

The Inclusive Construction in Australian Languages

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CONVENTIONS FOR ORTHOGRAPHY AND INTERLINEAR GLOSSES

The orthography used in the examples has been partly modified to make them more comparable. I follow Yallop (1982) in only changing those aspects of the orthography for each language which are non-standard within the Australianist tradition.

In all examples:

1. 'ny' is used for a palatal nasal
2. Either 'ty' 'tj' or 'j' are used for palatal stops.
3. 'rr' is used for tapped, flapped or trilled rhotics
4. 'r' is used for approximant rhotics
5. 'y' is used for [j].

Most of the languages from which examples are taken do not have a voiced/voiceless contrast for plosives. However, some of the languages are usually written using the symbols for voiced consonants, some use symbols for voiceless consonants and others use a mixed system. Symbols for plosives have been left as the voiced ones or the voiceless ones, whatever is in the original. Where originals are in a similar practical orthography they are left unchanged. Unusual symbols are represented with the same symbol as in the source.

Abbreviations used in interlinear glosses

Many of the interlinear glosses of the examples have been changed to standardise the abbreviations used. Common terms have been standardised, others have been left as in the original. Not all the abbreviations found in glosses are listed here, as some are not important to the discussion. Some unusual glosses are discussed in the section of text in which the example is discussed or in a footnote.

General strategies used in glosses

1. Complex information about a single morpheme is linked by full stops.
2. Additional information that is inherent to the morpheme glossed or evident from other sources such as the absence of a case-marker, or word order, may be indicated in brackets e.g. man(ABS) or 3.sg(POSS)
3. Where a morpheme is glossed in a way that relates to a grammatical rather than a lexical meaning it is shown in small caps.
4. Where the interlinear gloss has been changed in such a way that the analysis is significantly different to that in the original this will be mentioned.

Abbreviations

Person, number and gender of pronominals have been put into lower case to distinguish pronominal information from glosses of other morphemes that may include person, number or gender information such as noun class prefixes and possessive prefixes. Where a first person pronominal is glossed simply 'du' or 'pl' this indicates that the inclusive/exclusive distinctions are not relevant in the morpheme at issue or else 'in' or 'ex' will occur in the gloss.

Pronominal Information

1	First person
2	Second person
1/2	First person inclusive
3	Third person
m	Masculine
f	Feminine
nf	Non-feminine
sg	Singular
du	Dual
pl	Plural
nsg	Nonsingular
min	Minimal
a	Augmented
ua	Unit augmented
R	Restricted
ex	Exclusive
in	Inclusive
S	Intransitive subject
A	Transitive subject
O	object of transitive verb
CONTRAST	Contrastive form of a pronoun
card	Cardinal
OM	opposite moiety
SMOG	same moiety, opposite generational groups
+PAT	same patrimoiety
+GEN	harmonic generations
DISHARM	disharmonic generations

All other types of information

-	affix boundary
=	enclitic boundary
3II	Noun class marker
ABL	Ablative case
ABS	Absolutive case
ACC	Accusative case
ALL	Allative case
ANA	Anaphoric
ART	Article
ASS	Associative marker ('number' maker not case suffix)
ASSOC	Associative case
AUX	Auxillary
AVERS	Aversive case
CAUS	Causative
COMP	Completive aspect
COM	Comitative marker
CONJ	Conjunctive morpheme
CONT	Continuous aspect
COORD	Coordinate suffix
DAT	Dative case
DEM	Demonstrative

DS	different subject switch-reference marker
DU	Dual
DUR	Durative aspect
EFF	Effector case
EMPH	Emphatic
ERG	Ergative case
FEM	Feminine
F.PAIR	Focal member of a pair
FUT	Future tense
GEN	Genitive case
GIV	Given information
ICS	Inclusory Construction subset case
GRP	group
IMPF	Imperfective aspect
INCH	Inchoative aspect
INF	Infinitive form
INST	Instrumental case
IRR	Irrealis mood
LOC	Locative case
M	Masculine
NAME	A special affix for personal names
MLOC	modal locative case (Kayardild)
NC	Noun class marker
NEG	negative particle
NFUT	Non-future tense
NOM	Nominative case
NON.PL	Non-plural (i.e. singular or dual)
NOW	Immediate tense marker
NPST	Non-past tense
OM	Opposite moiety groups
ONE.OF.PAIR	One of a pair plural
ONE.OF.GRP	One of a group plural
PAIR	Paral nominal dual marker (see § 5)
PF	Perfective aspect
PL	Plural
POSS	Possessive
PRES	Present tense
PROP	Proprietary case
PST	Past tense
PUNCT	Punctual aspect
PURP	Purposive case
RDP	Morpheme created by reduplication
RECIP	Reciprocal
RR	Marker of reciprocal or reflexive
SA	S or A function
SG	Singular
SMOG	Same moiety groups, opposite generational groups
SS	Same subject marker
TR	Transitive marker
VEG	Vegetable class

1 INTRODUCTION

1.1 What is the Inclusive Construction?

A construction like that highlighted in bold in (1) commonly occurs in Australian languages.

(1) Roper River Kriol, Ngukurr
Minbala Michelle bin go.
1.du <name> PST go
Me and Michelle went.

(DAC unpub.)

This construction consists of a nonsingular pronominal referring to a group and another element that picks out a member of that group. Two overlapping acts of reference thus occur within a unified expression. The nonsingular pronominal, that refers to the whole group, will be called the 'superset'. The nominal that refers to a member of this superset will be referred to as the 'subset'. A similar construction to (1) occurs in languages with cross-referencing bound pronominals. Instead of a free pronoun being the superset term, a bound pronominal is used as in (2).

(2) Marra¹
rna-na **gariyi-marr** **rnirri-rlini**
M.SG-ART.NOM man(NOM)-NON.PL 1.du.ex-go.PST.CONT
The man and I went.

(Heath 1981:302)

Note that, the terms superset and subset denote referring expressions, not single words. In example (2) the subset expression, though it consists of the two words *mana gariyimarr* only denotes a single subset; the superset is the bound pronominal prefix on the verb. The two types of Inclusive Construction (IC) exemplified in examples (1) and (2) will be referred to as Type 1 and Type 2 respectively: Type 1 has a free pronoun referring to the superset while Type 2 has a bound pronominal. By 'bound pronominal' I mean any mode of encoding information about participants in a clause, including verbal agreement which is not considered referential. The distinction between Type 1 and Type 2 is encoded in parameter I. We also find that it is possible for the superset to be represented by both a free pronominal and a bound pronominal - the three possibilities are laid out in Table 1.

¹ See previous section for information on the standardisation of orthography and interlinear glosses.

Table 1: Parameter I: is the superset represented by a bound pronominal or a free pronominal, or both?

		Bound pronominal?	
		YES	NO
Free pronominal?	YES	<u>Type 3</u>	<u>Type 1</u>
	NO	<u>Type 2</u>	?

Type 3, in which both a bound and a free pronominal represent the superset, is much less common than Types 1 and 2 in Australian languages - an example is given in (3).

(3) Nunggubuyu
nurru=wa-ng **ma:gurn** **nurru**
 1.pl.ex-kill-PST1 <name> 1.pl.ex
 Ma:gurn and us killed it (buffalo)

(Heath 1984: 522)

The fourth square in Table 1 represents a type of IC which has been observed yet. Such an IC could theoretically occur in languages in which not all participants in a clause need to be overt.

The other main parameter along which ICs vary is in whether they contain extra markers that highlight the presence of an IC or not. The two examples given so far do not contain any extra markers; they are the kind of IC which will be referred to as 'implicit' ICs. The most common type of extra marker found in Australian ICs is a marker on the subset like the one underlined in example (4) which indicates that the subset is 'one of a pair' or 'one of a group'. ICs with extra markers will be referred to as 'explicit' ICs.

(4) Ngandi
rni-nyarra-ng-bula **nyarri-rudhu-ng**
 M.SG-father-POSS-ONE.OF.PAIR 1.du.ex.m-go-FUT
 My father and I will go

(Heath 1978:128)

There are a range of different types of markers found in explicit ICs. In Badimaya, there is a specific case suffix that occurs on IC subsets. An example is given in (5) in which the special IC case marker is underlined.

(5) Badimaya
ngalidya **babiny-da** gabi ngal-ang
 1du(ABS) friend-ICS² water(ABS) swallow-PST.PF
 We two, my friend and I, were drinking wine in the bush.

(Dunn 1988: 67)

A further possibility for marking explicit ICs are comitative markers which, although less common in Australian ICs than in other linguistic areas, do occur as in example (6).

(6) Bunuba
 ngay **wiyi-guda** **wardburrayntha**
 yes woman-COM2 go-3.nsg-RA³-PST-DU
 He and the woman went.

(Rumsey 2000: 62)

The markers that occur in explicit ICs will be discussed in more depth in sections 4 and 5. These two main parameters I use in my approach to ICs are based on those proposed by Lichtenberk (2000) whose work will be discussed in the next section. I will now look at previous work on the IC and detail how my approach builds on and modifies earlier approaches.

1.2 Previous investigations of the Inclusory Construction

A number of scholars have commented on the existence of the IC in various languages and suggested possible analyses. In this section I wish to look in detail at the two main investigations of the IC – work by Linda Schwartz (1988a, 1988b) on what she calls the ‘Plural Pronoun Construction’ (my Type 1 and 3 ICs) and ‘Verb Coded Coordination’ (my Type 2 ICs) and work by Frantisek Lichtenberk (2000) on ‘Inclusory Pronominals’. Lichtenberk (2000) refers to additional work on the IC Aissen (1989) and Ladusaw (1989). Like Schwartz, Aissen (1989) and Ladusaw (1989)⁴ view the IC as a subtype of another construction - either comitative constructions or nominal coordination. Lichtenberk (2000) provides a convincing critique of their views and approaches the IC as an alternative to comitative and coordination constructions rather than a type of either, which is the approach followed here. In addition to Schwartz and Lichtenberk's work, I will briefly discuss work by Balthasar Bickel (ms., 2000) on 'associative agreement' in which he discusses Type 2 ICs as a type of agreement.

Schwartz has produced the widest global survey of the IC to date and formulates a number of interesting generalisations but does not survey any Australian data. Schwartz looks in particular detail at the IC in some European languages in which the IC is one of two possible interpretations of an expression like that in (7). The two possible interpretations are given in ‘a’ and ‘b’.

² I have glossed this case marker 'ICS'. Dunn (1988) views the case marker as an allomorph of the locative case and glosses it 'LOC'. In section 4.1 I will discuss Badimaya ICs in more depth and in particular why this case marker should be viewed as encoding a different case to the locative case.

³ The gloss 'RA' glosses a verb root.

(7) Polish

Posli_my z prezidentem rzeczpolitey do kina
went.1.pl.AUX INST⁵ president republic to cinema
a. We went to the cinema with the President of the Republic.
b. The President of the Republic and I went to the cinema.

(Schwartz 1988a: 67)

Expressions like (7) are constructionally ambiguous – they can be interpreted as a comitative construction (translation *a*) or as an IC (translation *b*) - that is the instrumental case can mark an additional member of the set denoted by the agreement in the verb (*a*) or an included member (*b*). This constructional ambiguity seems to be common when a language marks IC subsets with the same marker as the 'accompanying nominal' in comitative constructions. This is not the only typological profile to allow such ambiguities. For example in Warlpiri ambiguity occurs in the IC in which the subset term carries a 'one of a group' number marker, not a comitative marker (see § 5.1.3). Expressions comparable to those found by Schwartz in which the IC is marked with comitative case, occur in Bunuba and Maranungku (see § 5.4.1). This kind of IC seems to be the only kind found in European languages⁶, but is very rare in Australian languages. Stassen (2000) notes that in many languages around the world, comitative marked nominals may optionally be included in the total number marked by agreement on verbs, which causes the type of ambiguity identified by Schwartz.

There is a big difference between the types of explicit markers found in Australian ICs and those found by Schwartz in her survey. Schwartz dubs all markers of explicit ICs 'connectors' and makes the following comment about their usual function of IC outside of ICs:

“When an overt, non-reduced connector morpheme occurs in the PPC [Plural Pronoun Construction], in all cases it has a range of meaning in its other uses including accompaniment or comitativity, and the connector is generally not used for other expressions of phrasal or sentential coordination (except, in some cases, NP coordination).”

(Schwartz 1988b: 241, my square brackets)

Schwartz's generalisation does not apply well to the Australian data. In § 5 I will describe all the types of explicit markers I have found in Australian ICs. These can be categorised as 'one of a group/one of a pair' number markers (§ 5.1); special pair markers that mark 'natural pairs' (§ 5.2); conjunctive markers (§ 5.3); and comitative markers (§ 5.4).

⁴ I give Lichtenberk's account of Ladusaw's ideas here because I was not able to access a copy of Ladusaw (1989).

⁵ I have changed the gloss of *z* to 'instrumental' as Schwartz glosses it as a 'connector' by which she means any type of marker in an explicit IC.

⁶ Schwartz gives examples of constructionally ambiguous expressions like that in (7) for French, Hungarian, Latvian, Bulgarian, Serbo-Croatian, Chilean Spanish and Russian.

Schwartz's work on ICs focuses on what she sees as the 'conditions' for ICs. What she means by 'conditions' is the context under which an IC interpretation rather than a comitative interpretation can occur in languages for which a constructionally ambiguous expression like (7) occurs. These vary cross-linguistically but she finds some tendencies. For example, Schwartz notes that the IC in Polish usually implies some type of intimacy between the referents so the comitative interpretation of example (7) is preferred by most speakers because the formal title given to the President suggests a lack of intimacy with the speaker. Schwartz also discusses the 'conditions' of ICs in languages in which they are clearly defined constructions rather than one interpretation of an ambiguous expression. In such languages what she is really describing are language-specific constraints on the semantic range of the IC. Such detailed information on, for example, whether animals can be referred to by the IC, is lacking for Australian languages so I will not be able to investigate that kind of question here.

Lichtenberk's (2000) work on the IC has influenced this study and I partly follow his typological approach to the IC and use some of his terminology. He views the IC as a distinct and unitary construction and constructs a brief global typology based on data from Schwartz and others in which to place his in depth investigation of the IC in Toqabaqita, an Oceanic language of the Solomon Islands. I follow Lichtenberk in identifying two basic parameters along which ICs vary. Parameter II - the distinction between explicit and implicit ICs, is taken directly from Lichtenberk. However my parameter I has a different basis to Lichtenberk's parameter I. Lichtenberk's parameter I distinguishes between 'phrasal ICs' and 'split ICs'⁷ whereas I look at whether the superset is represented by a bound pronominal, a free pronoun or both. I use a different parameter I for a number of reasons. The free pronoun superset and the subset form a phrase in Type 1 ICs and Type 3 ICs in many languages, but not all. As we will see in § 4, there is evidence that the Type 1 IC is a complex NP in some Australian languages and is two independent NPs in others.

While, I have left Lichtenberk's parameter II intact : "is there or is there not an overt marker of the relation between the inclusory pronominal and the included NP?" (Lichtenberk 2000: 3), I have investigated in more depth the type of markers that can occur in ICs and looked in particular at case in ICs, which Lichtenberk does not. I discuss markers that occur in Australian ICs in § 4 and in § 5. Until then I will avoid using explicit ICs as examples where possible, in order to focus on other aspects of ICs. Lichtenberk's study is important because it shows that the IC can be a distinct syntactic construction with its own set of syntactic properties that interact with semantic, syntactic and pragmatic factors. His work on Toqabaqita provides a firm basis for arguing that the IC is a distinct construction, not a subtype of nominal coordination or comitative constructions.

