being asked how many languages we speak.

(19) a. He, John looks like him, Bill.
b. He's a complete idiot, John.

While the focus of this paper is not on the appropriate formal syntactic treatment of these constructions (see Stirling & Baker 2007), it at least seems more sensible to treat type (i) examples as comprising two independent NPs which are at best apposed.

3.3 Double reference and information structure

In considering the possible discourse function or functions of the double reference constructions I have described, there are a number of ways of conceptualising the problem. Here we will take the perspective of a speaker's need to choose a particular referring expression at a particular place in the narrative, and the functional pressures on this choice.

Informationally, double references represent a combination of the contribution of pronouns and the contribution of full NPs, and therefore a more explicit and informative option than either expression by itself. Analysing the construction from the point of view of the information it contributes, it is evident that the two components of the reference generally provide different sorts of information (see Table 2). The pronoun marks the person and number of the referent, and, for singular pronouns, which have a tripartite case marking system, highly explicit information about the grammatical function of the NP. Singular third person pronouns also indicate the gender of the referent. In contrast, a lexical NP provides more specific denotation class information about the referent through the additional description it includes: it may also give information about gender and number (though it need not) and while NPs not morphologically marked as plural will be case-marked, they arguably provide less specific information about grammatical function than singular pronouns. Proper names similarly provide uniquely identifying information about the referent in context. From this it is clear that although "full" NPs are typically described in the literature as more "explicit" than pronouns (see for example Leafgren 2002; Ewing 2001), in fact it is not so clear whether lexical NPs or pronouns should be regarded as the more explicit of the two options in KLY. The other kind of information which referential NPs provide is, precisely, functional information about the degree of accessibility of the referent to the interpreter, or in other words, instructions as to how they are to go about resolving the reference of the expression; thus on standard accounts based on crosslinguistic surveys, part of the information provided by use of a pronoun is presumably that the referent should be readily accessible to the interpreter – more on this below.

Table 2. Explicitness of information provided by major NP types

	Lexical NP	**Proper name**	**Pronoun**
number	(✓) sometimes (if mked)	singular by default	✓ always
gender	(✓) sometimes (if inherent)	(✓) sometimes (if inherent)	(✓) sometimes (SG pronouns)
case	(✓) sometimes (if nonpl)	✓ always	✓ always
denotation class(es)	✓ always	× never	× never
uniquely identifying	may be in context	✓ always	× not usually

It is nevertheless the case that third person pronouns are more likely to be ambiguous than lexical NPs or proper names in context, and this is particularly so for the two stories under consideration here, as each involves at least two major characters of the same gender interacting in many scenes in the stories. Thus a view where an initial, less identifying pronoun is followed up by a further NP to allow for completely unambiguous identification of the referent is completely plausible. It should be noted however that there is not a two-way implicational relationship here: that is, it is certainly not the case that all contexts of potential ambiguity – at least as we can measure this crudely – require use of additional disambiguation. This is apparent from clauses 3 and 4 in the passage in (14) above, where in the context of switching between reference to Kwoiam and reference to Tomagani, double reference is used in clause 3 but then not in clause 4.

In terms of the iconicity principle mentioned in the introduction, and the related literature on the functional value of different types of referring expressions, there is a conflict between the predicted functional value of choice of a pronoun and that of a full NP (lexical NP or proper name). Crosslinguistically, full NPs are what Ariel (1990) calls "Low Accessibility Markers", and tend to be used when the referent is relatively inaccessible, that is, it has not been mentioned previously or at least not recently, while pronouns are "High Accessibility Markers". Kim et al. (2001) showed that use of proper nouns as referring devices in narratives in KLY was a relatively uncommon option. On the other hand, in a story such as Dhogay Ii with three major female participants, general category nouns such as *apu* "mother" and *kaazi* "child" seem to be used frequently to distinguish between these protagonists.

In these terms we can speculate in advance of systematic analysis as to why, on the one hand, a speaker would choose the double reference form over a full NP, and why, on the other hand, a speaker would choose a double reference over just a pronoun. Potentially inclusion of the pronoun acts as a corrective to any implication that the referent is an inaccessible one, which the use of full NP by itself might have. On the other hand, inclusion of the full NP could have the function of providing additional discriminating information should the reference of a pronoun by itself otherwise be ambiguous, for instance in contexts where there are competing alternative referents in the discourse, as mentioned above. In this respect double reference represents a graphic illustration of the tension Levinson (1985, 2000) describes between competing forces of minimization and recognisability: the normal assumption is that the form of an anaphoric referring expression will be chosen to provide just enough information to cue the interpreter to the intended referent, and, so as to avoid redundancy and confusion, not more than this. Is a double reference then an augmented pronoun form that speakers choose when they need more specificity, or an augmented full NP that speakers

choose when they want to create some particular discourse effect? Since we know that repetition and augmented and highly explicit and prominent forms of various kinds may also have emphatic and highlighting functions, this too should be considered as a possibility.

4. Methodology

In order to test for these possibilities and find out more about the patterns of distribution of the different types of nominals, a quantitative distributional analysis was performed of the referring expressions in the two stories I have mentioned, along the lines of Givón (1983) and later work in this analytical framework. Only the first third of the very long Kwoiam story was analysed: this provides roughly the same number of examples of human references as the entire Dhogay Ii story.

The narratives were divided into clauses or clause-like units. For Dhogay Ii, all references were initially identified, and then the subset of human references was examined in more detail; for the segment of Kwoiam, all human references were identified. For each instance of reference, the following 3 measures were calculated. The relatively few instances of reported speech and songs were omitted from consideration, as has been standard practice in this style of analysis.

1. Referential Distance (RD): RD is a text-based measure of referential continuity along a graduated scale which involves counting the number of clauses back to the previous mention of the entity. As is standard for this measure, if there was no previous mention an arbitrary value of 20 was assigned, and if the previous mention was more than 20 clauses back the value of 20 was also assigned.[10] This measure is designed to give a crude initial comparative indication of degree of accessibility of referents, based just on recency of mention. It has nevertheless proved reliable and robust crosslinguistically. Numerous analytical decisions must be made in applying this measure, and for the most part the standard protocol outlined in Givón (1983) is followed here – for example, relative clauses are not counted – however I discuss in section 5 the particular issue of how to handle relations of partial coreference between singular and non-singular NPs.

2. Potential Interference (PI): There are various ways of trying to calculate the potential for ambiguity in choice of a referring expression, all of which have problems. I adopted the method whereby one considers whether there are any other potential referents in the preceding three clauses which could be confused with

10. There are well-canvassed problems with this and other aspects of this measure but I will not address them here. See Givón (1983) and (1990: 907).

the referent at issue (essentially here, other participants of the same number and gender): a value of 1 was assigned if not and a value of 2 was assigned if so, to give a discrete binary measurement. Since this measure is designed to test the degree of competition provided by the presence of other referents in the immediate discourse, it is directly relevant to the hypothesis that double reference forms might be used to disambiguate potentially ambiguous pronouns.

3. **Topic persistence (TP):** While this did not turn out to be a measure of great interest in this study, I did check the topicality or thematic importance of referents at both local and global levels. I measured global topicality by counting frequency of mention of referents in the story as a whole, and local topicality (topic persistence) by counting for each mention the number of further mentions of the entity in the following 10 clauses. There turned out to be little difference in TP across different NP types referring to human participants: human or human-like participants inherently have a high degree of topicality, and as has already been mentioned these stories both involve multiple same-gender major participants, with lexical NPs often used to track them and frequently switched subjects leading to relatively high average persistence of these NPs. So results for this measure will not be discussed here.

It was suggested in section 3.3 that the use of double reference might also have an emphatic function. Leafgren (2002) mentions this as one of the functions of "doubling" of reference in Bulgarian. The second investigation that I did attempted to address this issue by exploring the question of whether the double reference mentions clustered in particular parts of the narratives thematically. In order to investigate this I did an episode analysis of the Dhogay Ii story and examined where the double references occurred relative to the type of episode and to episode boundaries. This investigation is described more fully in section 5.3.

5. Results and discussion

The Dhogay Ii story consisted of 149 clauses, and for this story a total of 225 nominal expressions were considered, of which 155, or 69%, identified human participants (see Tables 3 and 4). The first 152 clauses of the very much longer Kwoiam story were analysed, and for this story only human references were considered: in this excerpt there were 150 nominal expressions identifying human participants (see Table 5).

The overall pattern of reference marking in the two stories conformed to that sketched for KLY in Kim et al. (2001): by far the majority of instances of reference were made using pronouns, lexical NPs or unexpressed arguments: pronouns are overall the most common form of reference to humans. There were a small number of genitive NPs which ultimately were collapsible with lexical NPs more generally,

and few proper names were used. More interestingly, demonstratives were also used very infrequently, and as noted in Kim et al. in these stories were used only for reference to non-human entities: Kim et al. showed that demonstratives were chiefly used in the Dhogay Ii story to refer to important "props" in the story (such as the crabs and fish that were the source of the conflict, and the arm of the *dhogay*).

5.1 Referential distance (RD)

Table 3 shows the results for all references in Dhogay Ii for Referential Distance, and table 4 shows the results for the human references only. These tables also indicate the general pattern of nominal reference in the story: as indicated above, most participant identification is done by pronouns, lexical NPs or "zero" (elliptical) reference with the other types of nominal expressions represented in much smaller numbers, and demonstrative NPs in this data used only to refer to non-human participants. Most reference to non-human participants is by lexical NPs, which contributes to the high RD for this NP type when non-human participants are included in the data set: many non-human participants are referred to only once or infrequently given that they tend to be minor and peripheral participants in stories, certainly the case in these stories. Double references in these stories were, as I have said, overwhelmingly used for human participants. Double references are used roughly as often as proper nouns or demonstrative NPs in the Dhogay Ii story (4–5%) and much more frequently than any NP types other than pronouns and zeros in the Kwoiam story (14.6%).

Table 3. Dhogay Ii (225 references) – sorted by RD

NP type	Number of cases	RD	PI	TP
Zero	40 (17.8%)	1.18	1.58	3.73
Pronouns	59 (26.2%)	2.32	1.64	4.15
DRs	10 (4.4%)	2.80	1.80	3.7
Proper names	10 (4.4%)	6.90	1.50	3.5
Demonstrative NPs	15 (6.7%)	7.07	1.27	1.73
Lexical NPs	83 (36.9%)	8.77	1.39	2.86
Genitive NPs	8 (3.6%)	15.75	1.38	2.5

Table 4. Dhogay Ii (155 references to humans) – sorted by RD

NP type	Number of cases	RD	PI	TP
Zero	35 (22.6%)	1.2	1.66	3.86
Pronouns	57 (36.7%)	2.37	1.67	4.21
DRs	8 (5.2%)	2.88	1.88	4.5
Proper names	8 (5.2%)	3.63	1.63	4.25
Lexical NPs	47 (30.3%)	5.96	1.66	4.26

Table 5 shows the results for analysis of Referential Distance for the Kwoiam human references.