⁷ 'phrasal ICs' are ICs in which the superset and subset constitute a noun phrase and 'split ICs' are all other ICs.

through loss of one of the nominals from conjoined noun phrases – a similar analysis to Schwartz. It has also been proposed that the IC is a type of Determiner Phrase in which the Superset pronominal is the determiner and the subset is the D' (Blake 2001). This may well be a useful analysis of the IC in some languages and highlights the structural similarities between definite NPs and ICs in some languages. Other discussions of the IC occur within individual grammars such as Morphy (1983: 87), Wilkins (1989: 407), Goddard (1985: 100), Evans (1995: 249), Evans (forth.: §6.2.4.1) and Heath (1978: 302, 1984: 542).

1.3 Defining the Inclusory Construction

The first stage in creating a typology of a construction engages the typologist in two simultaneous processes. This stage could be described as the 'heuristic stage'. During this stage the typologist collects information on the range and possibilities of the construction and defines the limits of the construction. Yet how can the typologist collect examples when she has not yet decided what to include as examples of the construction? - by using a working version of what Haspelmath (1997) calls a 'formal-functional definition'. Haspelmath (1997) uses his formal-functional definition to study indefinite pronouns - which are encoded by individual lexemes - but a formal-functional definition is also a useful tool with which to study constructional phenomena. It not only allows for description of the similarities and differences between constructions cross-linguistically but also allows for discussion of the fuzzy borders between constructions in each language. These fuzzy borders can turn out to be the most interesting aspect of a typology. For example, the most interesting finding of Stassen's (2000) study of noun phrase coordination was that two thirds of the languages in his sample have separate NP coordination constructions (Stassen's 'NP conjunction') and comitative constructions, while one third have a single construction for linking nominals.

My use of the terms 'coordination construction' and 'comitative construction' throughout this work is based on Stassen's characterization of the difference between the two⁸. Stassen's prototypes for coordinate strategies versus comitative strategies are given (10) below.

(10)

COORDINATE STRATEGY	COMITATIVE STRATEGY
NPs have same structural rank	NPs differ in structural rank
Unique coordinate particle	Unique comitative marker
NPs form a constituent	NPs do not form a constituent
Plural/dual agreement on verbs	Singular agreement on verbs

(Stassen 2000: 21)

I use the features that Stassen lists in (10) to define nominal coordination constructions and comitative constructions. However, I do not place the same importance as Stassen does on the

⁸ Stassen defines 'strategies' rather than 'constructions' but I treat his 'strategies' as constructions.

occurrence of a 'unique coordinate particle' in coordination constructions or the constituency of either construction. In addition I do not view the two constructions to be in binary opposition to one another. Stassen avoids discussing ICs by excluding expressions containing pronominals from the domain of his investigation but my initial starting point is a three-way division - between comitative constructions, coordination constructions and ICs. Stassen defines coordination and comitative constructions as prototypes because he notes that in quite a few languages there is a fuzzy boundary between the two constructions.

In any typology, arbitrary limitations are usually imposed on the data. Stassen (2000) makes the decision to look only at nominal coordination and comitative constructions involving two non-pronominal nominals. This rules out 'list' type constructions, NP coordination constructions that utilise nonsingular pronouns and ICs. I have tried to avoid *a priori* arbitrary limitations on the domain of inquiry because of my interest in the links between constructions, which can easily be severed by such arbitrary limitations. I define the IC in terms of two sets of properties: (i) defining properties and (ii) prototypical properties. Defining properties determine what will and will not be considered within the scope of this investigation. Prototypical properties are generalisations about the type of ICs that tend to occur and those that tend not to. I will discuss non-prototypical ICs that I have found too, but note in each case, that they are unusual. By having a set of prototypical properties as well as a set of defining properties, I allow for discussion of unusual ICs. Although a particular language may not have a clearly defined IC construction, it may have a type of expression that fits the IC prototype. In such cases it is possible to discuss these expressions as putative ICs. In § 2 I introduce the defining and prototypical properties of the IC.

1.4 Is the Inclusive Construction really a distinct construction?

My typology is grounded in a number of tenets of construction grammar, namely that constructions, like lexical items, have a prototype meaning structure and that they also form family resemblance networks of association (Goldberg 1995). The quote from Schultze-Berndt (2000) below sums up what I mean by 'construction'.

"Constructions can be defined as patterns which are non-compositional, in the sense that the meaning of a complex expression that instantiates this pattern could not be arrived at solely by relying on the meanings of its parts, or the meanings of other constructions. In other words, if the meaning of a complex expression can only be fully stated with reference to the properties of the pattern itself, this pattern has to be recognised as a construction in its own right - which, in a sense is idiomatic."

(Schultze-Berndt 2000:25)

I have already stated that in some languages the IC is not a clearly distinct construction. What then is my basis for viewing the IC as a construction cross-linguistically? I follow an approach that I have taken from functionally-oriented typologies such as Haspelmath (1997) and Stassen (2000) which as far as I am aware has not been named as yet. In his typology of indefinite

pronouns, Haspelmath identifies nine functions (i.e. meanings) of indefinite pronouns. Not all nine functions occur in every language and in many languages particular indefinite pronouns cover more than one of these functions or are missing. The nine functions of indefinite pronouns are an abstract cross-linguistic construct which provide a framework for comparing the functions of indefinite pronouns in a large number of languages. We can view related constructions in a similar way to Haspelmath's related 'functions of indefinite pronouns'. Our three prototypes for coordination constructions, ICs and comitative constructions are like Haspelmath's nine functions of indefinite pronouns. There are a number of other constructions in Australian languages with syntactic or semantic similarities to ICs. These include list constructions, ordinary appositions of nominals, associative constructions, collective plural constructions, generic-specific constructions, part-whole constructions and ordinary NPs. Like Haspelmath's nine functions of indefinite pronouns, it is possible to find languages for which all these constructions occur but in most languages only a few of these constructions occur.

Haspelmath's unnamed strategy is that if certain functional and formal features commonly correlate then it is valid to identify a construction cross-linguistically. Describing an abstract cross-linguistic construction provides a basis for comparing something in one language to something quite different in another language, without obscuring the differences between them. This abstract creation allows the typologist to map out the semantic space covered by different formal expressions in each language - illuminating the relationships between constructions in each language and the possibilities for linguistic expression available in each language. If language A has a single construction which corresponds to two distinct constructions in language B there are two possible explanations. The first is that there are two semantic subtypes of the construction in language A which are not formally distinct. The second is that the semantic distinction realised by two separate constructions in language B is simply not consciously made by speakers of language A. There is no way for the typologist to determine which of these possible explanations is correct so neither should be assumed. This means that some of the ICs considered here may not be distinct constructions but subtypes or variations of a more general construction in the language in which they are found. In section 7 I will discuss the relationship between ICs and a number of related constructions.

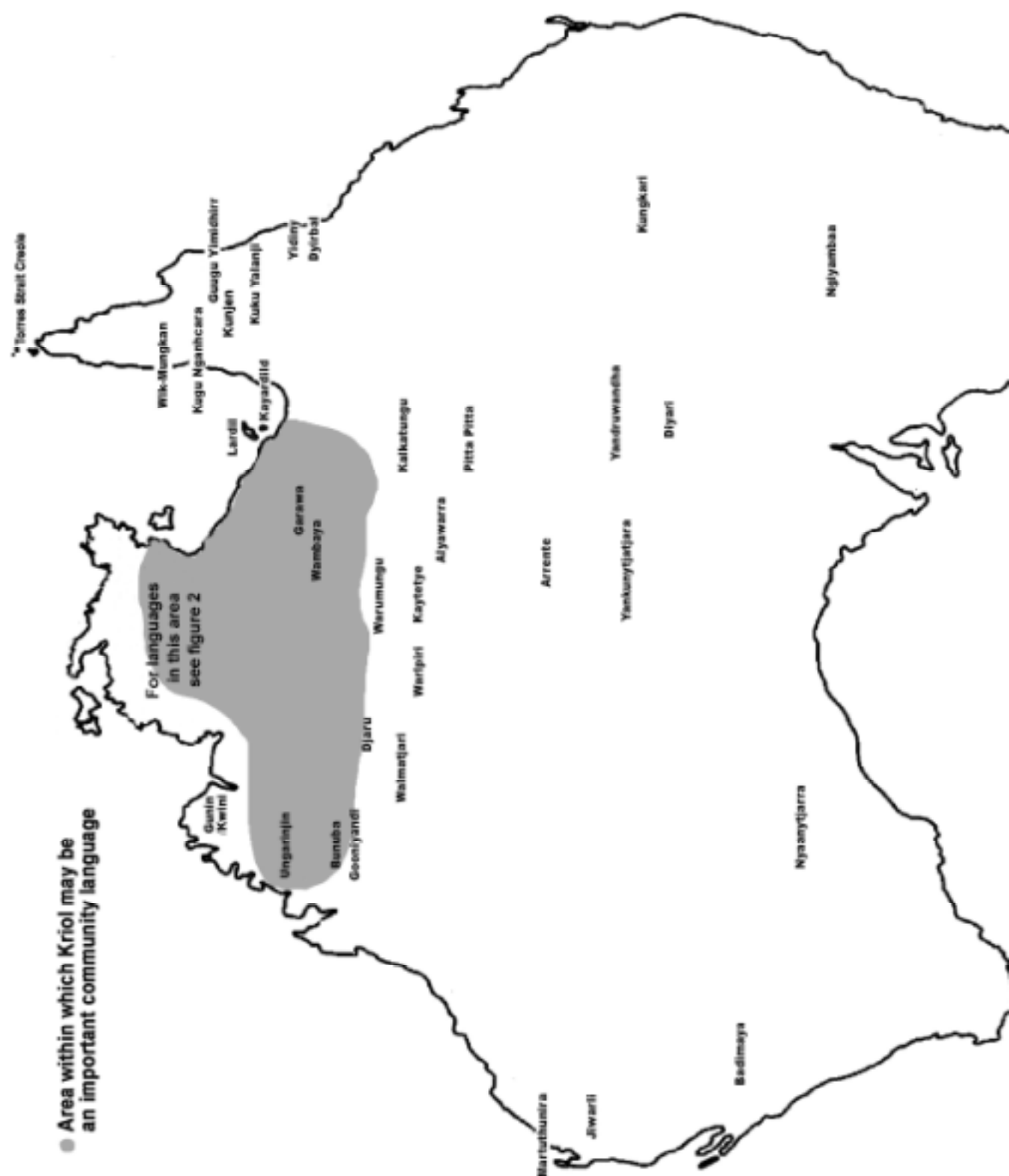
1.5 The languages sampled

This study focuses on ICs within Australian languages. I treat Australia as a linguistic area within which semantic and syntactic convergence and diffusion is expected to occur. Despite comprising 21 families, Australian languages commonly have very similar phonemic inventories (Dixon 1980) and similar patterns of semantic structure have been found across large distances (Evans And Wilkins 2000). Areal features are thought to have developed because Aboriginal Australians traditionally participated in cultural networks that combined covered most of Australia but had little contact with people outside of Australia.

The survey of Australian languages carried out for this study was carried out in the following manner: the larger and more recent grammars of Australian languages were surveyed first, then smaller and older grammars; text collections and other types of studies were also checked for ICs but the survey of the literature on Australian languages was not exhaustive. All the languages for which ICs were found during the course of this project are listed in the appendix, along with details of sources and page numbers. The appendix includes languages not referred to directly in the body of this work. For some languages there are clear examples of the IC collected but for others, only one example has been collected which looks like an IC but is not definitely an IC. There are additional problems with salvage studies. Where the informant is not a very confident speaker it is possible that the IC may not have always been present in the language but has been borrowed in from a traditional language the speaker is more familiar with or Kriol or Aboriginal English. So far I have evidence of the IC in about fifty Australian languages.

Determining which languages the IC does not occur in is extremely difficult. It is possible to write a large, in depth grammar of a language without discussing the IC, especially if it is not very common. For this reason it will not be possible to make predictions about which types of languages the IC is found in, on the basis of the languages surveyed.

Maps of the locations of the languages for which ICs were found are shown in Figures 1 and 2. The majority of the languages are shown in Figure 1. Figure 2 shows the locations of languages located in the far north of the Northern Territory which are too close together to be shown on Figure 1. Lines indicate the approximate boundaries of the areas in which the languages were traditionally spoken in Figure 2.



● Area within which Kriol may be an important community language

For languages in this area see figure 2



Figure 2: Location of languages in the northern part of the Northern Territory. Adapted from Harvey and Reid (1997: viii). Note that the areas within which Kriol is spoken is not marked on this map.

1.6 The structure of this work

In §2 I begin by presenting my definition of the IC which is also my definition of the domain under investigation. In §3 I briefly survey the IC in a single language, namely Kriol, looking at questions which I explore in §2. In §4 I use evidence from case marking to investigate the syntactic structure of the Type 1 IC in a number of languages. This involves investigating whether Type 1 ICs form NP constituents, which they appear to do in some languages but not others. I also propose a third parameter for a typology of the IC to describe the role of relational and referential case marking in ICs. In §5 I survey the types of explicit markers I have found among Australian ICs. The comitative markers that mark the subsets of ICs in Bunuba and Maranungku are treated also as explicit markers and discussed in §5.4. This completes our survey of the main parameters in the variation of the Australian IC, and I then move on to a more detailed look at particular types of IC.

In §6 I look at the distribution of Type 1, Type 2 and Type 3 ICs in languages and what factors can be used to predict which type of IC will occur in a language. In §7 I look closely at relationships between the IC and other constructions. In §8 I address some of the semantic possibilities of the IC which have not yet been discussed, in particular, the occurrence of indefinite pronouns as IC subsets, semantic parallels between types of switch-reference and ICs, and what might guide speakers to use the IC rather than other options.

Finally, in §9 , I return to Schwartz's work on the IC and her generalisations about the nature of the IC cross-linguistically. Some of her generalisations are supported by the Australian data and some are not. To conclude I summarise the three parameters of the IC which have been discussed and present them together with the defining and prototypical features as a working model which could form the basis for a more comprehensive model of the IC in Australian languages and elsewhere. I also point out those aspects of the typology that are problematic and what kind of research would be useful to developing our understanding of the IC.

2 PROTOTYPICAL AND DEFINING FEATURES OF THE INCLUSORY CONSTRUCTION

In order to describe the IC in a way that is flexible enough to allow exploration of its boundaries and its links with other constructions I define it in terms of two sets of features: defining features and prototypical features. Defining features of the IC provide a sharp cut off point between what is and what is not considered an IC. The defining features are designed to exclude examples which would be better described as another type of construction than the IC. Prototypical features predict the types of ICs we most commonly find in languages for which the IC is clearly a distinct construction. They are some generalisations I have made about the type of ICs that tend to occur.

The defining and prototypical features are not meant to be the defining and prototypical properties of the IC in any one language but of an abstract construction, created for the purposes of describing the IC cross-linguistically. All of the defining features given are expected to hold for any IC in any particular language but in each language there may be additional defining features - which could be drawn from the set of prototypical features. This set of features has been developed with a focus on Australian ICs but it is hoped that they will provide a useful framework for approaching the IC globally.

(11) Defining features of the IC

- a. Relationship between superset and subsets is one of proper inclusion
- b. Entailments of the predicate always hold for the superset, never just for the subset.
- c. Superset is a nonsingular pronominal
- d. IC is equivalent to a one argument of a predicate

(12) Prototypical properties of the IC

- a. Central member of superset is not referred to by subsets.
- b. Single subset occurs
- c. Refers to humans
- d. Type 1 IC usually has strict ordering: subset first or subset last

In the next few subsections each of these features listed will be discussed - in particular what possibilities are excluded by each feature.

2.1 Defining Features

2.1.1 Defining feature a: Relationship between superset and subsets is one of proper inclusion

According to set theory, Set A is only a proper subset of Set B if Set A is included by Set B but is smaller than Set B. In other words, a proper subset of a set does not fully exhaust the range of that set. This feature pinpoints the fundamental semantic feature of all ICs. It separates ICs from coordination constructions in which nonsingular pronominals occur, referring to the whole set and it separates ICs from 'ordinary apposition' - in which a nonsingular entity is referred to in entirety in different ways. This feature is not an easy one to apply to ICs. For ICs with dual

supersets it is relatively simple - only one subset can occur because if two occur the reference of the superset has been exhausted and a coordination construction rather than an IC is occurring. In example (13) it is clear that the reference of the superset is exhausted by the two subsets.

(13) Mangarrayi
ngaya **rna-barda** **ngi-ya-j**
 1.sg.NOM M.NOM-father 1.ex.du-go-PST.PUNCT
 My father and I went.

(Merlan 1983: 104)

However, in example (28) a plural number superset occurs so it is not clear whether the three subsets exhaust the reference of the superset or if other people who are not referred to individually are included in the reference of the pronoun *gidyarndi*. The three subset elements are indicated in the square brackets.

(14) Gooniyandi
gid-yarndi **[lambadi** **ngaanggi]** **[garingi** **ngaanggi]** **[nginyji]**
 you(pl)-PL father-in-law your wife your you
 You lot: your father-in-law, your wife, and you.

(McGregor 1990: 286, my brackets)

In Gooniyandi, coordination of nominals is accomplished by simple juxtaposition of nominals so if we knew that the speaker was only referring to three people in (28) the example would be very similar to example (15) from Mparntwe Arrente which is a simple apposition of a nonsingular pronominal to a coordination construction of the same total number. Such expressions are ruled out defining feature *a*.

(15) Mparntwe Arrente
 , ingwe nyente-le [atyenge newe uthene ayenge] ilerne
 night one-LOC 1.sg.DAT spouse and(BI) 1.sg.S 1.du.S

 pmere-le ne-rle.ne-ke.
 camp/home-LOC be/sit-CONT-PST.COMP

, my husband and I were staying at home one night

(Wilkins 1989: 502, 506, my brackets)

The relationship between the coordination construction and the nonsingular pronominal is not one of proper inclusion because the reference of the coordination construction exhausts the reference of the superset completely. This does not mean that it is not possible for a coordination construction to be a subset of an IC. An example of such an IC from Mparntwe Arrente is given in (16).

(16) Mparntwe Arrente
 [Yave uthene kake uthene] anwerne-ke re nthene-ke
 e.sister and(BI)⁹ e.brother and(BI) 1.pl-DAT 3.sg(A) give-PST.COMP
 She gave it to (my) sister, (my) brother and I

(Wilkins 1989: 409, my brackets)

While I contrast the IC to what I am calling ‘ordinary apposition’ I do not mean to imply that the IC is not a type of NP apposition. An apposition analysis may be an appropriate syntactic analysis for languages in which the IC is composed of two independent NPs. Both ordinary apposition and ICs may have the same syntactic structure but they are viewed as semantically different constructions.

Feature *a* also distinguishes ICs in which the subset has comitative marking from true comitative constructions. A comitative construction is defined as one in which reference is made to two entities but agreement is only with one of the entities. Once agreement in a putative comitative construction is nonsingular, an expression may be ambiguous as to whether it is a comitative construction or an inclusory construction. An example of such an expression in Polish was discussed in §1.2. If (17) was translated ‘they two went with the woman’ then it would be a comitative construction. However, the subset ‘woman’ is included in the reference of the superset in this example according to the translation given. Rumsey (2000) does not discuss whether this expression could alternatively be interpreted as a comitative construction.

(17) Bunuba
 ngay wiyi-guda wardburrayntha
 yes woman-COM2 go(3.nsg-RA-PST-DU)
 He and the woman went.

(Rumsey 2000: 62)

2.1.2 Defining feature *b*: Entailments of the predicate always hold for the superset and subset

The entailments of part-whole and generic-specific constructions may only hold for the smaller set – the part or the specific nominal. However, in the IC, the entailments of the predicate never hold just for the subset. An example of a part-whole construction that takes a similar form to the Type 2 IC, is shown in (18).

(18) Warlpiri
 waku-jarra=lpa=rna kankarlu-jarri-ja wirnti-nja-karra.
 arm-DU=ABS.PST=1.sg.S high-INCH-PST dance-INF-COMP
 I raised my arms while dancing (literally, ‘I rose [in my] arms, while dancing.)
 (Simpson and Bresnan 1983: 52, discussed in Bickel ms.)

Defining feature *b* also separates the IC from a number of other types of ‘disagreement’. The construction in (19) is not an IC because the entailments of the predicate hold only for the subset

⁹ There are six different strategies for nominal coordination in Mparntwe Arrente. The use of *uthene* for coordinating two nominals is one of them. It can only conjoin two nominals which are seen as being of a similar kind. It may occur following both nominals or just once between the nominals (Wilkins 1989).

dabbarrabolk ‘old people’ and not for the superset *arri-* ‘first person augmented’ which includes the speaker - who did not take part in the event described.

(19) Bininj Gun-wok
 arri-bolk-ngeibu-ni dabbarrabolk gorrogo, Gamirn.
 1.a-place-call-PST.INF old.people before <name>
 .. our old people used to call it, *Gamirn*.

(Evans forth.: 363)

However, this particular expression may represent a semantic extension of an IC or even a simple apposition in which a group of old people and their wider cultural group are seen as one and the same.

2.1.3 Defining feature *c*: Superset is a pronominal

Feature *c* rules out constructions in which the reference of a nonsingular nominal is clarified by making reference to some members of the set referred to by it as in (20).

(20) Maranungku
 jawa kini muntyir ngaran nungkuti mupiningka meningety;
 meat here turtle goanna water.snake rock.snake porcupine
 There is game here: turtles, goanas, water snakes, rock snakes and porcupines.

(Tryon 1970: 88, 90)

Defining feature *c* also excludes a construction in Ungarinjin that appears to be very similar to the IC except that the superset term is a number. An example is shown in (21).

(21) Ungarinjin
 Djungurimedjerri
 <name> two
 Two people, one of whom is Djunguri.

(Rumsey 1982: 139)

Rumsey (1982) categorises this construction as a type of head plus attribute NP but notes that it differs from other Ungarinjin NPs of that type in having a fixed order. As we will see later ICs tend to have a strict order – either superset first or superset last, even in languages in which the order of nominals and their modifiers is fairly free. Rumsey (1982) gives only one example of this construction and although it is unusual its properties seem to align it with ICs syntactically. It is important to distinguish the IC from constructions with nonsingular nominals as supersets but if more constructions like the Ungarinjin one are found it may be useful to expand the definition of the IC to include numeral supersets.

2.1.4 Defining feature *d*: Inclusory Constructions are equivalent to a single argument of a single predicate.

Defining feature *d* rules out cases which span more than one clause like that in (22)

(22) Ndjébbana
 Yá-nabo ba-rra-yó-ra-nja.
 3.min.f.S-step(+CTP) 3ua.f.S-RE-lie-CTP-FEM
 She fell and they both lay on the ground.
 (my translation, original: she fell on top of her mother)

(McKay 2000: 326)

McKay (2000) groups example (22) together with others that can be defined as ICs. However, it does not really appear to be similar to ICs in Ndjébbana or elsewhere. I will discuss the possibility of ICs crossing clause boundaries again in §8.5. It is best to limit the definition of the domain of investigation to single clauses for the purposes of this investigation in order to identify clear cases of the IC and later look at whether ICs can occur across clause boundaries.

2.2 Prototypical features

2.2.1 Prototypical feature a: Central member of superset is not referred to by subsets

In order to explain what I mean by the 'central member' of a superset, I will need to look in detail at the differences between ICs with different superset pronominals. There is a difference between (23) and (24) which has not been discussed yet.

(23) Roper River Kriol, Ngukurr
Minbala Mishel bin go.
 1.du <name> PST go
 Me and Michelle went.

(DAC unpub.)

(24) Roper River Kriol, Ngukurr
Dubala Mishel bin go.
 3.du <name> PST go
 Michelle and whoever went.

(DAC unpub.)

In example (23) both referents of the IC are fully specified, but in (24) only one member of the superset is identifiable - the other being translated as 'whoever'. Given a suitable context we might be able to identify who this person is, though this example was checked for acceptability in an interview so it has very little context. Example (25) below comes from a traditional narrative about two mythological beings: Green Turtle and Catfish. It is clear from the narrative context in Heath (1980) that the other entity referred to by the IC is Green Turtle who has been the only protagonist in the narrative up until example (25) is uttered.

(25) Nunggubuyu
wini:- 'nggarra=ya-nggi **yi:rnangurru,**
 3.du.m-TOGETHER=go-PST2 catfish
 He and Catfish went along together.

(Heath 1980b:127)

We can predict which ICs fully specify their referents without recourse to contextual information and which do not from the person and number of the superset. This information is summarised in

Table 2. The shaded sections indicate those pronominals which occur in ICs in which the referents are fully specified.

Table 2. Specification of referents of Inclusory Constructions in languages with different systems of pronominal contrasts

a) Languages with no inclusive/exclusive distinction in dual and plural first person pronominals

	dual supersets	plural supersets
1st person	1.du	1.pl
2nd person	2.du	2.pl
3rd person	3.du	3.pl

b) Languages with exclusive/inclusive distinction in dual and plural first person pronominals

	dual supersets	plural supersets
1st person inclusive	1.du.in	1.pl.in
1st person exclusive	1.du.ex	1.pl.ex
2nd person	2.du	2.pl
3rd person	3.du	3.pl

c) Languages with minimal/unit augmented/augmented system in pronominals

	unit augmented	augmented
1st person	1.ua	1.a.
1/2 person	1/2.ua	1/2.a
2nd person	2.ua	2.a
3rd person	3.ua	3.a

Tables a, b and c represent only some of the possible pronominal systems in Australian languages. Both referents of a first person dual inclusive superset are already specified without any subsets at all, which is why they rarely occur as IC supersets - those examples that have been found will be discussed shortly. A third person dual IC with only one subset will have one unspecified referent for whom the identity is unknown. However, when the superset is plural rather than dual, both the identity and total number of unspecified referents is unknown. Like the identity of these unspecified referents, the total number is often clear from the linguistic context. For example it may have been mentioned earlier what size the group of protagonists in a narrative is. For languages without the inclusive/exclusive distinction in first person pronouns, the IC is interpreted as exclusive when a nominal subset occurs. Alternatively a second person pronominal subset can be used to indicate that an inclusive group is intended (see discussion of (26) below). For languages without the dual category in pronouns, the default interpretation of the IC tends to be dual, unless there are reasons to interpret it as plural.

The central member of a superset is that referent which is already specified by the superset. This is a single first person for first person supersets, a single second person for second person supersets and a single first plus a single second person for first person inclusive supersets. Third person supersets do not have a central member. These ‘central members’ are not commonly referred to by subsets for obvious pragmatic reasons, not because IC subsets cannot be pronominal. For example, ICs like (26) with pronominal subsets, are commonly found in languages lacking inclusive/exclusive distinctions in pronominals.

(26) Central and Eastern Arrente
Unte ilerne alherraye!
 2.sg 1.du go
 let's you and I go!

(Henderson and Dobson 1994: 357)

The fact that ICs with first person dual inclusive supersets are not common is not listed as a special prototypical feature because it follows from prototypical feature *a*. Because both members of a first person dual inclusive superset are central members, any IC with a first person dual inclusive superset is, by definition, non-prototypical. The use of a first person dual inclusive pronominal superset occurs in example (27).

(27) Ndje↔bbana
Ngáyabba yí↔-yarra?
 1.min.card 1/2.min.S(IRR)-go(FUT)
 Can I go with you? [literally perhaps ‘I, can you and I go?’]

(McKay 2000:290)

A possible explanation of the use of the dual inclusive superset (which McKay describes as the 1/2 minimal pronominal) is that Ndje↔bbana appears to lack a special comitative construction. Most Australian languages have at least one type of comitative construction and Stassen (2000) notes that globally, it is very unusual for a language to lack a comitative construction. McKay comments on the way in which 'accompaniment' is expressed in Ndje↔bbana:

“In Ndje↔bbana there is no comitative or proprietive (‘having’) affix, such as one would find in many other Australian languages to mark the person accompanying another or doing something ‘with’ that person. Ndje↔bbana speakers use the resources of the verb pronominal prefix forms to express this type of meaning as in example (124) [my example (27)]. In this example the independent pronoun is used to focus on the one who wishes to accompany and the verb is marked with an S pronominal prefix which includes both that person and the other (the addressee) who is to be accompanied ... It is the partial overlap between the reference of the independent pronoun and the (more inclusive) pronominal prefix which expresses the notion of accompaniment.”

(McKay 2000: 290)

The fact that Ndje↔bbana lacks a comitative construction seems to lead to the fact that ICs with first person dual inclusive supersets are not unusual as they are in other languages. Greenberg (1988) and others have pointed out that first person dual inclusive pronominals have properties

of both singular and nonsingular pronominals which explains why they may occur as IC supersets but only in certain circumstances.

The prototypical features of the IC can help us judge whether an expression might be an IC when we have very little information about whether the IC occurs in a language. Example (28) below is an example which may be an IC but it is not clear whether proper inclusion occurs.

(28) Gooniyandi
gid-yarndi **lambadi** **ngaanggi** **garingi** **ngaanggi** **nginyji**
 you(pl)-pl father-in-law your wife your you
 You lot: your father-in-law, your wife, and you.
 (McGregor 1990: 286)

Coordination of nominals in Gooniyandi is achieved by juxtaposition of nominals (McGregor 1990) so example (28) may simply be an ordinary apposition of a nonsingular pronominal and a coordination construction. The fact that the central member of the superset is referred to, tips the balance in favour of the example being an ordinary apposition rather than an IC.

2.2.2 Prototypical feature b: Single subset occurs.

There are a number of reasons to suggest that the prototypical IC consists of two elements only - a superset and a single subset element. A subset element is a referring expression that refers to a single person, or group, it may consist of any number or morphemes or words. Example (29) shows a subset with a particularly complex structure, referring to a group of two non-aboriginal people.

(29) Marra
 ganangga yarna-**rniwi-jinji** **warr-a** **wurru-yimarr**
 there sleep-1.ex.pl-AUX(PST.CON.DUR) DU-ART(NOM) DU-that

wurr-munanga **wurruja**
 DU-non.aboriginal two

There we slept, (the two of us and) the two whites.
 (Heath 1981: 376)

There are a number of reasons why I propose that an IC with a single subset element is prototypical. Firstly, single subset ICs are the most common type and it seems likely that they may be the only type of IC possible in many languages. For example, Wilkins (1989) gives a detailed description of the IC for Mparntwe Arrente and describes it as having a single subset element, though such detailed descriptions of the IC are rare. Secondly, putative ICs with more than one subset frequently have other non-prototypical features (see discussion of example (30) below).

2.2.3 Prototypical feature *c* : *Inclusory Construction refers to humans*

It seems that ICs are rarely used to refer to non-humans apart from mythological beings like example (25) above. There are a number of possible reasons why non-humans are not usually referred to using ICs. In general the identity of non-human referents is usually unimportant so a simple nonsingular pronominal will do when referring to a group of non-humans. It is also unusual to refer to non-humans in first or second person. A non-prototypical example from Yankunytjatjara is given in example (30). It is the only example I have in which an IC is used to refer to places. It is clear that this example is an IC because there is a special pattern of case marking that only occurs on ICs in Yankunytjatjara - each nominal has the locative stem suffix but only the final element carries the allative suffix for the whole clause (see §4 for more details).