Table 5. Kwoiam (150 references to humans) – sorted by RD

NP type	Number of cases	RD	PI
Zero	36 (24%)	1.14	1.25
Pronouns	81 (54%)	2.85 [2.57]*	1.27
DRs	22 (14.7%)	7.82 [5.27]	1.73
Proper names	5 (3.3%)	13.4	1.00
Lexical NPs	6 (4%)	16.67	1.67

*Figures in [] represent the values for analysis 2.

In each case, the double references perhaps unsurprisingly fall between the zeros and pronouns on the one hand and the proper names and lexical NPs on the other in terms of their average referential distance. That is, double reference tends to be used when there is a somewhat greater distance to the last mention than one would expect if a pronoun were used by itself.

The results were analysed statistically using the Mann-Whitney test (the adjustment for ties was used in each case). For the Dhogay Ii story for all references, human and non-human, there was a significant difference between the average RD of double reference cases and both zeros ($W = 380.5$, $p < 0.01$) and pronouns ($W = 468.5$, $p < 0.05$). The same pattern was found when the analysis was run over human references only (zeros: $W = 269.0$, $p < 0.01$; pronouns: $W = 362.5$, $p < 0.05$). In contrast, in both cases there was no significant difference between the average RD of double references and that of full NPs, whether they were proper names, lexical NPs, or (when non-human references were included) demonstrative NPs.[11] The various kinds of full NPs were found not to differ significantly from one another in their average value for RD (i.e., lexical NPs, proper names, genitive NPs and demonstrative NPs) (this is unsurprising given that in broad terms such NPs are generally considered to fall into the same group of "low accessibility markers", cf. Ariel 1990). However, when all references were considered, pronouns were found to be significantly different from full NPs in their average RD (lexical NPs $W = 2980.0$, $p < 0.01$; proper names $W = 1931.0$, $p < 0.05$; genitive NPs $W = 1818.5$, $p < 0.01$; demonstrative NPs $W = 1997.0$, $p < 0.01$). When human references only

11. There was a statistically significant difference in average RD between double references and genitive NPs when all references, human and non-human, were considered: $W = 64.0$, $p < 0.01$. Given the very small number of instances of genitive NPs (8 – 3.5%) it is difficult to draw any conclusions from this result.

were considered, pronouns were found to be significantly different from lexical NPs ($W = 2435.5$, $p < 0.01$) but not from proper names.

For the Kwoiam story, essentially the same picture emerges statistically. Two variants of the analysis of this story were done, and both are mentioned here as a cautionary note in applying and interpreting analytical measures of this kind, since they are statistically significantly different in their results. In the first variant, a conservative approach to counting RD was taken whereby a previous mention of a group containing the participant in question was not counted: that is, RD was counted back to the most recent identical reference to that participant, not counting previous reference to pairs or groups containing the participant (this is the method used for example in Brown 1983). On the second variant, RD was counted back to the first reference of any kind to that participant, including reference to a pair or group containing it. In this story there are long stretches where Kwoiam and Tomagani act together as a pair, interspersed with comments on them individually, so there is a real sense in which both participants are still very much "active" in the discourse representation, even if a particular participant has not been referred to individually for some time.

On both analyses, as for Dhogay Ii, double references were statistically significantly different from zeros and pronouns in their average RD:

analysis 1: DR vs zero $W = 882.0$, $p < 0.01$
DR vs pronouns $W = 1469.0$, $p < 0.01$
analysis 2: DR vs zero $W = 839.5$, $p < 0.01$
DR vs pronouns $W = 1360.50$, $p < 0.05$

On the more conservative analysis 1, there was a more complicated picture for Kwoiam than for Dhogay Ii with respect to comparison of double references and full NPs: double references were not significantly different from proper names in their average RD, but were significantly different from lexical NPs ($W = 281.0$, $p < 0.05$). Lexical NPs and proper names were again not significantly different from one another, but all other pairwise contrasts between NP types were highly significant at $p < 0.01$ (including zeros vs. pronouns). It is important to remember the very small number of proper names (5) and lexical NPs (6) referring to human participants in this text: virtually all references to human participants were via pronouns (54%), zeros (24%) or double references (14.6%). (Another way to look at this is to note that most references to humans using lexical NPs or proper names also included a pronoun i.e., were double references.)

On the more generous analysis 2, double references were significantly different in average RD from all other NP types. Lexical NPs and proper names did not differ from one another (DR vs proper names $W = 275.0$, $p < 0.05$, DR vs lexical NPs $W = 271.0$, $p < 0.01$).

It is also informative to consider the pattern of distribution of values for RD more closely: as Givón (1990) points out, the categorical distribution for these values is important as it indicates the extent to which recency of mention can be taken to be a major factor in the choice of the NP type in question. As Givón found crosslinguistically, pronouns in KLY consistently have a very low RD with very little variation. In contrast, double references have a more distributed pattern, with some uses with very low RDs, a median higher than that of pronouns, and some uses with significantly higher RDs. In Dhogay Ii, their RD ranges from 1 to 7, with roughly equal numbers of cases occurring at 1, 2–3 and 4–7. In the Kwoiam story, on analysis 2, 10 cases occur at RD 1, 6 at RD 2–3, and 2 at RD 5–6, with the remaining 4 cases occurring at 20 being the four isolated references to groups of islanders: significantly, if these 4 cases are excluded, the average RD for double references goes down to 2.00. Lexical NPs have a very odd distribution with a group of uses at the value 20, but also with a cluster of uses with rather low RDs (this again is in accordance with the pattern identified crosslinguistically in Givón (1990: 913).

Although this picture is complex, it remains the case that statistically, double references pattern in their values for RD more like the full NPs which they in fact contain – the Proper names and Lexical NPs – than like the pronouns which they also contain. In other words, the only NP types which they do not differ from statistically are these full NPs. It is also relevant to recall here that in these stories, both of which contain multiple major participants of the same gender, both lexical NPs (for Dhogay Ii) and proper names (for Kwoiam) are used more frequently than might normally be expected, in contexts of continual switching between reference to these major participants. We may then ask: in a context of relatively higher RD, why choose a double reference over an unaugmented full NP form?

5.2 Potential interference (PI)

Tables 6 and 7 show the results for the two stories for Potential Interference (PI). Recall that this measure aims to capture the degree of potential ambiguity of reference to the intended participant at that point in the story, on the basis of whether there has been recent mention of other participants to whom similar referring expressions could plausibly refer. The general prediction is that more explicit types of referring expressions may be used when there is greater potential ambiguity in context so as to circumvent this ambiguity. However as has already been pointed out, the stories considered here are both distinctive in that each involves interactions between three human individuals: there are three major female participants in the Dhogay Ii story, the *dhogay*, the mother and the little girl, and two major male participants in the Kwoiam story, Kwoiam and Tomagani (with a further less

prominent female participant in Kwoiam's mother). This means that overall there are relatively high values for PI.

Table 6. Dhogay Ii story (155 references to humans) – sorted by PI

NP type	Number of cases	RD	PI
Proper names	8	3.63	1.63
Zero	35	1.2	1.66
Lexical NPs	47	5.96	1.66
Pronouns	57	2.37	1.67
DRs	8	2.88	1.88

Table 7. Kwoiam story (150 references to humans) – sorted by PI

NP type	Number of cases	RD	PI
Proper names	5	13.4	1.00
Zero	36	1.14	1.25
Pronouns	81	2.85 [2.57]*	1.27
Lexical NPs	6	16.67	1.67
DRs	22	7.82 [5.27]	1.73

*Figures in [] represent the values for analysis 2.

When the results are ordered in terms of potential interference, it is however clear that the double references have the highest score for this measure, with virtually all instances of double references occurring in contexts of potential interference – suggesting that the hypothesis that these usages reflect greater potential ambiguity may be correct. Eight of the ten cases in Dhogay Ii (and 7 of the 8 human cases) are positive for PI, and 16 out of 22 cases are for Kwoiam. However, statistically, although the picture is complicated by small amounts of data for some cells, in gross terms there is no significant difference between the different NP types for PI in either analyses of Dhogay Ii (with or without including non-human references) or for the Kwoiam data.

In considering PI for all references for Dhogay Ii, given a problem with low cell counts, Lexical NPs, Genitive NPs and Demonstrative NPs were collapsed as "full NP" for this analysis. Chi-square analysis showed an overall significant difference between the different NP types (zero, pronoun, double reference, proper name, full NPs) ($X^2(4) = 16.79$, $p < 0.01$). Interestingly, full NPs and proper names all have proportionately fewer cases of PI whereas zeros, pronouns and double reference show the reverse trend, all having proportionately more cases of PI. Comparison just of pronouns and double references shows no significant difference between them in average PI value. In interpreting these results, we must remember that we

should expect most potential interference in this story for the frequent references to same gender major human participants, who are referred to proportionately more (in the context of considering all cases of reference) by pronouns, zeroes and double reference.

If we then consider just the human references in the Dhogay Ii story, although again a problem with low cell counts must be acknowledged, there was no significant difference between the different NP types (zeroes, pronouns, double reference, proper names, full NPs) in their average value for PI: for all types, there are proportionately more cases of PI than not ($X^2(4) = 1.648$, $p = 0.8$). This suggests that the differences observed above when all references were considered was indeed contributed by the non-human references. This finding, although seemingly unhelpful in sorting out the factors involved in selecting the double reference option, is again probably a reflection of the nature of the story and the fact that any act of reference to a human participant is likely to take place in the context of a fairly recent reference to another human referent of same gender.

It is important to note here that a more detailed, finer tuned measure of potential interference might be able to tease out differences between the NP types which are not apparent here (for example, by looking at a prior context of fewer than three clauses or taking into account whether recent mentions of other participants were in a grammatical function which would make them serious contenders as an antecedent for the reference in question – see in this regard the claims of Centering Theory (e.g., Walker et al. 1998)). It is also important to note that the measure of PI used took no account of the semantic contribution of the sentential context, in particular of the predicate: in some cases it was simply unambiguous as to which participant was A and which P regardless of NP type because of the nature of the event (e.g., rolling on a rock like an octopus).

If we turn to the (human) references from the Kwoiam analysis, we note that there was a significant difference between NP types in respect of average PI value ($X^2(4) = 13.212$, $p < 0.05$). However, while this result is clearly significant and one would expect that with more data it would hold, until then it should be treated with caution. Four cells had expected counts less than 5.0 and all the difference was attributable to the small set of 5 proper names, which all had a value for PI of 1.00 (no PI), going against the general pattern whereby for other NP types, as for human references in Dhogay Ii, there was a preponderance of cases of positive PI. The three options of pronouns, elliptical reference and double reference, pattern most alike in the relative proportions of negative and positive PI (but note that as indicated above there is a very small number of lexical NPs too).