(30) Yankunytjatjara
 kutjupa tjut=a maa-kati-ngi, **Mimili-la**
 other many(ACC) AWAY-take-PST.IMPF Mimili-LOC.NAME

Intalka-la **tjana-la-kutu**
 Indulkana-LOC.NAME 3.pl-LOC-ALL
 (They) took some others to Mimili, Indulkana and other places (around there)
(Goddard 1985: 102)

The IC is discussed under entries for nonsingular pronouns in Henderson and Dobson's (1994) dictionary of Eastern and Central Arrente (pages 168, 357, 482). As in Yankunytjatjara, the IC is always superset final in Arrente and is a complex NP (Wilkins 1989). Henderson and Dobson discuss what I call the IC as a secondary sense of nonsingular pronominals. For example they describe this sense of first person dual and plural pronominals as 'and me too' or 'also me'. If the final superset term in Arrente ICs can be translated in this way maybe it could develop the meaning 'etcetera'. Such a development could also occur in Yankunytjatjara as the superset is also the final term in the IC. In Kayardild it the third person dual pronoun *birra* has a fully developed second sense in which it means 'too' which Evans (1995) suggests is likely to have developed from its use in Type 1 ICs (Evans 1995).

Despite the proposed prototype feature *c* there is no single motivation for the IC being restricted to human referents in all Australian languages. For most languages I have only a few of examples of ICs and these are most likely to be the most common ones. Where the author of a grammar provides a few examples, these are more likely to be typical ICs than unusual ones. For this reason we can say that the prototypical IC refers to humans but no more than that.

2.2.4 Prototypical feature *d*: *Type 1 Inclusory Construction usually has strict ordering- subset first or subset last*

There appear to be only two types of word order that the Type 1 IC can have - either the superset precedes all the subsets ('superset first' order) or all the subsets precede the superset ('superset last' order). Type 3 ICs can also have fixed ordering of free superset and subset but

there is only a small amount of data on Type 3 ICs (see discussion in §6). The number of languages for which there is clear evidence that either of the two possible orders can occur in Type 1 ICs is small. At this stage they include only Kriol and Kaytetye. In Kriol 'superset first' order occurs much more frequently. The Kaytetye data I have is from two sources – Harold Koch's field notes and Turpin (2000). Koch's data was collected many years earlier than Turpin's and I do not have information on the locations where the two data sets were collected. Five out of the six examples from Koch are 'superset first' while all six examples from Turpin are 'superset last'. Each data set shows a preferred order but it is not clear whether they differ because of diachronic change or regional differences in the language.

3 THE KRIOL INCLUSORY CONSTRUCTION

The English-lexifying creole of the Australian mainland is generally known by the name ‘Kriol’. The language is thought to have developed around 1908 in Ngukurr, Northern Territory. and is now spoken in many parts of northern Western Australia, Northern Territory and Queensland by around 20,000 Aboriginal people (Harris 1984). It is thought to have two main dialects – the eastern dialect known as Roper River Kriol and the western dialect of which the centre is the Fitzroy Valley area - and the Type 1 IC occurs in both dialects. This section is based on data I collected on behalf of Diwurruwurru-jaru Aboriginal Corporation in February 2001 in Ngukurr where Kriol is thought to have originally developed. Kriol is the main community language at Ngukurr and those interviewed spoke both Kriol and English and some also spoke a traditional Aboriginal language. First, second and third person examples of ICs from Kriol are given in (31),(32) and (33) below.

(31) Kriol

Minbala main baba bin go fishing.
1.du.ex 1.sg.POSSbrother PST go fishing.
Me and my brother went fishing

(DAC unpub)

(32) Kriol

Dubala main sista bin go fishing.
3.du 1.sg.POSSsister PST go fishing
My sister and ‘whoever’ went fishing

(DAC unpub)

(33) Kriol

Yunbala main baba gin go.
2.du 1.sg.POSS brother FUT go
You and my brother can go.

(DAC unpub)

An in other languages, kinship terms are common subset terms but in Kriol a possessive pronoun must occur before kinship terms as it does in (31), (32) and (33). Interestingly, ICs in Sandefur’s (1979) description of Roper River Kriol do not have the possessive pronoun *main* before kin terms. An example is shown in (34). Since most of Sandefur’s data was collected from Ngukurr too, it is possible that language change has occurred. This would not be surprising because many changes have occurred, for example change in the first person dual exclusive pronominal from *mindubala* to *minbala*. However, a larger number of informants would have to be interviewed to be sure change has occurred as speakers of different ages speak Kriol quite differently.

(34) Roper River Kriol, 1979

mindubala banji
1.du.ex brother.in.law
My brother-in-law and I.

(Sandefur 1979: 108)

Note that Kriol is unusual in that either order of superset and subset is possible. The superset is first in example (35) and last in example (36).

(35) Kriol
Minbala Ruth bin go.
 1.du.ex <name> PST go.
 Me and Ruth went.

(DAC unpub.)

(36) Kriol
Mishel minbala bin go.
 <name> 1.du.ex PST go.
 Me and Michelle went.

(DAC unpub.)

Subsection terms are acceptable subset terms as shown in (37).

(37) Kriol
Minbala galijan bin go.
 1.du.ex <skin.name> PST go
 Me and a Galijan went.

(DAC unpub)

An example from the western dialect of Kriol, collected from the Fitzroy Valley region is shown in (38).

(38) Kriol, Fitzroy Valley
 ... en **D. dupala** bin lipt-im-ap en push-um seim-teim
 ... and <name> **3.du** PST lift-TR-up and push-TR same-time
 Then D. and the other person lifted the car and pushed at the same time.

(Hudson 1983: 173)

There is a minor coordination construction in Kriol that may have developed from the IC which takes the form shown in (41). This construction is still used in Ngukurr by younger speakers and seems to be restricted to referring to two people who form a natural pair because they are close kin or friends.

(39) Kriol
 Jali dubala Maikul.
 <name> 3.du <name>
 Charlie and Michael

(Sandefur 1979: 108)

There are a number of other ways of referring to people in Kriol which are very similar to the IC but do not qualify as ICs. These expressions are simply appositions of nonsingular terms rather than ICs as proper inclusion does not occur between subset and superset. An example of such an apposition is shown in (40) in which the very productive associative suffix *-mob* is used. *Elinora-mob* refers to Eleanora and those who usually associate with her – it is not part of an IC because the set referred to by *Elinora-mob* includes all the members of the set referred to by the pronoun *mela*.

(40) Kriol

Mela Elinora-mob bin go.

1.pl.ex <name>-ASS PST go

We, Eleonora and those who usually do things with her, went.

(DAC unpub.)

Some other examples of appositions of two expressions referring to the same group are shown in (41) and (42). Neither of these are ICs.

(41) Kriol

Dubala Mishel en Elinora bin go

3.du <name> CONJ <name> PST go

Michelle and Eleonora went.

(DAC unpub)

(42) Kriol

Elinora en Mishel, dubala bin go.

<name> CONJ <name> 3.du PST go

Michelle and Eleonora went.

(DAC unpub)

It is not clear why a pronoun is sometimes used as well as a coordination construction. It is probably used for some type of discourse function and it is possible that its use is related to the common use of pronominals as determiners of definite NPs among Australian languages (Blake 2001). In addition to the possibilities illustrated, Kriol has a list construction and a comitative construction that are similar to those in English. It is also possible to refer to groups of people using kinship polyads like *dedi-gija* ‘father and son’ which are found in many Australian languages (Heath and Merlan 1982)

The presence of the IC in Kriol is a clear case of substrate influence and supports the idea that the IC is very common in Australian languages. Speakers of Kriol come from a large range of traditional language backgrounds, many of which have the IC. The fact that both the IC and constructions available in English such as coordination of pronouns and comitative constructions occur in Kriol suggests that a wide range of constructions can occur in a language, which refer to groups of people, each slightly different in the way they refer to a group and its structure. Speakers of traditional languages brought the IC with them into Kriol which indicates that the IC is able to express certain meanings that are not the same as a coordination constructions or comitative constructions. Interestingly, most of the languages originally spoken at the Roper River Mission, now Ngukurr, when Kriol developed, have obligatory cross-referencing pronominals. The usual type of IC in those languages is the Type 2 IC. The Kriol Type 1 IC may have developed through ‘semantic’ rather than ‘syntactic’ diffusion as is discussed by Austin *et al.* (1976) and Hercus (1987).

4 CASE MARKING AND THE SYNTACTIC STRUCTURE OF TYPE 1 INCLUSORY CONSTRUCTIONS

In §1 I argued that something should be recognized as a distinct construction cross-linguistically if it is syntactically distinct in a number of languages. The key to syntactic structure in many Australian languages is case marking which often does not merely fulfill an ‘agreement’ type of role but constructs the core grammatical functions of the clause, as well as building lower levels of constituency (Nordlinger 1998a). Case can also coindex independent constituents such as body parts and wholes or subjects and ascriptive predicates. Case marking can provide good evidence as to whether the elements of ICs form a complex NP or are not sister NPs but instead linked only via the clause node. I will briefly outline the main functions of case markers found in ICs and then look at different patterns of case marking that occur in ICs in particular languages and what they can tell us about those ICs.

Dench and Evans (1988) outline a number of different functions that case can have in Australian languages, three of which are relevant to the discussion of case marking in ICs that follows, namely relational case functions, adnominal case functions and referential case functions. Relational case functions indicate the role of NPs within a clause. They operate directly below the clause node and can indicate that a nominal or NP is in A, S or O function or an oblique function. An example of an IC with relational case marking is given in example (43).

(43) Guugu-Yimidhirr

Ngaliinh	Dyaagi-ngun	gambarr	balga-y
1.du.ex(NOM)	<name>-ERG	pitch(ABS)	make-PST

Jack and I made the pitch

(Havidland 1979:105)

Both the superset and the subset are marked for A function in (43), although the pattern of case marking is different for pronouns and nominals in Guugu Yimidhirr. All nominals are marked for relational case in Guugu Yimidhirr, whether they are independent NPs or part of a single NP so we cannot tell whether the superset and subset form an NP together or not. In languages in which only the final element of an NP indicates the relational case of the whole NP, we can determine whether the IC is an NP constituent or not. For example in Mparntwe Arrente only the last element of an NP is marked for case as in (44) so there is a clear basis for arguing that Mparntwe Arrente ICs form NP constituents.

(44) Mparntwe Arrente

Margaret	anwerene-ke
<name>	1.pl.(+PAT+GEN)-DAT

to Margaret and us.

(Wilkins 1989: 409)

Apart from relational case, adnominal case is likely to be an important function of case in ICs. Case has an adnominal function when it relates an NP to another NP within an NP constituent. While the relational case function operates directly below the clause node, the adnominal case function operates below an NP node. For example, in example (45) the special case marking suffix on the subset may be functioning adnominally, linking the NP *babiny* to the NP *ngalidya* within an NP constituent. Case marking in Badimaya is discussed more later.

(45) Badimaya
ngalidya babiny-da gabi ngal-ang
 1du(ABS) friend-ICS water(ABS) swallow-PST.PF
 We two, my friend and I, were drinking wine in the bush.

(Dunn 1988: 67)

The third case function which Dench and Evans (1988) discuss that occurs in ICs is the referential case function. According to Dench and Evans "The referential case function involves the marking of some NP or adverb in agreement with some other (usually core) NP in the same clause ... the identically marked words are separate constituents" (1988: 13). Referential case function can relate body parts and wholes that do not form a constituent, it can also link supersets and subsets that do not form a constituent. In Kugu Nganhcara it appears that case marking in the IC can have referential function. In (46) the superset and subset elements are not part of a single NP because NPs must be continuous in Kugu Nganhcara, the fact that both are in nominative case relates superset and subset semantically via the clause node. The superset and subset can also be juxtaposed in Kugu Nganhcara ICs and it is not clear what the structure of the IC is in such cases (see example (101)).

(46) Kugu Nganhcara
ngathunye purantyi-wu **nhipa wityo**
 elder.brother humpy-DAT 2.du.NOM go
 [My] elder brother and you are going to the humpy.

(Smith and Johnson 2000: 434)

In my typology of the IC I consider a case marker that functions adnominally within an IC to be a type of explicit marker because it clearly relates one element of the IC to the other. Relational and referential case marking is not a type of explicit marking of ICs and in § 4.3 I suggest a third parameter for our typology which can describe the role of relational and referential case marking in ICs. In the following sections I describe some interesting examples of case marking of Type 1 ICs. While this survey is limited by the small number of examples of the IC that I have for most languages, it is still possible to make some general observations about the case marking of ICs in Australian languages.

4.1 Case marking of Type 1 Inclusory Constructions

Guugu Yimidhirr

In Guugu Yimidhirr we find both superset and subset are marked for the same relational case. This pattern of marking all nominals for relational case, shown in (47) is the same pattern of case marking found within noun phrases, generic-specific constructions and part-whole constructions. Because all these constructions have the same case marking patterns, the pattern does not provide much information as to the structure of ICs in Guugu-Yimidhirr. A similar situation occurs in Martuthunira in which every nominal in an NP also carries a case suffix.

(47) Guugu-Yimidhirr
Bula **ngadhu** yumurr yuwal-inh dhada-y
3.du(NOM) 1.sg(GEN.ABS) child(ABS) beach-ALL go-PST
Those two - my son included - went to the beach.

(Haviland 1979: 105)

Kayardild

In Kayardild the IC has a similar pattern of case marking to the Guugu Yimidhirr IC when it is in nominative case. This is illustrated in (48).

(48) Kayardild
nga-rr-a **kajakaja** warra-ja thaa-th
1-du-NOM daddy(NOM) go-ACT return-ACT
Daddy and I will go (lit. 'we two, including daddy, will go').

(Evans 1995:249)

In non-nominative cases, free pronouns and possessive pronouns take exactly the same form. This leads to situations in which a pronoun plus a nominal could be interpreted as a possessive construction or an IC. In such a situation, the pronoun plus noun is always interpreted as a possessive construction as in (49).

(49) Kayardild
ngada kurri-ja bi-l-wan-ji ngamathu-y
1.sg(NOM) see-ACT 3-pl-POSS-MLOC mother-MLOC
I saw their mother
*I saw them, including mother.

(Evans 1995: 206)

If an IC meaning is intended the associative case suffix is added to the subset nominal as shown in example (50) below.

(50) Kayardild
 ngada kurri-ja **bi-l-wan-ji** **ngamathu-nurru-y**
 1.sg(NOM) see-ACT 3-pl-POSS¹⁰-MLOC mother-ASSOC-MLOC
 I saw them, including mother

(Evans 1995: 206)

All nominals in a Kayardild NP carry relational case marking, as do elements of ICs. Evans (1995) classifies the IC as one of a number of semantic subtypes of part-whole constructions and analyses part-whole constructions as single NPs with complex heads comprising two nominals. Although the IC is not very common in Kayardild it is interesting because it has a special case marker when it would otherwise be ambiguous with another construction – the possessive construction. Evans (1995) identifies a number of functions for the associative case marker, two of which could explain its use in ICs. One function is to express temporary possession - a person having something with them. Evans analyses that use of associative case as adnominal – it constructs a relationship between NPs within a single NP. The use of associative case in ICs could alternatively be related to the accompaniment function of the associative case in which the nominal bearing the case suffix is interpreted as a secondary predicate in the clause – a referential function. In this function, the case suffix indicates accompaniment among humans. Although ‘human accompaniment’ is more semantically similar to the function of the IC than ‘temporary possession’ it seems that syntactically the associative case suffix is functioning adnominally in ICs because the superset and subset are always adjacent in this construction (Evans pers. comm.) which would not be expected if the subset were a secondary predicate. The fact that the subset can take an adnominal case suffix suggests that it is an NP and thus the whole IC consists of a single complex NP containing a superset NP and a subset NP. It is clear that the associative case suffix is acting as a marker of an explicit IC in Kayardild as it only occurs in contexts in which some ambiguity might otherwise occur and it functions adnominally in the IC. In some languages ICs are always explicit, in others they may optionally contain extra markers. In yet other languages, like Kayardild, ICs contain explicit markers in specific contexts.