The overall story for PI, then, is that for human references, the measure used here indicates very little difference statistically between the NP types for this measure. However, to the extent that trends can be observed, where there is a difference we

can say that double references pattern more like zeroes and pronouns in their value for PI than like full NPs, and that overall double references have the highest percentage of positive PI values.

5.3 Narrative structure analysis of Dhogay Ii

It has been suggested in numerous studies that narratives are typically hierarchically organised into intermediate level units of structure and processing which are often called "episodes" and which are linguistically and psychologically well-founded (for example, Grimes 1975; Mandler & Johnson 1977; Hinds 1979; Longacre 1979; Chafe 1979; van Dijk 1982; Tomlin 1987; Stirling 2001; Ji 2002). We can take an "episode" to be a semantic unit (a "conceptual paragraph") corresponding to a chunk of narrative, typically including a sequence of more than one sentence, governed by a cohesive theme, topic or event sequence and often characterised by maintenance of the same actors, place and time. Conversely, episode boundaries represent major breaks or attentional shifts in the flow of information in the discourse and often coincide with major changes in participants, temporal and/or spatial continuity, and/or other thematic breaks (for evidence, see for example Ji 2002). Such changes often correlate with observable discourse features such as shift in tense/aspect/mood marking on verbs and presence of temporal and/or spatial adverbial expressions. The analysis of the Dhogay Ii story into episodes was undertaken on the basis that episode boundaries were identified by such discontinuities. The précis of the story given in English in (20) represents the major episodes identified in the story on this basis and also indicates how they can themselves be organised in terms of a standard Labovian schema for narrative structure (Labov & Waletzky 1967; Labov 1972).

(20) Episodic narrative structure of Dhogay Ii

story introducer:
yes, I'll tell a story
general scene-setting:
this story took place a long time ago
at that time people lived at the village of Wagadagema
there lived also at that time a big *dhogay*
her name was "Ii"
specific scene-setting:
one time the fathers went out hunting for sea food
on the land stayed just the mothers and the children
at that time was a big low tide
the children went out to the reef for reef food
complicating action:
the children picked up crabs and *maypap* fish from the reef

one girl brought her food home & asked her mother to cook it while she played
however, the mother cooked the food & ate it all herself
the girl returned from playing & asked for the food & the mother said she ate it
the girl cries & the mother tries in vain to stop her, continually till sunset
the mother is making a mat inside & the girl is crying outside; mother mentions Ii
the *dhogay* hears the mother mention her name & comes & sees the girl
the mother keeps making mats until she falls asleep, unaware of Ii's presence
the *dhogay* steals the girl
the mother wakes up & finds the girl gone
the mother rouses the village
[the fathers are nearly home from hunting]
the *dhogay* takes the child westward & does terrible things to her
the fathers come home & hear the news
the fathers chase the *dhogay* & spear her arm off, & then go home
the *dhogay* returns and gets her arm back
the *dhogay* goes back to her hole

Labov and Waletzky proposed a notion of narrative "highpoint", which is that part of the narrative that reflects the key event sequences around which the narrative is built, and that is therefore dwelt on and characterised by extensive "evaluative" marking, (cf. Labov & Waletzky 1967: 34; and Klapproth 2004: 93ff. for a more recent application of this kind of analysis). "Evaluative" marking or "evaluation" is taken to refer to a range of aspects of the narrative where the narrator's attitude is expressed in particular to indicate the relative importance of aspects of the narrative and to show what the "point" of the narrative is: on the Labovian schema it can include such elements as metacomment, use of reported speech, repetition, intensifiers, expressive non-verbal signals, departure from the syntactic norm, and explication and elaboration more generally. This story, as narrated by Mrs. Joseph, is highly dramatic and includes significant amounts of evaluation in terms of elaboration, repetition and emphasis throughout. However, it is possible to identify the episodes indicated in bold in the précis as distinctive in exhibiting the highest tension, highest action and greatest evaluation. These are therefore the "highlight" episodes in the narrative, and in fact they comprise an encapsulation of the important events that take place in the story and would be a reasonably comprehensive answer to someone who asked, what happened?:

(21) i. the *dhogay* takes the child westward & does terrible things to her
ii. the fathers chase the *dhogay* & spear her arm off, and then go home again
iii. the *dhogay* returns and gets her arm back

Subjective identification of these as "highlight" episodes in the narrative is confirmed by the presence within these episodes of a range of markers: non-future rather than remote past tense is used, there is much repetition, events are described in elaborate detail with phonological highlighting (for example the cries of the child as her eyes are plucked out are imitated), and evaluative comment is provided in the form of such particles as *gar*, *wa* ("yes") and *mina* ("truly"); the final of these three episodes (iii above) is also the only place in the story proper where song sequences are included.

If we now consider where cases of double reference occur relative to narrative structure and in particular with respect to the story episodes listed in (20), we find that there was a tendency for double reference to occur in the initial clause of an episode (as the first mention of the participant for that episode), or for a double reference to be the first reference to the main participant in the episode, even if not in the initial clause. In a number of cases, the clause it occurred in contained other markers of discontinuity such as temporal adverbial expressions, indication of shift in spatial location, or the particle *nge* "then", which was explicitly identified by native speakers as indicative of a change, a "new paragraph". This is the case for instance with example (1) given earlier, where there is a shift from description of the on-going crying of the child, to sunset time and the mother's activity in making a mat. It is also the case in the highlighted episodes (i) and (ii) in (21) as well. In (i), a double reference occurs as the first reference to the *dhogay*, and in (ii), a double reference occurs as the first reference in the episode altogether. So both these episodes begin with double references to major participants.

More strikingly, we can observe that all but one case of double reference in the story occur in the three highlight scenes. In fact, we can see the use of double reference in these episodes as contributing to the elaboration which highlights them. This finding is reminiscent of Scancarelli's (1985: 342–3) observation that in Chamorro narratives contrastive pronouns, usually rare, and cleft constructions, otherwise not found, appeared just at the climaxes of narratives. She attributes this pattern too to the tendency pointed out by Labov for additional grammatical complexity or elaboration to appear at the climax of stories.[12]

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12. Interestingly, the next most highly evaluated episode in the story after the three singled out here is that where the child is first introduced and we are told how she brings her food home to her mother for it to be cooked – the particle *gar* appears both in the introduction of the child and in the clause where her fateful action of giving the fish to her mother is described. The clause in which she is introduced is represented below.

Na	gar	wara	urapun	moegipakay.
3SFNOM	sorry/alas	other	one	little.girl

There was one little girl – alas!

6. Conclusion

Through the analyses reported here, we have come some way towards teasing out an understanding of the discourse function of the double reference option as compared with that of other referencing options available in Kala Lagaw Ya, at least as this operates in narrative texts. The results show that the double reference option should not be collapsed with either pronouns or full NPs (as had been done, due to the relatively small numbers of cases, in Kim et al. 2001). A Givónian analysis of double references in terms of referential distance and potential interference show this referential strategy to lie between zeros and pronouns on the one hand and full NPs and proper names on the other. However there is significant complexity due to the specific characteristics of the stories in question, and the only statistically reliable pattern to be observed shows the double reference option patterning statistically with full NPs rather than pronouns for Referential Distance. Pending further analysis with more sensitive measures of potential interference, there is however a possibility that double reference options are functioning in part to disambiguate reference. Episodic analysis of the Dhogay Ii story filled out the picture by showing that virtually all cases of double reference in this story occurred in the three peak story episodes as measured subjectively and by co-occurrence with a range of indicators of narrator evaluation. In particular, they tended to occur towards the beginnings of these episodes, for primary reintroduction of major characters. Choice of an augmented form of reference can thus be seen as an additional indicator of these "narrative highlights".

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Source texts

[DI] Dhogay Ii. Unpublished story told by Mrs. Kalengo Joseph, Mabuiag Island, 1992, and transcribed and translated by Lesley Stirling, Mrs. Kalengo Joseph & Father Michael Bani.

[KW] The story of Kwoiam. Written by Ned Waria. In Sidney H. Ray 1907 *Reports of the Cambridge Anthropological Expedition to Torres Straits* Vol. III Linguistics, 194–219. Cambridge: CUP. (Reprinted 1971 by Johnson Reprint Corporation New York).

[Saurkeke] Saurkeke. Unpublished story told by Mrs. Kalengo Joseph, Mabuiag Island, 1992, and transcribed and translated by Lesley Stirling, Mrs. Kalengo Joseph & Father Michael Bani.

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Person reference, proper names and circumspection in Bininj Kunwok conversation

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Proper names in Bininj Kunwok are one of a number of unmarked referring expressions in contexts of high social familiarity. In most other contexts and especially where culturally motivated circumspection is required, names are avoided in favour of a range of other referring expressions. The traditional philosophy of language view is that proper names allow speakers to avoid having to state circumlocutory identity details each time reference to an individual is made. In Bininj Kunwok however, cultural restrictions on the use of proper names in many contexts mean that speakers often use alternative expressions which frequently rely heavily on shared common ground to achieve recognition. The kind of shared cultural knowledge that is indexed for recognition of referents is spelt out in the analysis of data from a telephone conversation.

1. Introduction[1]

As far as person reference in polysynthetic languages is concerned, functionalist accounts of reference-tracking (e.g., Foley & Van Valin 1983) would seem to predict a rather clear cut mechanism. As a generalization, reference should be clearly tracked in discourse via obligatory pronominal agreement in the form of verbal affixes. Conversation participants however need to link the anaphor to the identity of the referent and it is universally true to say that, amongst a variety of strategies, this is frequently achieved at some stage of the discourse, with the use of proper names. But what happens when the otherwise frequent use of proper names is restricted for cultural reasons? In this chapter I examine person reference in interaction within a context where circumspection extends important influence

1. I owe many thanks to Nick Enfield and Ilana Mushin for their engaging comments on earlier drafts of this paper. I am also especially indebted to the Kuninjku and Kune-speaking communities who allowed me to record their conversations. Djungkidj Ngindjalarrkku assisted with transcription and over many years has shared with me cultural insights into Bininj Kunwok referential practices.

over choice of referring expressions, and in particular, a dispreference for the use of proper names. Most of the data is from a single extended telephone conversation in Bininj Kunwok,[2] a polysynthetic language of the non-Pama-Nyungan or northern prefixing classification and member of the Gunwinyguan language family spoken by some 1500–2000 speakers in the western Arnhem Land and Kakadu region of the Northern Territory (Evans 2003a, 2003b; Capell 1942, 1962).

In their edited volume of cross-cultural studies in person reference, Enfield & Stivers and their contributors (2007) offer us a central theoretical notion which assists in the understanding of how referring expressions are organized in any particular language. This is "the distinction between unmarked manners of formulation and the marked nature of departures from these defaults, along with the special interpretations that these exceptional departures invite" (Stivers, Enfield & Levinson 2007: 8).