Yankunytjatjara

Goddard (1985) discusses ICs in Yankunytjatjara at some length. He distinguishes two main types of case in Yankunytjatjara - core case and local case: core case identifies the core syntactic functions of nominals, local case provides other types of information and includes allative, ablative and perlativ case. In Yankunytjatjara NPs, only the last word carries the case marker(s) for the whole phrase as illustrated in example (51).

¹⁰ The morpheme glossed POSS is historically derived from the possessive suffix but no longer functions as a possessive marker in this word.

(51) Yankunytjatjara
 papa tjapu tjurta-ngku mayi ngalku-rnu
 dog small many-ERG veg.food(ACC) eat-PAST
 The small dogs (puppies) ate the food.

(Goddard 1985: 92)

ICs carry core case markers on all subsets which suggests that the different elements are separate NPs. An example of an IC with core case marking only is shown in (52).

(52) Yankunytjatjara¹¹
Tjirlpi-lu nyupali kati-ku-nti
 old.man-ERG.NAME 2.du(ERG) take-FUT-MAYBE
 You and the Old Bloke might take (us)

(Goddard 1985:101)

Locative case is separate to both core and local case. Like the core case markers, the locative case marker occurs on all elements of the IC as shown in example (53) below.

(53) Yankunytjatjara
 ngayulu **Tjampu-la tjana-la** nyini-ngi.
 1.sg(NOM) <name>-LOC 3.pl-LOC sit-PST.IMPF
 I stayed with Tjampu and the others.

(Goddard 1985:101)

However, when local case markers occur we find a different pattern of case marking which reflects the composite way in which they are built on the locative base. Although the locative case marker occurs on all elements¹² of the IC the more specific local case markers which follow it; allative, ablative and perlative, only occur on the final element of the IC. In example (54) only the superset carries the ablative marker.

(54) Yankunytjatjara
Yami-la tjana-la-ngurru
 Yami-LOC.NAME 3.pl-LOC-ABL
 from Yami and the others (“Yami mob”)

(Goddard 1985:54)

Similarly, in example (55) only the final pronominal superset carries the allative case marker.

(55) Yankunytjatjara
....nyuntu-la ngali-la-kutu
 2.sg-LOC 2.du-LOC-ALL
 ...towards you and I

(Goddard 1985:54)

Goddard argues that the IC makes two separate acts of reference and this is why superset and subset elements carry separate core case marking. He analyses the Yankunytjatjara IC as a

¹¹ The example is modified slightly because the original had two options for the subset term separated by a forward slash. One option has been removed for clarity.

¹² According to Goddard the locative case marker may be acting as a stem-forming suffix rather than a case marker here but this is not important to the discussion - see Goddard (1985: 102).

complex NP - it contains more than one NP but behaves like a single NP. It seems that the Yankunytjatjara IC has a similar structure to the Kayardild IC – it is a complex NP which consists of superset and subset NPs.

Mparntwe Arrente

Wilkins (1989) describes the Mparntwe Arrente NP as a fixed word order phrase with a single case marking enclitic which occurs on the final word of the phrase. In example (56) below, the ergative case marker occurs only on the last word of the NP *arelhe kngerre therre-le* ‘two big women’

(56) Mparntwe Arrente

Arelhe kngerre therre-le ampe mape-∅ ilte-ke.
 woman big two-ERG(A) child PL(GRP)-ACC(O) scold-PST.COMP
 The two big women scolded the children.

(Wilkins 1989: 172)

In the Mparntwe Arrente IC, the superset term must always be the last element in the construction. Only this last superset pronominal is marked for case, not the subsets as shown in (57). In (57) the subset of the IC is a nominal coordination construction which acts like a single subset. Only the superset term carries the dative case marker which is evidence that the IC in bold is a single complex NP.

(57) Mparntwe Arrente

Yave uthene kake uthene anwerne-ke re nthe-ke
 elder.sister and(BI) e.brother and(BI) 1.pl-DAT 3.sg.A give-PST.COMP
 She gave it to (my) sister, (my) brother and I

(Wilkins 1989: 409)

Wilkins describes the IC as a complex NP which consists of one NP (the subset) embedded within another NP (the entire IC) as shown in Figure 3. Other authors, however, have made similar claims that the IC in particular languages is a complex NP but with less evidence that the IC is a single NP (for example Blake 1987, Goddard 1985, Tsunoda 1981).

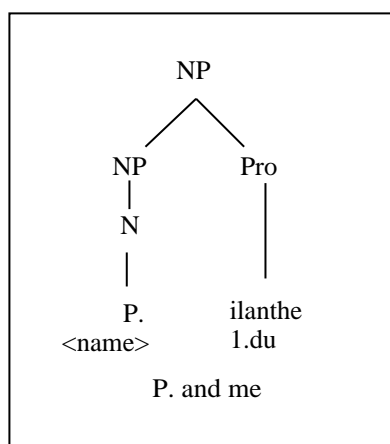


Figure 3: The structure of the IC in Mparntwe Arrente

(part of Figure 10-3 in Wilkins 1989:410)

Kaytetye

According to Turpin (2000) Kaytetye NPs usually only carry one case marker on the final element of an NP but sometimes all elements can carry case. Kaytetye pronominals inherently carry information about core case (nominative/accusative) and carry other case markers as suffixes. Case is carried by the subset term in only two of the examples I have and for both of these it is a non-core case that marks the IC as an oblique. These are shown in examples (58) and (59).

(58) Kaytetye

... **aylekanthe-ketye** **mperne-ye-ketye**
 1.du.ex.OM.-AVERS wife's.brother-1.SG.POSS-AVERS
 (frightened) of me and my brother-in-law

(Koch pers. comm)

(59) Kaytetye

... **mpwew-ake-warle** **ngk-arterperre-warle=tyampe**
 2.du-SMOG-ALL 2.SG.POSS-man's.child-ALL-PAIR
 ... to you and your son

(Koch pers. comm)

Note that the =*tyampe* enclitic that occurs in (58) but not (59) is optional on IC subset terms. *tyampe* is a nominal number marker and is discussed in detail in §5.2. Since Kaytetye NPs may optionally have case markers on all their elements, it is not possible to say at this stage whether the IC superset and subset form an NP constituent together.

Diyari

In Diyari the ergative case marking suffix can mark a number of functions other than core grammatical function (Austin 1981a). It can mark a nominal as being an instrument. It can also mark a nominal as being the subset of an IC as shown in (60). In example (60) the IC is in S function, not A, yet the subset term is marked with the ergative suffix. Note that *mawa* 'hunger'

is marked with the ergative suffix because it is part of a special construction together with *ngana-yi* ‘be-PRES’ in which it always takes the ergative suffix (Austin 1981a).

(60) Diyari
ngali **kanku-yali** mawa-li ngana-yi
 1.du.ex.(S/A) boy-ERG/INSTR hunger-ERG/INSTR be-PRES
 We two were hungry, the boy and I.

(Austin 1981a: 239)

Interestingly comitative expressions in Diyari referring to humans utilise either the proprietive or locative case markers, not the ergative/instrumental case marker. How the ergative/instrumental came to be used for the IC is an interesting question. The usual pattern of case marking of Diyari NPs is for the last non-pronominal element in the NP to carry the case marker for the whole NP. Discontinuous ICs are possible in Diyari as shown in (61). Even when separated from its superset as in this example, the subset term marked with the ergative suffix is not interpreted as an independent ergative NP but as a subset of the initial pronoun.

(61) Diyari
ngali-tha yatha-rna warra-yi **ngakarni** **nhiyi-yali**
 1.du.ex.SA-GIV say-PART AUX-PRES 1.sg.DAT elder.brother-ERG
 We said, my brother (and I)

(Austin 1981a: 122)

Austin analyses Diyari ICs as consisting of a subject nominal (A or S function) and an instrumental NP. He sees the subset as a special type of instrumental NP. Interestingly, IC subsets occur in instrumental case in Russian ICs too (Schwartz 1988b). However, although the subset may behave syntactically like an instrument NP it is difficult to see how a subset could be seen as an instrument semantically. Even in the case where an instrument NP occurs with an intransitive subject – giving an accompanying type reading like in (62) below, the instrument and the entity denoted by the subject nominal are seen as separate entities. In the IC, on the other hand, the number of the superset includes the ‘instrumental NP’.

(62) Diyari
 nhawu pinadu wapa-yi pirta-li
 3.sg.nf(S) old.man(ABS) go-PRES stick-ERG
 The old man is going with (i.e.) using a stick

(Austin 1981a: 118)

Instrumental and ergative case usually fulfill relational functions but it is likely that the ergative/instrumental case functions adnominally when it marks IC subsets – relating the subset NP to the superset NP, within a complex NP that constitutes the whole IC. Discontinuous NPs occur in Diyari so the occurrence of discontinuous ICs does not cause a problem for the hypothesis that the Diyari IC is a complex NP. A good test for whether IC subsets align syntactically with instrumental NPs would be to see if IC subsets can occur in object function, which instrumental NPs cannot in Diyari. The Diyari IC appears to consist of a superset NP and

a subset NP within an IC that is a complex NP. However, more work is needed to be sure of our analysis.

Badimaya

According to Dunn (1988) the IC subset in Badimaya is marked by the suffix *-da*, a special allomorph of the locative case. However, there is reason to believe that this is a special case suffix for IC subsets so I have glossed it ICS 'IC subset' in (63).

(63) Badimaya
ngalidya babiny-da gabi ngal-ang
 1du(ABS) friend-ICS water(ABS) swallow-PST.PF
 We two, my friend and I, were drinking wine in the bush.

(Dunn 1988: 67)

An overview of the different 'functional allomorphs' of the locative case Dunn (1988) identifies in Badimaya are given in table 3 below. The boxes coloured in shades of grey are those which differ from the pattern for 'local function', which encodes the prototypical function of a locative case - predicating the location of something.

Table 3. Locative case allomorphy in Badimaya

Environments	Local function	Comitativ e function	Comptativ e	IC subset
After word-final <i>ng</i>	-ga	-ga	-ga	-da
After consonant final proper names and place names	-da	-ala	-da	-da
After all other consonants	-da	-da	-da	-da
After vowel final proper noun or kin term	-la	-la	-la	-da
After any other vowel final word	-la -ngga	-la -ngga	-da	-da

The suffix used for marking IC subsets is probably historically related to the one occurring after consonant final proper names and place names for local function as many IC subsets are proper names. However, the fact that a single allomorph occurs makes it quite different to the paradigms for the other locative case functions. There is thus reason to argue that there is a separate case for the IC subset in Badimaya and in fact the comitative and comptative could also be proposed as separate cases. Proposing that this is a special IC subset suffix is complicated by the fact that the same suffix paradigm occurs in certain constructions using the suffix *gardi* 'SIDE' as in (64).

(64) Badimaya
 ngadhu wagu-nda-n wirlu-gardi yalgu-da
 1.sg(ABS) camp-CAUS-PAST west-SIDE Yalgoo-ICS
 I'm camping on the west (side) of Yalgoo.

(Dunn 1988: 49)

We could still argue that a special IC subset case occurs in Badimaya, which is polysemous with that which occurs in the special ‘side of’ construction.

Dunn (1988) describes the pattern of case marking in Badimaya as follows; in NPs with more than one nominal a single case marker usually occurs per NP. According to Dunn this case marker occurs most frequently on the nominal which is in ‘focus’ – from her examples the nominal carrying the case suffix looks similar to that which is in entity function according to in McGregor’s (1990) description of Gooniyandi NP structure. The most likely structure of the Badimaya IC is that the subset alone is in IC case which functions adnominally, relating the subset NP to the superset NP, which together comprise an NP.

Interestingly, in both Badimaya and Diyari the form of the case marker used in the IC is one which does not have any other functions which could be confused with the IC. In Diyari the ergative/instrumental case is not used for comitative constructions involving humans. Similarly the IC subset case in Badimaya is unlikely to be confused with that which occurs in comitative constructions because consonant final proper names marked for comitative function have the allomorph *-ala* as their case marking suffix and vowel final proper names and kin terms take the allomorph *-la*.

4.2 The syntactic structure of Type 1 Inclusory Constructions

Despite being prevalent among Australian languages, the Type 1 IC is not a structurally identical syntactic construction cross-linguistically. The similarities are semantic and conceptual rather than structural. A summary of the structural analyses based on case marking of Type 1 ICs for some of the languages just discussed is given in Table 4. The case marking found in Guugu Yimidhirr and Kaytetye ICs did not suggest a particular structure for the IC. The suggested structures for the Diyari and Badimaya ICs are still tentative at this stage as more data is needed to be sure about these.

Table 4: Information about IC structure from case marking

	Structure of IC	Language
A	IC is a complex NP which contains a subset NP and a pronoun	Mparntwe Arrente
B	IC is a complex NP which contains a superset NP and a subset NP	Yankunytjatjara, Kayardild (Badimaya?, Diyari?)
C	IC consists of independent superset and subset NPs which do not form a constituent together	Kugu Nganhcara discontinuous IC

Figure 4 below shows the basic structure of the three types of ICs labelled A, B and C in Table 4 above.

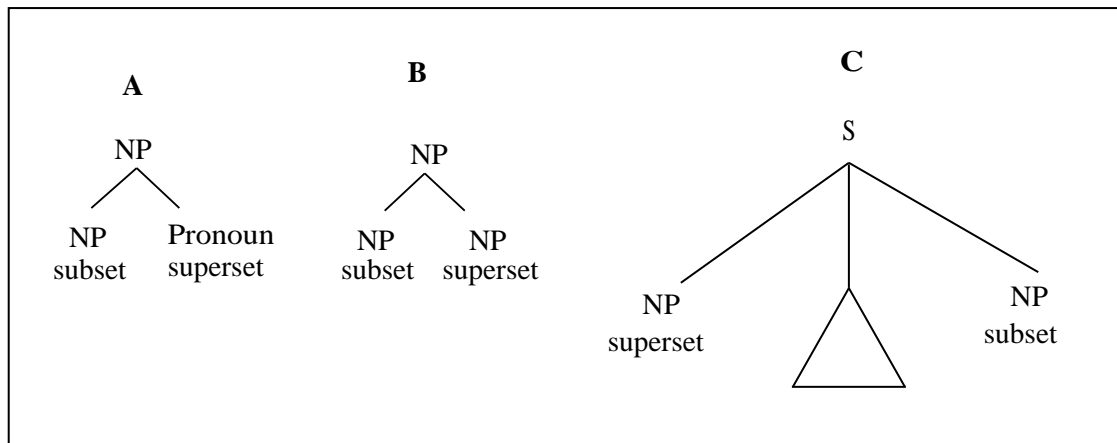


Figure 4: Three possible structures for type 1 ICs

We would not expect to find discontinuous ICs for languages in which the IC is a NP and discontinuous NPs cannot occur. None have been found for Yankunytjatjara and Mparntwe Arrente in which the IC is well described and is an NP. However, it is likely that in some languages superset and subset can form a complex NP when juxtaposed or separate independent NPs when they occur in different parts of the clause.

Type 1 ICs are a distinct syntactic construction in some Australian languages but exactly what type of syntactic construction the IC is seems to vary cross-linguistically. In this way it is similar to the part-whole and generic-specific constructions in that semantic parallels that occur cross-linguistically do not entail syntactic parallels.

4.3 The role of case markers in Inclusory Constructions

Adnominal case markers clearly function as explicit markers in ICs - making a link between the superset NP and the subset NP. For, example in Kayardild the role of the associative case marker is to highlight the presence of the IC in a context in which it could otherwise be ambiguous with a possessive construction. The role of the Inclusory Construction subset case marker in Badimaya and the instrumental case marker in Diyari is also likely to be that of an explicit marker but more data and analysis is required to show that these markers are functioning adnominally.

Referential case marking allows for unambiguous interpretation of Type 1 ICs in which the superset and subset do not form a phrase, such as the Kugu Nganhcara example in (65).