In addition to the organizing notion of markedness, the various studies in Stivers & Enfield (2007) also test person reference in a variety of the world's languages against two previously established generalised preferences (Sacks & Schegloff 1979) with some of the contributors suggesting a further two additional principles ([3] and [4] below):

1. *Recognition*. Speakers intend that through their choice of referring expression, their recipients should be able to recognize the individual being referred to.
2. *Minimization*. Speakers in making reference to others prefer to use a single referring expression.

The additional two preferences are:

3. *Circumspection* (Levinson 2007). Observe any local constraints of circumspection (e.g., if cultural taboos prohibit certain default expressions for particular referents or in particular contexts, use the acceptable alternative).

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2. Bininj Kunwok "People's Language" is a recent appellation (Evans 2003a) now used by linguists for convenience to refer to 6 mutually intelligible language varieties which form a dialect chain. The language features compound verbal constructions which can incorporate pronominal, adverbial, directional, benefactive and nominal elements as well as other verbal inflections marking tense, aspect and mood. Bininj Kunwok is best known in the literature by the dialect with the largest number of speakers, Kunwinjku (formerly "Gunwinggu" in the anthropological literature). One of these 6 dialects, Gun-djeihmi has a different practical orthography in which the spelling of the name is "Bininj Gun-wok" (although there is no voiced/unvoiced stop contrast g/k, but the orthography differs for other reasons which are not relevant here). I employ what is known as Standard Kunwinjku Orthography (Kun-wok vs Gun-wok) because the textual illustrations used in this paper are from the Kuninjku and Kune dialects which use this orthography.

4. *Association* (Brown 2007; Hanks 2007; Stivers, Enfield & Levinson 2007). Associate a referent with any of the conversation participants. This usually means indicating kinship relationships e.g., "I spoke to your Mum today".[3]

The first two preferences are most efficiently satisfied in many languages by the use of proper names which as unique identifiers of individuals are also usually single referring expressions. In Bininj Kunwok, and most likely in most Australian languages, the use of proper names is however subject to a variety of restrictions and taboos. There is a diversity of name types in Bininj Kunwok in addition to the range of other kinds of referring expressions listed in the discussion which follows, but use of proper names as the unmarked referring formulation is restricted to a narrow range of contexts associated with social intimacy free from the many constrained relationships of Aboriginal societies. Using names in Bininj Kunwok is often considered face-threatening and so a variety of other formulations and referential strategies are preferred. The conversation analyzed in this chapter illustrates some of the possible strategies which can be employed in person reference when names and even kin terms are dispreferred in a particular context.

For the diverse group of languages surveyed by the various authors in Stivers & Enfield (2007), the unmarked referring expression is either a name, a possessed kin term or combinations of these two categories (Stivers, Levinson & Enfield 2007: 13). Certainly the unmarked formulation can also be a combination of both names and possessed kin terms as Levinson (2007) demonstrates for Yélî Dnye. Likewise in Bininj Kunwok, unmarked referring expressions consist of more than just one form, and include certain kinds of names (European given names and "traditional" nicknames), kin terms of various kinds and subsection terms, the latter effectively operating as both names (but being limited in their ability to pick out a single individual) and social categories. Amongst a group of social intimates who are at the most intense and unconstrained level of social interaction, (a group of same gender teenagers for example), expressions which refer to other individuals in the peer clique would still be a choice of either name, kin term or subsection. It is contexts (and not necessarily frequency) which define what is marked or unmarked, determining what is "expected" or "typical" in particular social and physical environments, including what a speaker wishes to achieve by the choice of a particular referring expression.[4] Within an unconstrained context such as that I have just

3. The details of how this preference applies in English are discussed in Stivers (2007).

4. It is worth noting that referential practice in Bininj Kunwok is undergoing change. European given names are becoming more acceptable and frequent as unmarked formulations in some dialects.

mentioned, e.g., a group of same gender teenagers, even the three expressions of name, subsection or kin term can be graded into degrees of relative markedness. For example, whilst a kin term could be used as an unmarked choice in reference, there may be certain sub-contexts when such a kin term might be used by those in unconstrained relationships to achieve certain goals such as marking an obligation to share resources or to express affection. Within each context of social interaction even otherwise unmarked referring expressions exist on a markedness continuum relative to the pragmatics assigned by a speaker. The principles of circumspection and association, both culturally motivated, are so important for speakers of Bininj Kunwok, that conversation participants in a variety of contexts tend to avoid names and find contextually suitable alternatives. Such alternatives, as we shall see in the conversation analyzed below, are sometimes fraught with difficulties and distractions relating to risks in recipient design but possibly less so than the use of proper individual given names which are dispreferred for a variety of reasons discussed in the following section.

The particular context illustrated in the conversational data analyzed in this chapter is related to strategically vague or circumspect person reference.[5] Vague reference can be thought of in terms of a particular type of recipient design. A vague referring expression can be an output of the principle of minimization whereby a formulation might be optimally vague, but still allows reference to be achieved. It is also possible that a referring expression can be too vague, and as a result the recipient fails to recognize the referent. In this latter case, it can either be of no consequence to the conversation, (in which case it will be ignored) or it may present a problem which conversation participants must deal with before the conversation continues.

In Bininj Kunwok conversations, circumspection is a very common strategy and speakers can frequently push the boundaries of the minimization principle by expecting recipients to maximize their reliance on what is considered common ground (Grice 1989; Enfield 2006), whilst at the same time, indexing such common ground or the kind of background knowledge that people in small culturally homogenous societies are expected to share. There is also evidence from Bininj Kunwok conversational data (as there may be from other languages), that there are occasions when the preference for circumspection can result in a speaker

5. Vagueness and circumspection are not necessarily the same thing. The latter is a term that encompasses a range of referential formulations that depart from what might be considered default or unmarked expressions, but are always designed in one way or another so as a recipient can achieve reference. Vague reference may or may not result in successful recognition or indexing of a referent. Witholding information is always a strategic option open to conversation participants.

refusing to be more specific, based on a speaker assumption that the recipient will ultimately be able to infer the identity of the reference, even in the face of specific requests or "repair initiators" from a recipient for further information. Here is an example extracted from a telephone conversation:[6]

(1) 1. C: *Bale* *bukkanj?*
where LOC
'Where are you calling from?'

2. MK: *Oh* *konda* *kure* ***Bulanj.***
LOC loc SS.N.
'Oh (I'm) here at Bulanj's (place).'

3. C: *Ay?*
'What?'

4. MK: ***Bulanj!***
SS.N.
'Bulanj!'

5. C: ***Na-ngale*** ***Bulanj?***
I-who SS.N.
'Which Bulanj?'

6. MK: ***Na-wu*** ***ngurri****-bengka-ø*
I-REL 2a-know-IMP
'The one you all know, think!'
[If you all think about it, you'll know who I mean]

The recognitional chosen by speaker MK in line 2 is a subsection name (see section 3(2) below). However, as there are many people with this subsection name in the community, the recipient in line 3 initiates a repair sequence that gets her nowhere, with MK being intentionally unhelpful in his response. It would seem that MK, in assessing the recipient's ability to access the referent, considered the identity of the referent so highly accessible that he was not going to be more specific even

6. Abbreviations: 1-first person, 2-second person etc, 3/3 (etc)- third person subject/third person object, a – augmented, M – minimal, UA – unit augmented, I, II, III, IV – masculine, feminine, vegetable, neuter noun classes, pers.n.– proper noun (person), PLACE.N.– proper noun (place), ABL – ablative, BEN – benefactive, COM – comitative, CONJ – conjunction, DEM – demonstrative, EMPH – emphatic, GEN – genetive, IGN – ignorative, IMM – immediate, INT – interjection, IMP – imperative, IRR – irrealis, LOC – locative, NEG – negative, NP – non-PAST, OBL – oblique, P – PAST, PP – PAST perfective, PERS.N. –personal name, REL – relative, RR – reciprocal/reflexive, SEQ – sequential, STAT – stative, SS.N. – subsection name, PLACE N. – place name, REDUP – reduplicated.

when explicitly requested to be so. The conversation proceeded to a topic switch without any indication whether or not the identity of the referent was recognized.

2. Taboos which motivate circumspection and vague reference in Bininj Kunwok

There are some forms of traditional personal names given to a child at birth which are almost never used in reference or address. Such given names which are known locally in English as "bush names" or in Bininj Kunwok as *kun-ngey bininj* "Aboriginal name", are considered private property and are sometimes only known by the individual and their immediate family. Their use in traditional contexts is restricted to rare occasions when a parent may address their child with their bush name or in metalinguistic contexts where the significance or origin of a person's name is being explained (not by the owner of the name, but by a knowledgeable person to others who don't know).[7] Two other kinds of names – nicknames and European given names, are used more commonly in reference (nicknames more so than European given names in some dialects but never in addressing a person and rarely in self reference). Even within this generalization there are fine-grained distinctions. Many nicknames are based on derogatory terms relating to physical features of an individual or to some misadventure or illness that resulted in a physically distinguishing mark (e.g., a spearing, an attack by an animal, a hand crippled by leprosy etc). However, not all nicknames are dysphemic. Some have their origin in a totemic animal, or the name of the clan of the grandkin after whom a private "bush name" is given. In these latter cases, such nicknames can be used more freely in reference and address, especially amongst socially intimate groups of younger people. But their use will still vary depending on the kinship relationship between the referent and the addressee, one reason being the existence of further taboos, common in most cultures, on the use of names in reference to one's affines.

In Bininj Kunwok as for many other societies, one does not use names to refer to one's in-laws or the in-laws of an addressee, and the respectful avoidance between a man and his mother-in-law (and her siblings) is legendary. In such cases, reference to tabooed kin is made via the highly polite and complicated system of tri-relational kin terms known in Bininj Kunwok as *kun-derbi,* described

7. Children are often given the bush name of someone in their grandparent's generation. Some bush names are a place name with a noun class prefix e.g., Na-kirdilinj "[male]-(place called) Kirdilinj". Some people use their "bush name" in the place of a surname, using it for official administrative purposes as the second part of a binomial formulation which follows a non-Aboriginal or European first name.

below. An alternative formulation is via minimal descriptions such as "those who live at place x" (where the singular should be inferred from the plural). Further naming taboos, both of which are universal in Aboriginal languages, are the taboo on unconstrained reference to a cross-sex sibling and on reference to a person recently deceased. The sense of social shame a person feels at hearing the name of a cross-sex sibling is described with the expressions *kan-bengbun* "it causes me concussion" or *kan-bengdulubun* "it stabs my mind". In the case of reference to the recently deceased, common formulations include minimal descriptions that include a place name (i.e., the deceased's place of residence) or a covertly possessed kin term.[8] Also acceptable is a kin term that indexes the relationship between the deceased and a close family member such as a spouse or child.