(65) Kugu Nganhcara

ngathunye purantyi-wu **nhipa** **wityo**
elder.brother(NOM) humpy-DAT 2.du.NOM go
[My] elder brother and you are going to the humpy.
[My] elder brother is going to the humpy with you.

(Smith and Johnson 2000: 434)

Relational case marking also indicates that a dependency relation exists between superset and subset and it may or may not show that the superset and subset form a phrase. In some languages, the pattern of relational case marking may indicate that superset and subset form a phrase - for example in Mparntwe Arrente. In other languages the pattern of relational case marking may indicate that dependency relations exist between superset and subset without showing that they form a phrase. For many languages we do not yet have evidence that the Type 1 IC is a phrase - for example Kaytetye and Guugu Yimidhirr - but we can say that dependency relations exist between superset and subset in these languages. In some of these languages it is likely that the superset and subset do not form a phrase. The marking of superset and subset with relational or referential case does not create a clear link between them but simply marks them as having the same functional role in the clause and for this reason these types of case marking are not treated as explicit marking of ICs.

The marking of all nominals or NPs with relational case is obligatory in many languages and in such languages we can predict that every nominal in an IC will be marked with relational case. Explicit markers are different to relational case markers in that their role in ICs cannot be predicted from the basic properties of a language. For example, as will be discussed in § 5.1 just because a language has a certain type of number marker does not mean that that marker will participate in ICs in that language. For example, similar types of number markers occur in both Yidiny and Dyirbal but only in Dyirbal does the number marker act as an explicit marker in the IC. Languages may have many lexemes which are potential explicit markers of ICs without these markers occurring within ICs. However, the occurrence of relational and referential case markers in the IC can be predicted from other information about a language.

A separate parameter to parameters I and II is required to describe the role of relational and referential case marking in ICs. This parameter - parameter III - describes whether case marking suggests that the reference of superset and subset overlap. In the simplest case, case marking of superset and subset marks them both as being in the same grammatical function in the clause. If two separate entities are both in the same grammatical function in a clause they must be linked in some way - such as by a coordination construction, a comitative construction, an ordinary apposition, or any number of other ways. Parameter III is needed in our typology to clearly identify the role of the case markers in Australian ICs and separate out those which do not act as explicit markers but provide more general information about the superset and subset and their

role in the clause. I will return to parameter III in § 9.2 and discuss its importance for comparing Australian ICs with those in other languages.

5 GRAMMATICAL ELEMENTS FOUND IN INCLUSORY CONSTRUCTIONS

The terms ‘implicit IC’ and ‘explicit IC’ are taken from Lichtenberk (2000). However, Lichtenberk’s study focuses on a language, Toqabaqita, which does not have explicit ICs so he does not look at them in any depth. Consequently I have had to develop my own typology of explicit ICs. There are a number of parameters to describe in relation to explicit ICs. The first parameter of interest is the distribution of explicit ICs in a language – are all ICs explicit or only some and if so why? Secondly, where do the extra markers occur in ICs? They might occur once per IC: between superset and subset or after the subset, or they may occur twice per IC: after both superset and subset¹³. Not all these possibilities have been found in the Australian data. Thirdly, what is the nature of the marker? It is often not possible to determine a core function for a grammatical morpheme but extra markers will pattern differently in terms of the range of functions they can have outside of ICs.

The most prevalent markers in Australian ICs are number marking morphemes. In § 5.1 I look at number markers that indicate a nominal is ‘one of a pair’ or ‘one of a group’. In 5.2 I consider a special pair marker that occurs in Kaytetye ICs and in 5.3 I look at an unusual marker that occurs in Wik-Mungkan ICs that has conjunctive and case marking functions. In § 5.4 I look at the occurrence of comitative markers in Type 2 ICs, which was discussed briefly in § 1. The use of free conjunctions in Australian ICs seems to be rare. For example, although these participate in nominal coordination in Nunggubuyu, Dyirbal, Arrente, Lardil and Warlpiri they do not normally participate in ICs. One example in which the Nunggubuyu conjunction *marri* does occur in an IC is discussed in § 8.3.

The presence of extra markers does not make an IC more or less like the other construction that marker usually occurs in, be it a coordination construction or a comitative construction. In English we associate a simple coordination construction with the use of the conjunction *and* between two nominals. A similar strategy to the English coordination construction is found in some Australian languages but it is by no means the norm. Although relatively uncommon world wide (Stassen 2000), asyndeton - the simple juxtaposition of nominals - is a common coordination strategy in Australian languages – as one of a number of options in a language or as the only type of coordination construction in a language (Blake 1987). So in any particular Australian language, coordination constructions and ICs may or may not share their marking morphemes or they may share their lack of special markers.

¹³ Unfortunately there are too few examples of ICs with more than one subset to investigate what patterns extra markers may have in such ICs.

5.1 Number marking suffixes

The number markers which I have found in Australian ICs are mainly nominal suffixes. In this section I have divided the types of number suffixes into three main groups based on how they are described in grammars. However, I actually wish to argue that all the suffixes discussed in this section share a core function. As McGregor (1990) argues for *-yoodoo* in Gooniyandi, they all mark a nominal as belonging to a higher level of constituency which has a certain number. Thus in a sense they operate more like case markers than conjunctions or number suffixes - linking nominals upwards to higher levels of constituency rather than across to other constituents of the same rank. As Dixon (1977) translates the suffix *-ba* in Yidiny the core meaning of these markers is “one of a group of people” (145). This makes sense of why these suffixes often appear attached to a subset term of an IC, even when they are rare in nominal coordinations in a language. The subset element appears to be alone in the clause but in fact is part of a larger group, referred to by the superset term. Such suffixes makes it clear that the subset nominal is not a separate participant in the clause but part of the same entity referred to by the superset term. I will first discuss ‘one of a group’ suffixes in Dyirbal and Yidiny to outline how these suffixes can operate. Then I will discuss the suffix which participates in Ngandi ICs which has been analysed as a conjunctive suffix and some number markers that occur in ICs in other languages.

5.1.1 ‘One of a group’ suffixes in Dyirbal and Yidiny.

Dyirbal and Yidiny both have ‘one of a group’ suffixes and Dixon (1972, 1977) describes them as such. However, only in Yidiny does the ‘one of a group’ suffix participate in the IC. Type 1 ICs occur in Yidiny and Dixon (1977) writes “Coordination of nouns (with human reference) within an NP is achieved through the addition of *-ba* to each one” (p.145). Example (66) is an example of coordination in Yidiny and example (67) is an example of an IC in Yidiny. In the IC *-ba* only occurs on the subset nominal.

(66) Yidiny

darrnggidarrnggii-ba yaburu-ba galing
 old.woman-ONE.OF.GRP¹⁴ young.girl-ONE.OF.GROUP go.PRES

An old woman (being one of a group of people) and a girl (being another member of a group) are going. (That is ‘a woman and a girl are going’, leaving open the question of whether they are going alone, or as part of a larger assemblage.)

(Dixon 1977:177)

(67) Yidiny

nganytyi **bunyaa-ba** galing
 1.nsg woman-ONE.OF.GRP go.PRES (my gloss)

A woman and I (and some others) are going.

(Dixon 1977:178)

¹⁴ All the glosses from this point on which gloss a marker as ONE.OF.PAIR ‘one of a pair’ or ONE.OF.GRP ‘one of a group’ are my glosses.

The fact that the same morpheme appears in both the coordination construction and the IC makes it appear that they are similar constructions but the IC fits well into the definition of the IC given in § 2.

In Dyirbal there are two ‘one of a group’ suffixes: *-garra* meaning ‘one of a pair’ and *-manggan* meaning ‘one of a group (of more than two)’. A characteristic of ‘one of a group’ suffixes across languages is that they can act like associative markers when they suffix a personal name. Such an example of the use of *-garra* is shown in (68).

(68) Dyirbal
 burrbula-garra baninyu
 B.(name)-ONE.OF.PAIR come.PRES
 Burbula and another person are coming

(Dixon 1972: 230)

Neither of the Dyirbal ‘one of a group’ suffixes are attached to elements of the IC in Dyirbal as shown in example (69). Thus the presence of ‘one of a group’ suffixes in a language does not predict their participation in ICs.

(69) Dyirbal
ngali **bayi** **yara** baninyu
 1.du NC¹⁵ man come.PRES
 man and I are coming

(Dixon 1972:63)

Thus despite the fact that the ‘one of a group’ suffixes found in Yidiny and Dyirbal are semantically similar and occur in coordination constructions in both languages, they only occur in ICs in Yidiny. This supports my approach to such markers and the relationship between coordination constructions and ICs. It may be argued that the presence of the one of a group suffix in Yidiny ICs ‘proves’ that the Yidiny IC is a type of nominal coordination. However, then we would then have to propose that there are separate coordination constructions and ICs in Dyirbal but not in Yidiny. This approach would obscure typologically important parallels between the two languages. Instead, my approach is to argue that separate constructions may share morphemes. A nominal coordination construction is not defined simply by the markers that occur in it so it is possible for the same morphemes to occur in other constructions such as the IC.

5.1.2 The Ngandi ‘conjunctive’ suffix

In Ngandi a suffix *-bula* occurs which is usually suffixed to the second of two conjoined nominals as in example (70) in which it is underlined.

¹⁵ ‘NC’ glosses a noun class marker.

(70) Ngandi
 ma-wurnrdan? balaka nyarr-ma-ga-ma-ngi,
 VEG-black.plum first we-VEG-DEFOCUS-get-PAST

ma-berrge?-bula.
 VEG-green.plum-BOTH

We got black plums first, and then green plums as well.
 (Segmenting and gloss from Blake 2001: 423. Translation from original in Heath 1978:128.)

Heath (1978) glosses *-bula* as ‘and’ while Blake (2001) glosses it as ‘both’ for the example above. Heath also notes that in other contexts *ma-berrge?-bula* would mean ‘two green plums’. This suggests that *-bula* is better characterised as a suffix that indicates a nominal is ‘one of a pair’. *-bula* occurs in four of the five ICs in Heath (1978). Examples of Ngandi ICs are given in (71) and (72).

(71) Ngandi¹⁶
rni-nyarra-ng-bula **nyarri-rudhu-ng**
 M.SG-father-POSS-ONE.OF.PAIR 1.du.ex.m-go-FUT
 My father and I will go

(Heath 1978:128)

(72) Ngandi
rni-gorlokornrdo-bula **barri-ga-ridh-i**,
 M.SG-<name>-ONE.OF.PAIR 3.du.m-SUB-go-PST.PUNCT
 Gorlokorndo and another man went

(Heath 1978:259)

Heath notes that *-bula* does not occur in all Ngandi coordinations coordination constructions and the suffix appears to be occasionally omitted from ICs as in example (73).

(73) Ngandi
rnarri-wo-tyaldya-rudhu-ng **rni-yul-mak-burkayi-yung**,
 2.du.m-both-together-go-FUT M.SG-person-good-really-ABS

The two of you will go together, (you and the man, who is now) a well-behaved person.

(Heath 1978:253)

An example that clearly shows that *-bula* is marking 'one of a pair' is shown in (74). The nominal *yul* 'aboriginal' has a singular noun class prefix as well as the 'one of a pair' suffix. This shows clearly that the suffix does not simply indicate that the nominal it attaches to is dual in number. In this example the verb has a reciprocal suffix, other examples of ICs that co-occur with reciprocals will be discussed in § 8.2.

¹⁶ In the Ngandi examples the voiced/voiceless consonant symbols represent a lenis/fortis contrast.

(74) Ngandi
nyarri-bu-ydhi-ni **rni-yul-pula**
 1.du.ex-hit-RECIP-PST.CONT M.SG-aboriginal-ONE.OF.PAIR
 I and an (aboriginal) man were fighting

(Heath 1978:291)

5.1.3 Number markers in Inclusive Constructions of some other languages

Gooniyandi

Two number marking suffixes are found in Gooniyandi: *-yoodoo* ~ *yiddi* (dual) and *-yarndi* (more than two) (McGregor 1990). In general McGregor describes these suffixes as optional suffixes which mark a nominal as dual or plural. *-yoodoo* can also be added to non-singular pronouns to make them dual. Together with case suffixes the two number markers are analysed by McGregor as postpositions which “enter into constituency with noun phrases, forming postpositional phrases“. Usually only one per phrase occurs and they mark the number of the whole phrase not just the nominal to which they are attached. Like some of the other 'one of a group' number markers which have been discussed, *-yoodoo* can participate in nominal coordination as shown in example (75) below.

(75) Gooniyandi
 wampi-yoodoo biddidhiya
 <name>-ONE.OF.PAIR <name>
 Wampi and Ameer

(McGregor 1990:280)

The Gooniyandi Type 1 IC in example (76) is analysed by McGregor as containing two NPs which he indicates.

(76) Gooniyandi
ngidi _{NP1} **David-jooddo** _{NP2}
 1.R¹⁷ <name>-ONE.OF.PAIR
 we two, including David

(McGregor 1990:286)

McGregor suggests that NP number two in the example is derived from a coordination construction from which a first person singular pronoun has been ellipted, leaving only the conjunct *David* and the number marker *jooddo*. My analysis of the IC thus far has avoided explanations of the IC that suggest it is elliptical. Given its similarity to other Australian constructions such as the part-whole and generic-specific constructions I believe it is unnecessary and misleading to view the IC semantically as elliptical. It would be better to analyse the 'one of a pair' suffix as marking the nominal 'David' as being part of a dual group than as a remnant of a phrase that underlyingly consists of two nominals.

¹⁷ '1.R' stands for 'first person restricted'. This pronominal category covers first person dual (inclusive and exclusive)

Warlpiri

In Warlpiri the different functions of the 'one of a group' number suffixes that occur in the IC give the IC an ambiguity. The presence of the 'one of a group of more than two' suffix *-patu* in (77) creates the possibility of two possible meanings as shown by the two translations given. The name *Jakamarra* is a 'skin name' so it is more likely to be shared than a personal name which probably makes this expression less likely to be interpreted as an IC than one in which a personal name occurred. Note also that the pronominal enclitic attaches to the first word or phrase in Warlpiri so in the example it attaches to the subset term.

(77) Warlpiri
Jakamarra-patu=lpa=rnalu yanu
J-ONE.OF.GRP=IMPF=1.pl.S go-PST
We including Jakamarra were going.
We Jakamarras were going.

(Mary Laughren pers. comm.)

Without the 'one of a group' suffix on *Jakamarra*, only the simple plural interpretation is possible, not the IC interpretation.

(78) Warlpiri
Jakamarra=lpa=rnalu yanu
J=IMPF=1.pl.S go-PST
We Jakamarras were going.

(Mary Laughren pers. comm.)

Bunuba

Bunuba has two different kinds of ICs, marked by different suffixes on the subset nominal. The type which has a comitative suffix on the subset was mentioned briefly in § 1 and will be discussed in more depth in § 5.4. The other Bunuba IC has a suffix *-way* which, when it occurs on personal names, indicates that the person named is one of a pair. The suffix *-way* occurs on the subsets of two ICs given in Rumsey (2000). An example is given in (79). It appears that the 'one of a pair' suffix occurs on subsets that are proper names and the comitative suffix occurs on subsets which are common nominals.

(79) Bunuba
jimarri birnrdayminyi-way yathayirrayntha
mate <name>-ONE.OF.PAIR sit(1.R-RA-PST-DU)
We two, Wulumada and I, went to that place.

(Rumsey 2000: 66)

It is compatible with the descriptions given for the suffixes discussed in the previous sections that like *-yoodoo* they also be analysed like case marking suffixes that mark relationships between a nominal and a higher level of constituency. The Gooniyandi number suffix either marks a

and first person plural exclusive categories.

nominal as going together with other nominals as part of a constituent, or marks it as a noun phrase on its own and thus marks it as part of a non-singular constituent. If that single nominal is a personal name, it is pragmatically inferred that rather than referring to two people with the same name, the name plus 'one of a group' suffix refers to the named person and another unspecified person. McGregor's account of the two Gooniyandi number suffixes applies equally well to the other suffixes considered in this section which appear to share certain unusual properties.