Circumspection in Bininj Kunwok person reference is also common in contexts which involve some kind of poignant social attention on an individual. There are occasions when someone is "put on the spot" so to speak, and this elicits a sense of what Bininj Kunwok speakers call *kun-yeme* "shame, shyness". The equivalent in the western desert language of Yunkantjatjara, is described by Goddard (1992: 108) as the motivation for the avoidance of " "you-influencing" illocutionary intentions". This also extends to self-reference and as a result, a person making a telephone call will usually identify themselves with the first person singular pronoun "It's me" and assume that the person on the other end of the call will be able to recognise their voice (a strategy common in many languages including English, see Schegloff 2007).[9]

3. Personal referring expressions in Bininj Kunwok

In any culture, the way a person is addressed and referred to by others varies enormously depending on the context. In European languages, given names, surnames, nicknames, professional occupations, titles, kin terms and combinations of these labels almost exhaust the most common possibilities. There are also spatially deictic terms which link individuals with place and descriptive expressions that a recipient can use to achieve recognition of a referent such as "the man in the black hat". Amongst Australian Aboriginal societies there has been little comparative work done on naming practices, although Hart's (1930) work on personal names

8. That is, the use of a kin term where the propositus (i.e., the person bearing the relationship to the term) must be pragmatically inferred. See (10) line 16 below for an example.

9. There are also other possible strategic motivations for this practice on the telephone. It is possible that explicit self identification could suggest distancing and thus is avoided.

among the Tiwi is an exception. Other studies include Thomson for Wik Mungkan (1946) and some brief comments by Spencer and Gillen for the Western Desert (1899/1968: 637–639). One of the first studies to note the impressive repertoire of expressions available to speakers of Australian languages is Stanner's 1937 paper *Aboriginal modes of address and reference in the north-west of the Northern Territory.* Stanner lists the great range of terms which Aboriginal people utilize in making reference to others. The kinds of terms Stanner found in Daly River languages are very similar to those found in other Top End Australian languages and most likely for many other parts of Aboriginal Australia as well. These include the use of personal names of various categories, nicknames, subsection names, avoidance terms and dysphemisms, kin terms of several formulations, clan affiliations, ceremonial terms, moiety membership and place names.

The choice of referring expression used in Bininj Kunwok conversation will depend on the context of the utterance and the speaker's goals in the conversation. The legendary complexities of Australian Aboriginal kinship entail a large range of referential possibilities and to describe them all here in the detail they deserve would require more space than is available here.[10] The following list includes the most common person reference expressions used in Bininj Kunwok focusing on those terms which have a bearing on the analysis of the conversation transcript below.

3.1 Kin terms

3.1.1 *Basic kin terms including vocatives*

These are sometimes also referred to as "monadic terms" (e.g., McGregor 1996)

karrard, karrang (VOC=*karrangh*) "mother"
ngadburrung "sibling"

3.1.2 *Basic non-vocative terms*

These usually (but not always) encode a third person propositus (the person from whom the relationship is figured or "anchored"). These are terms that translate as "one's father", "his/her mother's mother (and converse)", "a child of a patriline" and so on.

na-kornkumo "the father (of a referent)"
ngal-djongmiken "the mother's mother (of a referent)"
na-bininjkobeng "the husband (of a referent)"

10. For an exhaustive treatment see Garde (2003).

3.1.3 *Dyadic kin terms*

Terms which refer to both parties between whom the named relationship holds have been referred to in the literature as dyadic terms (Laughren 1982; Merlan & Heath 1982; McGregor 1996). In Bininj Kunwok there are a small number of these terms which all feature a dyadic kin suffix *–ko,* also found more extensively in the Dalabon language immediately to the south. Such dyadic terms need not be restricted to kinship either e.g., *ngeyko* "namesake/a pair who have the same name" (literally "name-dyad").

> *bene-beyko* 'adjacent generation patriline couple (e.g., father and child pair or a woman and her brother's child)'

3.1.4 *Tri-relational kin terms*[11]

This is a most impressive and complicated system of encoding the relationships between a speaker, addressee and a referent. In Bininj Kunwok there are about 115 terms in this system known variously as *kundebi, kunderbi, kunderbuy* or *kundembuy* (depending on the dialect).

> *berlunghkowarre*
> "1 > 3 Z, 2 > 3eM, 1 > 2 ZC" (the one I call "sister", you call "elder mother", I call you "sister's child") or "my sister, your elder mother, you are my sister's child"

3.1.5 *Kinship verbs*

Kinship verbs in Bininj Kunwok and neighbouring languages are described in Evans (2000: 106) in which he defines such lexical items as satisfying two criteria*:*

1. It must be a verb, in the sense of sharing the criterial morphosyntactic characteristics of core verbs (e.g., "hit", "tell") in the language in question.
2. In at least one of its senses, its semantics must be of the type "⟨X⟩ be K [to ⟨Y⟩]", where K is a kinship relation of the type "mother", "father" etc.

> *Ngan-borna-ng*
> 3 > 1-bore/be.father.to-PP
> My father.

> *Ngane-mim-kurrng-bu-rr-en*
> 1ua-eye-"poison.cousin"-hit-RR-NP
> We (2) are "poison cousins" (i.e., he or she is the mother/mother's brother of my spouse)

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11. There are no examples of tri-relational terms in the transcript analysed in this paper. This may be because the conversation participants were not yet fluent in their usage, but also because they are no longer being used by younger generations of speakers of some Bininj Kunwok dialects. There may also be other reasons related to speaker goals.

3.2 Subsection terms

Bininj Kunwok has eight named categories or subsections which are affiliated with either matrimoieties or patrimoieties and are effectively marriage classes. This is by far the most common way of referring to others in everyday conversation. Subsections are a feature of person reference in unmarked contexts, but they are also suitable in constrained contexts. They operate as reference and address forms that are kind of names that do not necessarily pick out an individual. Unlike proper names, they do contain internal semantic structure (i.e., "member of marriage class x") thus they are singular formulations that both denote and connote but kinship information can also be inferred from them. For example:

(2) *Na-ngale ø-bimbu-yi? Minj mimih bad bininj birri-bimbo-m, yo*
I-who 3P-paint-IRR NEG spirit but people 3AP-paint-PP yes
Kamarrang Kamarrang, Kela, Kela *birri-bimbo-m kun-red*
SS.N. SS.N. SS.N. SS.N. 3a-paint-PP IV-place
Wamud *Yo bedberre, mimih larrk.*
SS.N. Yes 3APOSS spirit, no.
'Who painted [here]? It wasn't mimih but people, yes, Kamarrang. Kamarrang, Kela, Kela, that's who painted here, it's Wamud's country. Yes, theirs, not mimih spirits.'

Without any other background knowledge about who the various people mentioned here are, their identity is impossible to establish. However, it would be known by addressees that the speaker, a man of Balang subsection, had a father of Kamarrang subsection. By virtue of the subsection system, a man of Balang subsection should have a father who is either of Kamarrang or Wamud subsection. The second Kamarrang mentioned would most likely be a brother (siblings have the same subsection) and the two "Kela" mentioned are the "fathers" of the last referent, a "Wamud", a conclusion which is consistent with one's knowledge of the operation of the subsection system (i.e., Balang-Kamarrang and Kela-Wamud are two patri-couples). The person referred to as "Wamud" at the time when this conversation was recorded was the most senior and well-known "Wamud" in the region. As the conversation took place on a site belonging to a clan which matched the clan affiliation of this senior "Wamud", the identity of this person can be inferred without too much uncertainty.

3.3 Clan names

Patri-clan names with a gender prefix are often used in combination with a subsection name to refer to people.

Bulanj na-Kardbam "a man of the Bulanj subsection and the Kardbam clan"
ngal-Nguluminj "a woman of the Nguluminj clan"

3.4 Dysphemisms

These are usually related to cross-sex sibling avoidance. They appear to be derogatory terms but there is no intention to be insulting. Males refer to their sisters by terms such as:

yabok ngal-warre "[my] no-good sister"
wurdwarre "younger no-good sister"
wayarra "malicious spirit, devil"
ngalbulkayken "the one out of the grave"
ngalkodjngalng "skull head"

Females make teknonymous reference to their brothers if possible whereby the use of a child's European given name plus a third person plural free standing pronoun requires the recipient to infer the father's name (see [3.8] below).

3.5 Nicknames

Most nicknames relate to a salient physical characteristic resulting from misadventure or deformity.

Denge Wamba "shark foot" for a person bitten on the foot by a shark.
Ngal-kodjrayek "hard headed woman" for a woman who always has an afro haircut.
Bidngoreng "crippled fingers" for a man whose hand was deformed by leprosy.
Bid Kunak "fire hand" for a boy whose hand was seriously scarred by a burn.

3.6 Free standing pronouns

In many of the world's languages this is also a very common way of referring to people in conversation even when no specific antecedent has been provided (Chafe 1980; Fox 1987). In Bininj Kunwok, it is particularly common in contexts where circumspection is required. Free-standing pronouns can also function as switch reference indicators but also as markers of emphasis especially when a referent has been a previous topic in the conversation.

3.7 Demonstratives

Recognitional demonstratives (Himmelmann 1996) are also used regularly in person reference and can mark the relative accessibility of a referent, previous mention and shared knowledge. Identification of a referent can be built up through

successive mention by use of demonstratives which are also often combined with nominals.

A recognitional demonstrative used as first mention (from the transcript below):

(3) 10. HK: *Bukkanj ka-h-ni* ***nakkanj?***
LOC 3-IMM-BENP IDEM
'Is he there … that one.' [the one you should know I mean]

Bare demonstratives can achieve reference, usually by virtue of spatial proximity:

(4) ***Na-ni*** *yi-ka-n* *kureh* *ba* *bininj* *yibin-ma-ng*
I-DEM 2-take-NP LOC so people 2/3a-get-NP
'You take this one ["this person here'] so you'll gather some people.'

Demonstratives can be combined with nominals:

(5) ***na-mekke*** *Bulanj* *na-wu* *walk* *bi-ka-ng,*
I-DEM SS.N I-REL circumcision.candidate 3/3p-take-NP
'That Bulanj (subsection name) who took the circumcision initiate, …'

3.8 Teknonymy

This is an indirect but conventional way of referring to an adult with respect to their offspring.[12] It does not necessarily entail vagueness. These expressions most commonly occur when someone wishes to avoid using the name of a person's cross-sex sibling. Instead they use the person's child's name plus the free standing third person plural pronoun *bedda* "them".

(6) *Ngayi, Abigail bedda.*
I PROP.N. 3
'It's me, [infer > the father of] Abigail and the others.'

4. Analysis

The conversation involves the son of a man recently deceased (a Kuninjku dialect speaker) making a phone call to another community of less closely related kin from another dialect group (Kune dialect) in order to inform them about funeral

12. See also Levi-Strauss (1969: 349). Hill & Hill also report this method of reference in Hopi (1997: 177) as does Enfield for Lao (2007: 104).

arrangements. Such notifications are considered extremely important as part of the decorum of funeral rituals. People can become extremely angry and abusive at funerals if they feel that they were not promptly and properly informed of the death of a relative, or of the time of the final rituals involving burial and washing ceremonies. The main two interlocutors (HK and NM) would rarely find themselves in a situation where they have any need to speak to each other. In other words, there is quite a degree of social distance between them.

The telephone call commences with the caller, HK (male, early 30s) identifying himself to a child who picks up the phone and then, after one turn of talk, hands it to NM (female, mid 30s):

(7) 1. Child: *Hello*
2. HK: *Ow!*
3. Child: ***Ngudda*** *na-ngale?*
2 I-IGN
'Who are you?'

4. HK: ***Ngayi*** *konda.* ***Wurdurd!*** ***Ngayi,*** … ***Daddy*** *ka-yo?*
1 LOC children 1 3-LIENP
'It's me here. Children! It's me, is Dad there?'

5. NM: *Hello*

6. HK: *Konda,* ***ngayi, wurdurd*** … ***Abigail bedda.***
LOC 1 children PERS.N. 3a
'It's me here children … Abigail and the rest.'

7. NM: *Ma.*
INT.(okay.act)
'Okay go ahead.'

8. HK: *Kure* ***Mankorlod-beh.***
LOC PLACE.N.-ABL
'From Mankorlod.'

9. NM: *Ma*
INT.(okay.act)
'Okay, go on.'

HK's call is answered by a child. When asked to identify himself by this child HK merely replies "It's me here" and he assumes that the child is in fact a child of the person he wants to speak with, and so he uses a simple Kriol kinship term *daddy* (covertly altercentric) "[your] father".[13]

13. The community HK is calling is bilingual Kune-Kriol speaking.

An issue here relates to the use of the first person pronoun as self-identifier. Assuming that two individuals recognise each other's voice, this form of minimal reference may be normal for close friends (see Schegloff 2007). However, the two conversation participants here are certainly not social intimates. Between close friends, a more informative recognitional could possibly suggest distancing, but distance and circumspection are called for in this case and the avoidance of names here is consistent with the preference for circumspection.

In line 5, NM comes to the phone. This is the wife of the person HK wants to speak with and HK provides further self-identification in the form of "me here, Abigail and all of them". "Abigail" is a reference to the speaker's own daughter, an example of teknonymous reference mentioned in section 3.8. This kind of expression is conventional in form and used commonly. The form consists of "given English name of child of referent+third person plural free pronoun". In other contexts, the use of proper names such as non-Aboriginal given names is infrequent. We can speculate that because the names used are those belonging to children, there can be no loss of face for the person who bears the name. Bininj Kunwok speakers rarely use the personal names of adults, except when speaking to non-Aboriginal people and sometimes with children. The use of the pronoun *bedda* here is a conventional strategy mentioned above, whereby the third person plural is used to refer to a third person singular referent. The use of the term following a child's proper name is pragmatically marked. In certain constructions and contexts, recipients know that *bedda* means that they must infer a singular referent whom the speaker does not want to mention directly. For example, a man's mother-in-law, a highly charged relationship of avoidance, can be referred to by the pronoun *bedda* "them" but meaning "her", often accompanied by the corresponding kinship sign-language of the elbow extended out from the body.

Note also that the expression *Ngayi Abigail bedda* does not overtly mention the relationship between Abigail and the referent (the latter being the speaker HK) along the lines of "It's me, Abigail's Dad". Knowledge about kin relationships in small communities is extensive and HK deems this to be shared background knowledge accessible by the recipient. The preference is to be indirect. This construction "given name+*bedda*" is also used as a way of avoiding direct reference to a person's cross-sex sibling within their hearing.

When transcribing this section of the conversation, I asked my transcription assistant why HK had used the *Abigail bedda* reference which I thought more suitable when addressing tabooed kin such as a cross-sex sibling or a mother-in-law. In fact, in this case, there is no particular prohibition against using one's own proper name but there is a preference to avoid it if possible. In describing why this choice of indirect self-reference was used, my transcription assistant said the following:

(8) *Ka-mak* *ka-ngeybu-rr-en* *bad* *ngal-beywurd* *kabi-ngeybun*
3-good 3-call.name-RR-NP but II-child[of.patriline] 3/3-call
en *kornkumo* *kabirri-bengkan.* *Ngarri-djal-yeme* *bu*
CONJ father 3ANP-think. 1a-just-shameNP REL
ngarri-ngeybu-rr-en.
1a-call-RR-NP
'It's okay for him to call his own name but he calls the name of his daughter and they think of [infer] the father. We feel embarrassed to use our own names.'

This reflects a general (but by no means strict) principle of avoiding the proper names of adults, children being less socially susceptible to the pervasive notion of shame, referred to as *[kun]-yeme* "shame, embarrassment".

In lines 7 and 9 of (7) NM is now on the line, but HK does not recognise her voice and assumes he is still talking to the child. As he does not know the identity of the child, he addresses him/her using the plural *wurdurd* "children", there being no singular equivalent vocative form. In line 8, HK provides further recognitional detail about himself in the form of a site in his clan country "Mankorlod" which is also the name of an outstation where HK sometimes resides. At no point does NM provide any self-identification and it is assumed that she expects HK to recognise her voice. The fact that HK does not make any enquiry as to NM's identity is the basis for an assuption that he has recognised her, allowing him to proceed with the purpose of his call, i.e., to discuss the death of his father with NM's husband.

(9) 10. HK: *Bukkanj* ***ka**-h-ni* ***nakkanj?***
LOC 3-IMM-beNP IDEM
'Is he there … that one?' [the one you should know I mean]

11. NM: ***Ka**-yo.*
3-sleepNP
'He's asleep.'

12. HK: *Aa* ***ka**-yo.*
3-sleepNP
'Oh he's asleep.'

13. NM: *Yo*
yes

In (9) HK makes it clear his intention is to speak with a particular person who is as a first mention, referred to by a demonstrative co-referent with a third-person pronominal participant prefix on the verb (line 10). The demonstrative *nakkanj* "that one right there" refers to the addressee's husband, the person HK wants to speak with, who is however asleep (lines 11–13). Note the demonstrative is used for first mention without any other antecedent reference. Such a demonstrative

can also be associated with a proximate (near to middle distance) sense in terms of spatial deixis but to define Bininj Kunwok demonstratives primarily in spatial terms would be incorrect. Here there is a sense of "the one we both know, immediately present (either physically or just mentioned recently in the discourse). An alternative gloss is perhaps that also proposed for Dutch demonstratives by Kirsner (1979: 358) whereby *nakkanj* in this context would signal "HIGH DEIXIS, "greater urging that the hearer find the referent" ".

This recognitional reference is possibly also a result of cultural factors relating to sensitivities concerning reference to an addressee's affines. Note that the addressee NM, has no trouble at all knowing who HK's intended referent is.[14] There are a number of reasons why this is the case. Firstly, HK would rarely ring anyone in this community as he does not have particularly close kinship connections in this outstation community, (although these are definitely people considered as kin from another language group). We can only speculate that on the occasion of a person of HK's kinship position making contact with this community (i.e., somewhat distant to those in the community he is ringing), he would want to speak with one of the senior traditional owners of the community. In this latter category, there are two candidates, NM's husband and NM's husband's brother. We can infer that NM's husband is more accessible as the person co-referent with the demonstrative *nakkanj* because he is the marriage partner of the addressee and therefore close kin of NM in the same household.[15] The use of the demonstrative, less likely to single out an individual than a kin term, implies a sense of kinship immediacy. Again, demonstratives of this type are not just indexes of spatial proximity or discourse immediacy (i.e., just mentioned) but also proximities of social relationships in the situated sense of "that person right there where you are now, who (in light of background knowledge) is easily accessible or recognisable (because he is the one with whom you cohabit)."

Another clue for NM in recovering her husband as HK's intended referent in (9) is HK's use of the locative *bukkanj* 'there, that immediate place where you are right now'. This would exclude the other possible candidate for co-referent mentioned above, i.e., the brother of NM's husband who also is a senior traditional

14. It is worth noting that the participants are not seeking referential vagueness, as it is clear that the intention is that the recipient should recognise the referent, but rather the vagueness is in the formulation of the chosen expression.

15. It is worth noting that in these outstation communities (at the time of the recording of this conversation, 1995), there was usually only one telephone, which is a public phone booth situated in the middle of the outstation compound and not inside a particular individual's house.

owner of this outstation community but who lives in another household. This is an example of how spatial deixis can assist in recognition of a referent.

(10) 14. HK: *Mm, na na-wu* ***nga****-wok-bekka-yinj …*
I-REL 1-word-listen-IRR
'Mm, well I wanted to listen to what he has to say.'

15. NM: *Njale-ken?*
IGN-GEN
'What about?'

16. HK: *Aa?* ***Koninj-ken, ngabbard.***
DEM-GEN father
'Aa, this matter, [my] father.'

17. NM: *Yo well njemed,* ***ngurri-..***
yes whatsit 2a-
ngurri*-djal-mulewa-n* what time *laik* ***na-ni***
2a-just-tell-NP like I-DEM
worry ***ka****-yime* too much.
3-say/DONP
"Yes, well you all just make known what time because he's worrying too much."

The next matter to be raised, also indirectly, is the subject of the phone call. This concerns the timing of a mortuary ceremony for HK's father. Note that NM has correctly inferred from the context that HK is ringing to tell the members of NM's community when the funeral will take place even before HK gets a chance to state this.

HK does make a reference to his father in line 16 and it is now common local knowledge that this person has just died so HK uses a basic kin term *ngabbard* "father" (line 16). NM takes the opportunity to speak on her husband's behalf and says that he is anxious to know when the funeral will take place and that he is worrying too much about this matter.[16]

16. Whether or not this is in fact the case is not the point. Funerals are important events for social cohesion as well as being potential sources of conflict. As a matter of good manners, distant kin usually make a point of expressing their solidarity with the bereaved by providing evidence of their grief (sincere or feigned). This is also important in a cultural environment in which almost all deaths are explained as being the result of sorcery. Kin who do not display appropriate grief or even anger at the immediate relatives of someone who has just died leave themselves exposed to possible accusations of sorcery. Such anger is ritual in nature and is said to be a result of not being immediately informed of the death of someone considered kin.

What follows is a series of constrained diplomatic exchanges containing some expressions of mutual kinship solidarity and concern for the other party. NM makes a comment that her husband is worrying about the time of the funeral (line 17) and in response, HK also expresses solidarity with NM's community by expressing that he is concerned about a child at NM's community who is the namesake of the deceased and therefore ritually significant at a time when the person with the same name has just died (lines 24–25, see (11) below). This child, whilst otherwise unrelated in any close kinship sense to the deceased was at birth given the same personal Aboriginal name (or "bush name" in local parlance) as the person who has just died.

(11) 24: HK: ***Na-meke*** *nga-wam* ***ngey-ko*** ***na-meke*** *mak*
I-DEM 1-GOPP name-dyad I-DEM CONJ
nga*-bengka-ng.*
1-think-PP
'That's the thing now I went on account of, that namesake … I was thinking about him' [or that matter relating to him].