In discussing the occurrence of the Ngandi dual number marker *-bula* in coordination constructions, Blake (1987) comments that this suffix is derived from the common Pama-Nyungan third person dual pronoun of the same form and suggests that the occurrence of number markers in coordination constructions (and therefore also ICs) may well have developed from coordination constructions which utilise nonsingular pronouns. The occurrence of nonsingular pronouns in coordination constructions in Kugu Nganhcara, Wik-Mungkan and Kriol is discussed in § 7.

5.2 *The special pair marking suffix in Kaytetye Inclusory Constructions*

Apart from 'ordinary' dual and plural markers, a special pair marker is found in some Australian languages. Rukeyser (1997) discusses these in her typology of nominal duals which covers some Indo-European, Finno-Ugric, Semitic and Australian languages. The major distinction she finds among these morphemes is between what she refers to as arbitrary and paral duals. Paral duals are those which indicate that the two entities referred to are a natural pair, two things which belong together and together form a unit. She contrasts paral duals with arbitrary duals – arbitrary duals can refer to two arbitrarily selected entities. The nominal number markers discussed in the previous section appear to all be arbitrary duals and plurals but in Kaytetye ICs a paral 'one of a pair' marker occurs.

Turpin (2000) discusses the morpheme *tyampe* that can occur in Kaytetye¹⁸. *-tyampe* can only occur in coordinations of two items which are considered to form a natural pair as in (80).

(80) Kaytetye	
teye-tyampe	tyweke-tyampe
tea-ONE.OF.PAIR	sugar-ONE.OF.PAIR
tea and sugar	

(Turpin 2000: 86)

Turpin (2000) notes that *-tyampe* cannot occur in coordinations of items which do not form a natural pair. She explains that 'man' and 'woman' could be coordinated using *-tyampe* but 'woman' and 'sugar' cannot. *-tyampe* is optional on IC subsets - an example of its use is shown in

¹⁸ Note that *tyampe* is represented as an enclitic in examples from Harold Koch's field notes and as a suffix in examples from Turpin (2000).

(77). There is not enough data to be sure, but it appears that *-tyampe* occurs more commonly in ICs in which the referents are close kin.

(81) Kaytetye
 arrenkwe-tyampe ayleneanthe
 mother(1.sg.POSS)-ONE.OF.PAIR 1.du.ex. OM.NOM
 My mother and I

(Turpin 2000: 87)

In languages for which paral dual markers exist, it is natural that they should occur in ICs. Since the semantic range of ICs tends to be restricted to human referents, referents are usually of a like kind. ICs usually refer to collective activity by the referents of the superset and as Dench (1987) explains, collective activity tends to be carried out by certain expected or natural groupings of people (Dench1987).

5.3 The marker *-ang* in Wik-Mungkan Inklusory Constructions

Kilham *et al.* (1986) refer to the suffix *-ang* as the ‘coordinate suffix’. This suffix is obligatory on subsets of first and second person ICs and optional on the subsets of third person ICs - an example of it is shown in (82).

(82) Wik-Mungkan
 ngan Benny-ang thawan nungant,
 1.du <name>-COORD say.1.nsg.ex.PST him-to
 (when) Benny and I said to him,

(Sayers 1976: 130)

Note that Wik-Mungkan is unusual in that the only type of IC recorded is that which I call Type 3 and discuss in more detail in § 6 . The suffix *-ang* occurs optionally on nominals in coordination of two nominals as in (83).

(83) Wik-Mungkan
 John-ang pul Michael-ang
 <name>-COORD 3.du <name>-COORD
 John and Michael

(Kilham 1977: 75)

Kilham (1977) refers to the *-ang* suffix as the coordinate suffix when it occurs in ICs and coordination constructions. However, the same form also occurs as the ergative, locative and instrumental case marker. There may be a link between the use of *-ang* as a case marker and its use in ICs and coordination constructions. Recall that the ergative/instrumental case marker occurs on IC subsets in Diyari and the Badimaya IC subset is marked with a case marker that appears to be historically related to the locative case marker.

5.4 Comitative case markers in Inclusory Constructions

In this section I wish to discuss those ICs in which the subset is marked with a comitative or proprietive case marker. The three examples found of the occurrence of proprietive or comitative case markers all involve fairly narrow and specific contexts.

5.4.1 Type 2 Inclusory Constructions with comitative case markers

There are only two languages I have found so far in which ICs contain comitative case markers. I expect that these expressions are constructionally ambiguous between comitative constructions and ICs: if proper inclusion occurs they are ICs and otherwise they are comitative constructions. However, neither author describes the construction as ambiguous so there may be reasons why they are not.

Bunuba

Bunuba and Yandruwandha are the only languages in my sample which offer a choice between two distinct explicit marking strategies for ICs. In § 5.1 the occurrence of the pair marking suffix *-way* in Bunuba ICs was discussed. It appears that *-way* only occurs on personal name subsets, while common nominal subsets bear the suffix *-guda* as in examples (84) and (85) below..

(84) Bunuba
ngay **wiyi-guda** **wardburrayntha**
yes woman-COM2 go(3.nsg-RA-PST-DU)
He and the woman went.

(Rumsey 2000: 62)

Bunuba has two separate comitative suffixes; *-guda* is less commonly used than the other comitative suffix *-ngarri*. According to Rumsey (2000), referents in comitative constructions with *-guda* often have equal weight which does not occur in the comitative construction with *-ngarri*. In addition, Rumsey notes the case of a speaker translating *-guda* as ‘too’ rather than ‘with’. It seems that *-guda* has a quite different meaning to the usual comitative marker. The superset pronominal in the IC in (85) is glossed 1.R ‘first person restricted’ - it can refer to a first person dual group (inclusive or exclusive) or a first person exclusive group. The use of a second person singular subset in (85) makes it clear that a first person dual inclusive meaning is intended.

(85) Bunuba
nginji-guda **wardbiyirra** maangi
2.sg-COM2 go(FUT-1.R-RA) mate
Let's you and I go mate

(Rumsey 2000: 63)

Maranungku

The IC in Maranungku appears to be even more restricted in its occurrence than the Bunuba IC. Tryon (1970) describes an accompaniment marker *witya* which forms an accompaniment phrase with a nominal which sounds very much like a prototypical comitative construction. He then notes that when the subject of the sentence is first person, the pronominal affix on the verb must take either dual or plural agreement to include in its number those referred to by the ‘accompaniment phrase’. Examples of this are given in (86) and (87).

(86) Maranungku
 yeri **yera witya ngarani** wat atu tawun
 tomorrow child with FUT.1.pl.ex.go walk FUT.AUX town
 Tomorrow I shall go to town with the children
 (Tryon 1970: 68)

(87) Maranungku
peku ngany witya ngarani wat mata tu tyapat me
 woman my with FUT.1.pl.ex.go walk DU FUT.AUX swim STATE
 I shall go swimming with my wife
 (Tryon 1970: 68)

It is not clear why the verb has plural rather than dual agreement in (87) - Tryon does not comment on this.

It appears that Tryon's claim that first person subjects always trigger an inclusory strategy is not completely correct as there is a counter example from a text, shown in (88).

(88) Maranungku
 peku witya kangani yi hampti tu tat
 woman with NFUT.1.sg.go PST Humpty Doo stay
 I went with my wife and stayed at Humpty Doo.
 (Tryon 1970: 81)

5.4.2 The two markers found in Yandruwandha Inclusory Constructions

In Yandruwandha two different case suffixes can occur on the subset of ICs. The subset can take the ergative/instrumental case suffix like Diyari subsets as shown in (89).

(89) Yandruwandha
ngali nhuliyi pidipidi-li thawa-nga
 1.du.ex.(S/A) this white.man-ERG go-PRES
 I and the white man are going.
 (Gavan Breen pers. comm. in Austin 1981a:123)

Breen (1976) gives another example of a Yandruwandha - this time with a proprietive case suffix on the subset which is shown in (90).

(90) Yandruwandha
nguthu-ngurru pula thirri-nhana
 elder.brother-PROP 3.du fight-PST
 The two brothers were fighting.
 (Breen 1976: 296)

The occurrence of a kin term subset marked with proprietive case in an IC restricts the whole construction to referring to a dyadic kin pair of which the kin type in the subset is one member. ICs with kin term subsets have special meanings in a number of languages which will be discussed in § 7.5. It would be interesting to know if a kin term subset can occur in a Yandruwandha IC with ergative/instrumental case marking, to indicate that the IC does not refer to a kinship dyad.

6 THE DISTRIBUTION OF TYPE 1, 2 AND 3 INCLUSORY CONSTRUCTIONS IN LANGUAGES

Type 1 ICs mainly occur in languages which lack dependent pronominals or languages for which dependent pronominals are optional. However, even where cross-referencing pronominals are obligatory, Type 1 ICs may occur. We can imagine that they might occur in roles not directly cross-referenced by bound pronominals but I have not collected any examples of this. However, I have come across the Nunggubuyu example shown in (91) in which a Type 1 IC occurs as one conjunct of a nominal coordination construction which itself is the subset of a Type 2 IC. I have not highlighted the ICs in bold but indicated the Type 1 IC and the subset of the Type 2 IC with square brackets.

(91) Nunggubuyu
[[Roger nirn] marri yirriwurlwurldi nurru],
[[<name> 1.du.ex.m] CONJ <name> 1.pl.ex]

nurru-gu=gubadha-ngi.
1.pl.ex-RDP¹⁹=walkabout-PST2

‘Roger and I, and Yiriwurlwurldi, the three of us went walking’

(Heath 1984:542)

I return to this example in § 8.4 in which I discuss the ‘additive’ use of the Type 1 IC combined with coordination.

It is not clear that the Type 2 IC occurs in all languages with bound pronominals, even if they have Type 1 ICs. For example, bound pronominals are an option in Yankunytjatjara, but despite discussing the Type 1 IC in detail Goddard (1985) does not discuss the presence of Type 2 ICs in Yankunytjatjara.

The Type 3 IC has both a bound pronominal and a free pronoun representing the superset. Type 3 ICs may be the only type of IC possible in a language, or they may occur as alternatives to Type 2 ICs in a particular language. The languages for which Type 2 ICs are the norm in which Type 3 ICs have been found are; Gurr-goni (Green 1995: 75, 343), Nunggubuyu (Heath 1980b: 521, 522, 528) and Ngandi (Heath 1978: 251). Type 3 ICs seem to occur fairly infrequently in these languages, like free pronouns generally. In many languages the role of optional free pronouns that are cross-referenced by bound pronominals is to emphasise their referent or mark their referent as the topic of the clause. Bresnan and Mchombo (1987) suggest that this is because all languages have two types of pronouns – one type used for simple anaphora and another used for contrast, emphasis or focus – and that the type used for simple anaphora tends to be

¹⁹ I have glossed the suffix *-gu* ‘reduplication morpheme’ but I am not completely sure that this is correct.

phonetically less substantial than that used for emphasis. Consequently in languages in which bound and free pronominals can co-occur, bound pronominals tend to be used for simple anaphora while free pronouns tend to be used to convey topicality, emphasis or contrast.

An example from Nunggubuyu is given in (92). Interestingly the order of the subset and the free superset is the same as in the Type 1 Nunggubuyu IC in example (91).

(92) Nunggubuyu
nurru=wa-ng **ma:gurn** **nurru**
 1.pl.ex-kill-PST1 <name> 1.pl.ex
 Ma:gurn and us killed it (buffalo)
(Heath 1984: 522)

In Wik-Mungkan the Type 3 IC is the only type that seems to occur. The free pronoun and the subset take the form of a Type 1 IC in that they occur adjacently with a fixed order (superset first). This is the case for all ICs in Kilham (1977), Kilham *et. al.* (1986) and Sayers (1976) although the order of superset pronoun and subset are not fixed for third person ICs. The position of the free superset plus subset with respect to the verb is relatively free. An example of a Wik-Mungkan IC is given in (93) below.

(93) Wik-Mungkan
Ngan Winnie-ang kaangk Anne'ak **iiyanan**
 1.du <name>-COORD like <name>.PURP go.we.PST
 Winnie and I wanted to go to see Anne,
(Sayers 1976: 114)

In Djaru, it also seems that the Type 3 IC is the norm. Tsunoda (1981) describes the IC, which he calls an ‘inclusive NP’ and gives only one example which is shown in (94) below. Presumably this is the usual form the IC takes in Djaru.

(94) Djaru
ngadyarra ngawi-yi nga-liyarra yan-i
 1.du.ex father-KIN CAT²⁰-1.du.ex(NOM) go-PST
 We-two-exclusive, one member of whom is (my) father, went, ie. (my) father and I went.
(Tsunoda 1981: 92)

Schwartz does not distinguish Type 3 ICs from Type 1 ICs treating both as cases of the Plural Pronoun Construction (1988b). Lichtenberk (2000) also groups them together with Type 1 ICs as ‘phrasal ICs’. However, Type 3 ICs are unique in the combination of features that they show.

²⁰ Tsunoda calls this particle which forms a stem for bound pronominals a ‘catalyst’.

In languages where both Type 2 and Type 3 ICs are options it seems likely that they will have different meanings.

7 RELATIONSHIPS BETWEEN INCLUSORY CONSTRUCTIONS AND OTHER CONSTRUCTIONS

7.1 *Type 1 Inclusory Constructions and noun phrases*

Even in languages for which it is not clear that the Type 1 IC forms an NP constituent it is possible to compare the word ordering within ICs to the ordering of nominals within NPs or nominal groups. It has been argued that some Australian languages totally lack noun phrases and instead nominals simply tend to occur in syntagmatic groupings for pragmatic or discourse related reasons (Heath 1986, Himmelman 1997) but this does not mean that ordering preferences do not occur. An interesting feature of the Type 1 IC is that it has a distinct tendency for fixed word ordering between superset elements and subset elements. Ignoring discontinuous ICs, where the order of superset and subset seems to be freer, there is a preference for a particular word order in the IC in most languages. The two word order possibilities for the IC will be referred to as ‘superset first’ and ‘superset last’. As discussed in § 2.2.4 the only languages for which it appears that the superset and subset can occur in either order are Kriol and Kaytetye. Theoretically, many different word orders are possible in ICs with more than one subset but no other orders have been observed yet. For many languages there is no clear information available about whether word order is fixed or not, though all examples found have the same word order. In such cases it is possible to suggest (tentatively) a preferred word order for the Type 1 IC.

Note that the word order possibilities being discussed are functional rather than formal like the ordered slots in McGregor’s (1990) proposed NP structure for Gooniyandi. He proposes that certain functional slots are present in the Gooniyandi NP, but these functional slots do not correspond with word classes. For the IC, the functional slot ‘superset’ does correspond to a single word class - pronouns but the functional slot ‘subset’ can comprise a number of different words of different classes such as nominals, demonstratives, proper names, numerals etc. We would expect the ordering of words within subsets to follow the usual ordering of nominals within nominal groups/NPs in each language but there are only a few examples of ICs with more than one subset in the sample.

In Table 5, the word ordering of ICs and NPs in a number of languages has been compared. Both Schwartz and Lichtenberk suggest that the Type 1 IC or free pronoun and subset of the Type 3 IC be considered a head (superset) plus non-head (subset) type of construction. I have compared the ordering of head nominals and modifiers in NPs with the ordering of supersets and subsets in ICs in Table 5 below. The languages chosen for the table are those which were discussed in § 4 and others for which information on ordering of elements of NPs was available. Where there is information about the the word order of ICs by the author of the source used, ‘author’ is written in brackets under the word order information, otherwise I have written in brackets the number of

examples found in each language. My use of the term ‘head nominal’ is equivalent to McGregor’s ‘entity function nominal’ (McGregor 1990). ‘Modifier’ covers any type of modifier.