25: NM: *Yo* *na-ne* ***ngarri****-m-ka-n* *mak* *ken.*
yes I-DEM 1ASUBJ/3OBJ-hith-take-NP also GEN
'Yes, he's here, we'll bring him too.'

The boy is referred to initially by a demonstrative *nameke* (line 24) "that one of male noun class, the aforementioned" and then the dyadic term "namesake-pair". There is no reference to him as a child, or his relevance in the mortuary rites as this is shared background knowledge which is not made explicit. What is of interest here is the introduction of a new referent into the discourse by means of a demonstrative that usually has an immediate anaphoric sense relating to "the aforementioned". But clearly there has been no previous mention of this topic or this referent. Referential switches are frequently made by use of these kinds of "recognitional demonstratives" (Himmelmann 1996) as are first mentions of referents, illustrating the inappropriateness of the term "anaphoric demonstrative" as a general gloss for particular demonstratives in all contexts. Such first mentions, as Himmelmann also notes for such "recognitional demonstratives" in other languages (1996: 223), "may be based on (presumed) shared- knowledge rather than being truly new, introductory mentions as in English".

NM has no problem in recognising this referent and she replies immediately, "yes we'll bring him too [to the funeral]." She then goes on to promise that her

For this reason no offence is taken by the relatives who are the object of such anger, but rather this is considered evidence of grief.

family will provide some food for the funeral camp which is another expression of solidarity.

(12) 27. NM: *Man-me na-me bolk ø-manka-ng ku-mekke kure-be*
III-food I-DEM today 3P-fall-NP LOC-DEM LOC-ABL
***bini**-m-munkewe-ng.*
3uaP-hith-send-PP
'Food landed there today, the two of them sent it here.'

28. HK: *Kure-beh Darwin-beh?*
LOC-GEN PLACE.N.-GEN
'From where, from Darwin?'

29. NM: *Kure walem-beh.*
LOC south-ABL
'There from the south.'

30. HK: *Walem-beh.*
south-ABL
'From the south.'

31. NM: *Yo **karrangh***
yes mother
'Yes, (my) mother,'

32. ***ø**-munkewe-ng man-me, na-mekke man-me bakki … .*
3P-send-PP III-food I-DEM III-food tobacco
'she sent food and tobacco.'

In (12) line 27 two new unidentified individuals are introduced into the discourse by a bound pronominal prefix on the verb ***bini**m-munkeweng* as people sending food to the funeral ceremony. This minimalist reference is not accessible for HK and so he initiates a repair sequence by asking where the food came from. By doing this we can speculate that the question avoids asking NM to be specific about the senders of the food, but rather he suspects he will be able to infer the identity if a place of origin is identified. It seems the answer to his repair initiation does not succeed and so HK repeats NM's answer as a further repair initiator (lines 29, 30) until NM makes it explicit "Yeah, Mum sent the food …" (line 32). But note that there is still one unidentified referent indexed by the dual subject on the verb ***bin**im-munkeweng* "they 2 sent hither" whose identity remains unspecified.

It is not only people who are referred to in an indirect or vague manner but also places. There is an interweaving of person and place reference, the interpretation of which relies again on shared background knowledge relating to the social ordering of place (see also Schegloff 1972). Local knowledge would allow

an addressee to infer that the food is being sent from the Bulman community in the Katherine district although this community is not named explicitly. NM's family have close ties with people further to the south and their kinship networks are strongest in communities to the south, a fact that would be well known to HK. But I suspect HK's probing in lines 28 and 30 is not aimed at determining the place of origin of the food but who has sent it. This is in keeping with a general preference to avoid specificity of reference to people. A second general principle which is illustrated here and supported by a corpus of other Bininj Kunwok conversational material I have recorded is for first mention of a referent to be typically minimalist and vague and then what follows is a gradual relaxation of the preference for minimization, even in the absence of requests for repair. But even this process may result in underspecification requiring the recipient to infer the identity of the referent through the application of background knowledge. Note that this is the opposite of what is considered the usual pattern in many languages i.e., initial reference is normally a full noun phrase with subsequent mentions consisting of anaphors such as pronouns (Ariel 1990; Fox 1987).

(13) 33. HK: *Aa*
Oh yeah.

34. NM: ***ø**-Munkewe-ng na-me **ø**-manka-ng bolk, bolkkeme*
3P-send-PP I-DEM 3P-fall-PP today today
ø**-manka-ng **Manrol
3P-fall-PP PERS.N.
'She sent it and it arrived today, today with Manrol.'

35. ***ø**-wam, **ø**-me-y.*
3P-GOPP 3P-go-PP
'He went and got it.'

36. HK: ***Manrol?***
PERS.N.
[non-Aboriginal pilot's surname]

37. NM: *Yo **Ian Manrol** **ø**-wam **ø**-me-y.*
yes PERS.N. 3P-GOPP 3P-get-PP
'Yes Ian Manrol went and got it.'

38. HK: *Kureh walem?*
LOC south
'There in the south?'

39. NM: *Yo.*
yes

The main point in (13) is reference to a non-Aboriginal pilot. Note that here we have HK initiating a repair by repeating the pilot's surname in line 36, and

then NM relaxes minimization by providing the repair in the form of a binomial. The preference to avoid using a proper name is dropped here because the referent is outside of the cultural framework in which the preference operates. Here it is not face threatening to use a name as the referent is a non-Aboriginal person who is socially external to the interaction being described. Of further relevance is the absence of kinship relationships, from which the identities of referents could be reckoned, and so here an "alternative recognitional" (Stivers 2007) is in fact a proper name.[17] This is unproblematic of course for HK, but he is perhaps still fishing around for more specific information about the senders of the food judging by a repeat of the comment about the food coming from "the south" (lines 30 and 38).

(14) 40. HK: *Ma!* ***Na-wu*** *kuneke kareh* ***nungkah*** ***ka****-yo* *ba*
INT I-REL IVDEM IGN 3EMPH 3-lie-NP so
ø*-bu-yinj manu*
3-hit-IRR IIIDEM
'Okay. As for him who is sleeping, he could make a call'

41. ***nga****-wok-bekka-yinj.*
1-word-hear-IRR
'so I can hear what he has to say.'

42. NM: *Mm,* ***nungkah*** ***ø****-yime-ng* *"bonj",*
3EMPH 3P-sayP finish
ka*-warnyak* ***nungka*** ***yi****-..*[cut off by next turn]
3-not.wantNP 3 2-…..
'Mm, well he said "Enough", he doesn't want, … you …'

Line 40 returns to the topic of HK informing NM's husband. This is after all, the main reason for HK's call. He wants to talk to NM's husband and so far has been unsuccessful. The interjection *Ma!* in line 40 marks HK's acceptance or understanding of what has been discussed in (12) and (13) and now marks a topic shift. HK reintroduces NM's husband by a relative clause which indexes the previous mention ("as for the one who is sleeping") and an emphatic free standing pronoun *nungka* "he/him" which together indicate some specificity of reference and emphasis. Unlike pronominal prefixes on verbs, free standing pronouns must have definite reference and as in this example, they refer to participants already established in the domain of discourse. In line 42, NM replies also with mention

17. Interestingly enough, in latter years since this text was recorded, this particular non-Aboriginal pilot and long term member of the community, has been adopted into a local Aboriginal family and he is now frequently referred to by Aboriginal people by his subsection name *Kodjok*.

of the same referent by means of the same free pronoun. It is not entirely clear why NM does this, but it allows her to avoid direct reference and emphasise her controvertial point that there is some disquiet in the camp, perhaps about the delay in not being informed about the death by the family of the deceased.

The sensitivity of the subject matter (death, affinal kin and community politics) requires circumspection in reference and thus the abundance of referring expressions (i.e., free standing pronouns) which are potentially vague. Further elucidation of the context will help. Line 42 is an example of the ritual behaviour mentioned above concerning indignation at not being immediately informed of the death of someone considered kin. In line 42 NM reports the speech of her husband, who it seems is somehow unhappy with something most probably related to this issue. Another possible motivation for NM's reaction is that NM is aware that her community has made no effort to contact the family of the deceased man and her present excuse is a culturally acceptable strategy for avoiding such an oversight as it turns the tables back onto HK to justify why NM's family have not been contacted to date. NM does not get a chance to explain in full, as HK cuts her off and immediately launches into a narrative of the events leading up to his father's death and how he too was not apparently immediately informed or not present at the place where his father died when the body was collected by medical staff and taken away for official purposes (autopsy, issuing of death certificate etc). By providing this narrative, HK is identifying with NM's indication of ritual indignation and creating a form of solidarity with her. His butting in was perhaps designed as a strategy to stop NM from saying anything unpleasant or face-threatening before he could give an explanation that he believed that he too was also treated in the same manner.

(15) 55. HK: *Kunekke bu **birri**-m-djal-ni, na-wu minj mak*
IVDEM REL 3a-hith-just-be I-REL NEG CONJ
'Because of them, they just stayed there and didn't

56. ***ngandi**-marne-wok-ngime-ninj **ngadberre** ya*
3a/1-BEN-word-enter-IRR 1aOBL yeah
'call us **all**'

57. *bu **ngandi**-bengdarrahdayhke-meninj **ngadberre.***
REL 3a/1-informREDUP?-IRR 1aOBL
'to inform us all [about what had happened].'

58. NM: *Yo*
'yeah'

59. HK: *Yiman **ngayi** **nungka.***
Like 1 3
'Like me and him.'

60. NM: *Uwa, namekke*
yes IDEM
'Yes, that's right.'

In a previous part of the conversation not transcribed here, the free pronoun *nungka* referred to HK's father in contrast to himself. In line 59, we have the same pair of pronouns *ngaye* "me" and *nungka* "him" but we have switched reference to *nungka* "him" again co-referent with NM's husband. This is only inferable from the discussion which just precedes the use of the pronoun and because the temporal orientation has now shifted to after HK's father's death. Despite the potential for ambiguity in person reference throughout this section of the conversation, none of the referents are specified by anything more than pronouns or bound pronominal prefixes on verbs (and without full noun phrase antecedents).

(16) 61. HK: *Ya mak* ***nakka*** ***na-buyika*** ***na-wu*** ***ngarri-ni*** *mak*
yeah CONJ IDEM I-other I-REL 1a-sit CONJ
bukkan kun-red.
LOC IV-place
'Yes and the other person from that place where you are who is here with us.'

HK as an afterthought (line 61) adds a very indirect reference to the other important traditional owner of the community he is ringing so as not to leave anyone out. This is a reference to NM's husband's brother who is referred to basically by tying him to his land, "the other one from that place." When HK says *ngarri-ni* "we are all here/we all sit together" he is furthering his solidarity strategy by making a joint reference to members of NM's husband's clan and members of his own clan. Despite linguistic differences, these are both clans of the same moiety, whose territory is contiguous and whose respective outstation communities are not far from each other. The reference to a place with the expression *bukkan kunred* "that country there (where you are)" joins both clan estates and both outstation communities together in order to stress commonality and create solidarity between two otherwise linguistically distinct communities (one Kune/Rembarrnga, the other Kuninjku). These clans and moieties are not mentioned explicitly but this is easily accessible shared background knowledge, another reason why perhaps the referential expression does not overtly specify the referent. It is nonetheless rather surprising that there is no referring expression that indexes the kinship relationship between *nakka nabuyika* "that other person" (line 61) and other established referents such as NM's husband. This is exceptionally vague.[18]

18. Even my native speaking co-transcriber took some time in deciding on the identity of the referent in line 61.

(17) 75. NM: Yo, well **nungka ø**-yime-ng, **ngudda wurdurd namekke,**
yes 3EMPH 3P-say-PP 2 children IDEM
'Yes, well he said that you and your family.'

76. ***ngun**-madbu-n **ngudberre ngurri**-djal-re.*
3/1-wait-NP 2AOBL 2a-just-GONP
'he'll wait for you and you all go together.'

77. HK: *Mm*

HK continues his demonstration of solidarity with his theme of 'I too was offended' from lines 64–74 (not provided) and the referents are himself and his deceased father, all indexed by bound pronominal prefixes on verbs. NM switches topic in line 75 and continues reference to her husband by the free pronoun *nungka* (line 75). Both speakers continue to refer to this person in this minimalist fashion throughout the conversation and only once (in (18), line 109 below) is this person referred to by any other more detailed recognitional expression except for the detail provided by NM earlier, that he is asleep. In fact NM's husband becomes referred to twice after the first mention as the one who is asleep (lines 40 and later in line 96). This represents a rather unusual example of reference to a person by their current activity 'he who is sleeping at the moment'. I think both NM and HK are satisfied with this rather indirect expression which is again, an example of an "alternative recognitional" [Stivers 2007]) because it avoids any use of proper nouns, avoids having to repeat terms that encode the affinal relationship between NM and her husband (with the exception of (18), line 109) and is successful enough in achieving recognition of the referent through a consistent expression. It is also a formulation that indexes a strategic social element to the conversation (Enfield 2006). HK may be happy to avoid a direct conversation with NM's husband on this difficult topic and by choosing to refer to NM's husband as "the one who is sleeping" he is also providing evidence that his duty has been discharged (NM's husband has been formally notified of the death, albeit indirectly) and not being able to speak directly with NM's husband has been excused (NM's husband is asleep).

(18) 107. HK: *kare **nakkan** **na-wu** **na-ni** **na-buyika** **na-wu***
IGN IDEM I-REL I-DEM I-other I-REL

***Bengwarr**, ya*
PERS.N yeah

'And him, that other person, [nickNAME] yeah'

108. ***ngane**-wokdi **ø**-yime-ng "**ngudda yi**-ra-y med,*
1ua-speak 3P-say-NP 2 2-go-IMP wait

***yi**-wok-ngime-n, ya ba bu*
2-word-go.inside-NP yeah so REL

'we talked about it and he said', 'You go and make a phone call, yeah so'

109. ***ngun**-wok-bekka-n'.* *Ya* ***ngudda*** *wanjh* ***ngal-bininjkobeng***
3/2-word-hear-NP yeah 2 SEQ II-wife
***ngarr**-wokdi ba bu*
12-speak so REL
he'll hear what you've got to say". Yes and you as the wife, we've spoken

110. ***yi**-marne-yolyolme,* ***nga**-m-wok-ngime-ng* *kuning* ***ngarr**-wokdi,*
2-BEN-explainNP 1-hith-word-go.inside-NP IVDEM 12-speakNP
nungka
3EMPH
and so you explain to him that I rang and we've spoken about this and he

111. ***ka**-m-re* *kare* *welengh,* *ngulam* ***ka**-m-re* *bukkan,*
3-hith-go IGN SEQ tomorrow 3-hith-goNP LOC
will come then tomorrow he'll come there,

112. *bakki* ***ka**-yi-marne-ka-n* *mak.*
tobacco 3-COM-BEN-take-NP CONJ
he'll take tobacco for him and

113. NM: ***Na-ngale?***
I-who
Who?

114. HK: ***Na-wu*** ***na-nih Bengwarr.***
I-REL I-DEM PERS.N. [lit: "deaf']
This one here, [NAME]

115. NM: *Ma*
Okay

In line 107, there is quite a specific indication that there is a switch of person reference. This is achieved with a relative clause, which is usually associated with a greater degree of specificity of reference. HK is also quite explicit in marking the switch but does so without resort to names of kin terms; *nakkan nani nawu na-buyika* "that one here, another person …". He explains that this person has given him instructions to make the phone call. It can be inferred from this that the referent must be someone in a position of kinship responsibility in relation to the deceased, i.e., close kin. The referent is in fact the next younger brother of the deceased. However, the switch is clearly indicated but the identity of the referent is not. The referring expression HK uses does not allow NM to make a successful identification of the referent. Her failure to recognise this person, who is in fact someone she would be able to recognise (I know this from my own background knowledge) is made explicit in line 113 when she asks "who?" The adjective *beng-warr* "crazy" is also used by men to refer to their sisters, although here there are

male noun class prefixes on the demonstratives. Anyone can be called *bengwarr* for a variety of reasons and there is just not enough detail to help NM.

Of interest is the switch reference in line 109. There is a swtich from the newly introduced referent *bengwarr* back to NM's husband through the third person subject-second person object prefix on the verb *ngun-wokbekkan* "he will hear what you have to say" and then another switch to the addressee as subject, *ngudda* "you" (line 109). It is here that we get a kinship term (these being rare in this conversation) *ngal-bininjkobeng* "the wife (of referent)" which is in fact an indirect way of referring to NM's husband.[19]

It is not clear whether or not NM's response with the continuer interjection *ma* "Okay, go on" in line 115 is evidence of her recognition of the referent or not. She doesn't get provided with new recogntional details despite her request. Speakers can use continuers even when there is a referential misfit. NM may not want to disrupt the gravity of HK's message by turning the conversation into a referential problem in itself. As other conversation analysts have noted (e.g., Auer 1984: 629), conversation participants sometimes display a preference to allow misfits to go unnoticed in the hope that further identifying descriptions will follow but also to avoid disruption of the on-going interaction. I suspect that in the present example, NM is still not sure who HK is referring to but is not going to pursue the issue in order to avoid interruption to the existing interaction.

HK's reply in line 114, also raises the question of whether or not Bininj Kunwok speakers are always prepared to relax minimal forms for more descriptive or "recognitional" ones (in the sense of Sacks & Schegloff 1979; Auer 1984) when the addressee cannot identify the referent. As mentioned, despite NM's repair initiator, HK doesn't give any new recognitional information about the referent. In fact, he just repeats what he says in line 107.

5. Conclusion

In Bininj Kunwok conversations where circumspection is called for, there is a clear preference to avoid the use of names as referring expressions. Why should the use of names be considered face-threatening? Certainly in some unmarked contexts, the use of names (at least nicknames and European given names) is not considered problematic. The strong preference to mark social relationships in person

19. HK's subtext here is that by speaking to the wife of one of the senior traditional owners of this community and asking explicitly that his words be passed on, HK has discharged his duty to inform relevant kin of the death of his father.

reference for a culture where everyone in the social universe is considered kin can result in the frequent use of kin terms rather than proper names. The category of kin term chosen for a referring expression is frequently determined by the strategic objectives of the speaker for a particular context and ways of speaking are influenced by the nature of the social relationship between interlocutors, as for any language. Additionally, there are a range of taboos on personal names across a range of contexts. Cross-sex siblings are in strict avoidance relationships and hearing each others names risks psychological discomfort and embarrassment of the highest order. The utterance of the name of a recently deceased person can have effects on the spiritual essence of the deceased person as well as causing grief to the next of kin. Uttering a person's name can effect their physical condition as names are considered an integral part of an individual and are not considered merely as arbitrary labels that pick out individuals in reference and address. The utterance of names is subject to rights and responsibilites in ritual and religious contexts. Words have extralinguistic significance in the sense that they beget creative, protective, preventative, destructive or regenerative cosmological effects. Finally in a very general sense, personal names can focus attention on an individual or on a culturally sensitive relationship and in many contexts this is considered undesirable. It is not hard to imagine that amidst such a mine field of risks, it is far easier to avoid or minimise the reliance on names as referring formulations in favour of a large repertoire of alternatives.

Given that in many contexts in Bininj Kunwok the use of proper names is considered face-threatening in nature, this highlights an interesting contrast in relation to explanations for why names are used so frequently as referring expressions. From a philosophy of language perspective, Searle (1997 [1958]) notes that reference is achieved either by the use of proper names on the one hand, or by definite descriptions, demonstratives and other expressions on the other. The claim is that proper names allow us to avoid the mess of negotiating our way to agreement on which descriptive characteristics would adequately represent a referent:

> 'Why do we have proper names at all?' Obviously, to refer to individuals. 'Yes, but descriptions could do that for us.' But only at the cost of specifying identity conditions every time reference is made: ... (Searle 1997 [1958]: 591)

In Bininj Kunwok, there are many contexts in which speakers do pay the price of specifying "identity conditions" via descriptions rather than resorting to proper names. Formulating the right descriptive referring expression in Bininj Kunwok may be fraught with risks, but perhaps less so than for proper names which can entail at the worst "shame" and at the lesser end of the scale, a sense of embarrassment resulting from a variety of cultural taboos. In such contexts when there is a preference to avoid the use of proper names, referring expressions are sought

which satisfy the same preferences as names do; singular expressions and sufficiently recognitional (but in these cases through a reliance on contextual factors or shared background knowledge and common ground). Further, these "alternative descriptions" to proper names can be sufficiently minimalist which in this framework refers to three aspects, firstly, a single reference form, secondly, the degree of recognitional potential inherent in a referring expression and thirdly less phonological content (Sacks & Schegloff 1979).

Whilst being seemingly vague, bound or free standing pronouns and demonstratives can often do the job as well as proper names whilst at the same time indexing knowledge and cultural practices held in common. In the case of kin terms, the strong preference for association in particular contexts is also satisfied. Having an extensive repertoire of referring expressions also enables speakers to use referring expressions as strategies that do pragmatic work. A kin term in the right context might convey affection, solidarity, inclusion or lever access to resources. In Bininj Kunwok joking relationships, speakers actually *concentrate* on the use of proper names in address to ironically echo what is appropriate in contexts of circumspection when proper names are to be avoided (Garde *in press*).

Bininj Kunwok speakers avoid using proper names in most contexts, demonstrating that they are not absolutely essential for most person reference in interaction. In the absence of proper names, the risks associated with alternative descriptive expressions and recognitional potential are certainly noticeable but not necessarily more problematic. Greater reliance on shared background knowledge as part of the inferential process of recognising a referent is to be expected, and instances as in (1) and (18) where reference can be foreclosed on the provision of what turns out to be an underspecified referent, are not uncommon and represent the kind of concomitant risks that can be expected from an avoidance of proper names.

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