Table 5: Word order in Inclusory Constructions and NPs compared

	IC structure	IC order	Head-Modifier order
Mparntwe Arrente	Complex NP	Subset^Superset (author)	Head^Modifier (always)
Yankunytjatjara	Complex NP	Subset^Superset (author)	Head^Modifier (always)
Kaytetye	?	either order (see above)	Head^Modifier (always)
Kayardild	Complex NP	Superset^Subset (two examples)	Head^Modifier (more common)
Martuthunira	?	Superset^Subset (two examples)	Mod (restrictive)^Head ^Mod (non-restrictive) (always)
Diyari	?	Superset^Subset (two examples)	Pro^Head ^Adj (always)
Guugu Yimihirr	?	Superset^Subset (two examples)	Head^Mod (preferred)

All the languages listed in the table basically have head-first ordering in NPs. However, only four out of the seven languages have superset-first ordering in ICs. Although this is just a small sample the results suggest that the IC superset and subset are not in a head and non-head relationship, even when the IC is an NP.

7.2 Inclusory Constructions and two semantically similar constructions: generic-specific and part-whole constructions

Blake (1987) refers to generic-specific constructions, part-whole constructions and ICs together as ‘superordinate constructions’. Similarities between the three constructions can be both semantic and syntactic, within a language and cross-linguistically. In the following section I compare Type 1 ICs with generic-specific constructions, and with part-whole constructions in which both elements are represented by free words rather than bound morphemes, in order to compare only comparable structures. In Table 6, below, I have summarised information on IC structure and on the syntactic structure of part-whole and generic-specific constructions in some languages. The languages chosen are mainly those discussed in § 4 for which a structure of the IC has been proposed and other languages in which the three constructions are well described. In some of these languages there is more than one way of expressing part-whole or generic-specific relations. In these cases two different structures have been given in the table.

Table 6: Inclusive Constructions, Generic/specific (or classifier/nominal) and part/whole constructions: comparing syntactic structure

	IC structure	Classifier-nominal and Generic-specific structures	part-whole structure
Mparntwe Arrente	Complex NP	Complex head of single NP	Complex NP
			Two NPs
Yankunytjara	Complex NP	Simple NP	Two NPs
			Complex head of single NP
Kayardild	Complex NP	Complex head of single NP	Complex head of single NP
Martuthunira	?	Complex head of single NP (Classifier-Nominal)	Complex head of single NP
		Two separate NPs (Generic-Specific)	
Diyari	?	Two NPs	Complex head of single NP
			Two separate NPs
Guugu Yimidhirr	?	Two NPs	Two NPs

Structural similarities between the three constructions both within and across languages are surprisingly lacking. For example, in Mparntwe Arrente the IC is a complex NP, a nominal and its classifier form a complex head of a simple NP, and there are two possible part-whole constructions. If the part and whole are juxtaposed, forming a single complex NP, then the relationship between them is interpreted as being inalienable possession. If the part and whole are marked as separate NPs then it is possible to interpret the part as alienably possessed from the whole and the part can also be interpreted as a secondary predication of the whole. Investigations in § 4 suggested two possible structures are common for Type 1 ICs: (i) superset and subset comprise a complex NP, or (ii) superset and subset are fully independent NPs that can be separated in the clause. These two types of structure are found for part-whole and generic-specific constructions too in addition to a third possible structure in which the two elements are the complex head of what is a simple NP. This analysis has not been proposed for any ICs but there are many more part-whole and generic-specific constructions for which syntactic analyses have been carried out than ICs so some ICs with this structure may yet be found.

In Yankunytjara all three common structures are found among the three constructions: a complex NP, a simple NP with a complex head and two separate NPs. A greater level of similarity between constructions occurs in Kayardild and Guugu Yimidhirr in which both generic-

specific and part-whole constructions are analysed to have the same syntactic structure. It seems to be relatively rare for all three constructions to take the same syntactic form in a language. This suggests that semantic parallels do not necessarily imply syntactic parallels, within or between languages for the ‘superordinate constructions’.

There are semantic parallels between the three constructions: each consists of basically two elements: one larger and encompassing the other. On grounds of iconicity we would expect all three to have the same ordering in each language with the superordinate element always first or always last in all three constructions. This is in fact rarely the case as shown in Table 7 below. Where not otherwise noted the word order given for a particular construction is fixed.

Table 7: Inclusory Constructions, Generic/specific (or free classifier/nominal) and part/whole constructions: comparing ordering

	IC order	Order of Classifier-Nominal and Generic-Specific constructions	Order of part and whole
Mparntwe Arrente	Superset last (always)	Classifier^Nominal (always)	Whole^Part (often)
Yankunytjatjara	Superset last	Generic^Specific	Whole^Part
Kaytetye	either order	Generic^Specific (more common)	Whole^Part (more common)
Kayardild	Superset first (three examples)	Generic^Specific (more common)	either order
Martuthunira	Superset first (two examples)	Classifier^Nominal	either order
		Generic^Specific	
Diyari	Superset first	Generic^Specific	Whole^Part (complex heads)
Guugu Yimidhirr	Superset first (two examples)	Generic-specific (usually)	Whole-part (unless ‘whole’ is pronominal)

In some of the languages in Table 7 we see parallels in the ordering of elements in the three constructions. For example in Diyari, the superordinate element precedes the smaller element in all three constructions. In Yankunytjatjara on the other hand, the superordinate element is first in both generic-specific and part-whole constructions, but last in ICs. In Kaytetye, the three constructions share a flexible word order. Other aspects of a language may influence the order in the IC. For example in Diyari, in NPs containing pronouns acting as determiners, the pronoun is always the first element of the NP. A parallel between pronominal NPs and ICs may lead to the superset pronominal being first in Diyari ICs. In Kaytetye, Turpin (2000) notes that there is a tendency for pronouns to be the second word in a clause. This may influence the ordering of IC elements when they occur in clause-initial position but the Kaytetye data I have does not comprise full clauses so I cannot test this prediction.

7.3 Inclusory Constructions and nominal coordination constructions in languages in which they are formally similar

In many Australian languages coordination of nominals can be achieved simply by referring to two nominals individually as well as referring to the whole group using a nonsingular pronominal of the appropriate number. In such situations the only difference between a nominal coordination construction and an IC is that proper inclusion occurs between the IC superset and its subsets.

For example, in Gurr-goni a coordination construction can take the form shown in example (95) which is formally similar to the IC shown in (96).

(95) Gurr-goni
 Leila, Lynn borritjiyu-na ngardupu awurrinj-yurrburridji-ga,
 <name> <name> 3ua.f-EMPH alone 3ua.f.S-run-CONT
 Leila and Lynn, those two were running by themselves.
 (Green 1995: 343)

(96) Gurr-goni
gengurdu **njina**-bo-go
 Father's.father 2.ua.nf.S-go-FUT
 (Said to the author:) Your grandpa will go with you. [Lit., Your father's father you two (non-feminine) will go]
 (Green 1995: 75)

Pronominal conjuncts can occur in coordination constructions in some languages as in the Mangarrayi example in (97). Such a construction is not grammatical in most of the languages with ICs that were surveyed because pronominals are often not allowed to be conjuncts in coordination constructions (see §7.3 for a discussion of other languages in which both ICs and coordination of pronominals are possible).

(97) Mangarrayi
 ngaya rna-barda ngi-ya-j
 1.sg.NOM M.NOM-FATHER 1.ex.du-go-PST.PUNCT
 My father and I went.
 (Merlan 1982: 104)

Merlan (1982) comments that the Mangarrayi IC, like that in (98), gives a special emphatic force to the referent of the subset term whereas coordination of a pronoun and a noun give equal emphasis to both referents. This provides support to the view presented here that even when they are formally similar, the IC and coordination construction are separate constructions with separate meanings.

(98) Mangarrayi
 a-**ngirr**-yu?yuma **ngarla-X** malga Biraran,
 IRR-1.ex.du-swim F.NOM-<name> up.to <place.name>
 X and I will swim right up to Biraran
 (Merlan 1982: 146)

In languages without obligatory cross-referencing pronominals, the IC and the coordination can be formally similar when a coordination construction involves a nonsingular pronominal. For example, Smith and Johnson (2000) give the following structure for conjoined NPs in Kugu Nganhcara:

(99) Kugu Nganhcara: nominal conjunction
 pula X pula Y
 3.du(NOM) X 3.du(NOM) Y
 X and Y

(Smith and Johnson 2000: 434)

Smith and Johnson give the third person dual pronominal as an example only and note that the pronoun used in each case is the nonsingular pronoun of the appropriate person and number. They also note that the nonsingular pronominal can occur before either conjunct or before both and that referents which are predictable (i.e. 'central members') can be omitted. From Smith and Johnson's description of the IC in (99) and the information they give on which elements can be omitted, we can predict the total range of possible structures for conjoined nominals and ICs as in (100) with *pula* used as the pronominal. Note however, that discontinuity between the elements is possible so the order and adjacency of the elements in each case are not important.

(100) Kugu Nganhcara: possible structures for conjoined nominals/ICs
 a. pula X pula Y
 b. pula X Y
 c. X Y
 d. pula X
 e. pula Y

In a language like Kugu Nganhcara, it would be interesting to find out if there was a preference for the IC to be used rather than coordination constructions in certain contexts. We could look for whether the IC was preferred over coordination of pronouns. We could also look at whether the use of the IC was preferred over coordination when there was a high level of intimacy between the referents. Although only three ICs and coordination constructions are given in Smith and Johnson (2000). It is interesting that the two which are ICs both refer to pairs of close kin. The coordination construction given by Smith and Johnson (2000) is shown in (101).

(101) Kugu Nganhcara
 ngaya nga'a-wu pama kunhji nhingurum ngana uwa
 1.sg(NOM) fish-DAT man brother 3.sg(ABL) 1.du.ex(NOM) go
 His brother and I are going for fish./ I'm going fishing with his brother.

(Smith and Johnson 2000: 434)

Interestingly, this example refers to a first person and someone who is referred to as being a third person's brother. There are not enough examples to support an argument that intimacy is important to whether speakers of Kugu Nganhcara use an IC or a coordination construction but this type of investigation may prove very interesting in the future.

Third person ICs and coordination constructions show clear formal similarities in Wik-Mungkan. The first and second person Wik-Mungkan IC consists of a pronoun followed by a subset term which bears the coordinative suffix *-ang*²¹ as shown in (102).

(102) Wik-Mungkan
Ngan Winnie-ang kaangk Anne-`ak iiyanan.
 1.du.ex.S <name>-COORD like <name>-PURP go.we.PST
 Winnie and I wanted to go to see Anne,

(Sayers 1976: 114)

Third person ICs have a more flexible structure – either order of superset and subset is acceptable and the *-ang* suffix can be omitted (Kilham 1977). The third person IC in (103) shows the opposite order of superset and subset to (102).

(103) Wik-Mungkan
kaal-ang pul
 mother's.younger.brother-COORD 3.du
 Mother's younger brother and the other person.

(Kilham 1977: 75)

The structure for coordination of two nominals in Wik-Mungkan is summarised from Kilham (1977) in (104) below. The third person dual pronominal occurs between the two nominals. Either or both *-ang* suffixes can be omitted.

(104) Nominal coordination in Wik-Mungkan
 N(-ang) pul N(-ang)
 N(-COORD) 3.du N(-COORD)

An example is given in (105) below.

(105) Wik-Mungkan
 John-ang pul Michael-ang
 <name>-COORD 3.du <name>-COORD
 John and Michael

(Kilham 1977: 75)

According to Kilham (1977) the structure summarised in (104) applies equally well to third person pronouns and nominals. However, this is not completely true because if we compare (103) to (105) we see that coordination of two nominals involves three words but a third person IC involves only two. The Wik Mungkan coordination construction is similar to a minor coordination construction found in Kriol that was mentioned in § 3. Both coordination constructions place a free dual pronoun between the two conjuncts. The Kriol example is repeated in (39). The word *dubala* in Kriol is also the number 'two' and is not clear whether it functions as a number marker or as a pronoun in this construction

²¹ see §5.3 for more discussion of the *-ang* suffix

(106) Kriol
 Jali dubala Maikul.
 <name> 3.du <name>
 Charlie and Michael

(Sandefur 1979: 108)

Blake (1987) notes the similarity between coordination constructions which involve nonsingular pronominals, and ICs. It is easy to see how one could have developed from the other simply by the addition or subtraction of nominals from the construction. Synchronically, the participation of free nonsingular pronominals in coordination constructions may have developed from the IC or vice versa.

7.4 Inclusory Constructions, 'one of a pair/group' markers and associative constructions

It was discussed in § 5 that in a number of languages, nominal number marking morphemes with the meaning 'one of a group' appear on IC subsets. For these languages, there is evidence that these 'one of a group' markers mark 'normal' nominal or noun phrase number when attached to common nominals but when attached to proper names act like associative markers. Associative markers can be defined as markers which together with a noun mean 'X and his/her friends or family or associates'²². The marker that occurs with the noun in this construction may be the main nominal plural that occurs in the language or a special associative marker. In all the cases of number markers that occur as explicit markers in ICs, all that have been discussed apart from the Kaytetye plural marker are the main nominal number markers that occurs in the language. The two apparently different functions of the number markers discussed in 5.1 were explained by arguing that these number marking suffixes mean 'one of a pair/group' and their exact function depends on what type of nominal they are attached to and perhaps also the context in which they are used. However, Corbett and Mithun (1996) argue that associatives should not be considered a type of nominal number but rather as a separate category to usual number. Functional ambiguity between 'usual nominal number marker' and 'associative plural marker' seems to occur in quite a few Australian languages but it may be best to view the two functions as separate, because as Corbett and Mithun point out, the two functions are not comparable.

When number markers functioning as associatives occur on subsets of third person ICs they provide the same information as the superset pronominal. Since third person ICs are less common than first or second person ones, only one such example has been found - in Wardaman. Merlan (1994) describes the suffix *-warrma* as marking the focal member of a pair but it behaves similarly to the other 'one of a group' number markers discussed as it can also occur on one of the nominals in a coordination construction. An example of it occurring on the subset of a third person IC is given in (107).

²² This is the definition being used by Edith Moravcsik and Mikhail Daniel in their global typology of associatives project which has been discussed in depth on the Association for Linguistic Typology email list during the last few months.

(107) Wardaman

oliba-warrma **ya-wud-janga-n-guya** ngorlog-ba-wu mad-gu
<name>-F.PAIR 3-nsg-come-PRES-DU talk-PS-DAT language-DAT
Oliver and another are coming to talk language

(Merlan 1994: 88)

In a case like (107) it is possible to argue that the inference that another person is being referred to as well as Oliver is due to the presence of the 'focal member of a pair' suffix functioning as an associative marker or the IC. In such cases it is best to analyse the situation as one in which an associative construction and an IC occur simultaneously, both reinforcing the meaning of the other.

7.5 *Inclusory Constructions and kinship dyads and polyads.*

In a number of languages, kin term subsets have special features when they occur in ICs. If a kin term occurs as a subset without any indication of possession, it may be implied that the 'central member' of the superset or the speaker is the possessor as in example (108).

(108) Kalkatungu

Ngalhi kungi a=**lhi** ingka tawun-kunha
1.du wife PURP=1.du go town-ALL
my wife and I are going to town

(Blake 2001: 420)

In many ICs collected the possessor of a kin term subsets is overtly indicated as in (109) below.

(109) Kugu Nganhcara

agu iiru **nganana** **ngathidhe ngathurumu-wu**
land this.ABS 1du.ex.DAT mother 1.sg.ABL-DAT
This land belongs to me and my mother.

(Smith and Johnson 2000: 434)

There is no logical reason to think that a kin term subset cannot be possessed by someone other than the central member as in example (110).

(110) Kriol

Yunbala main **baba** gin go.
2.du 1.sg.POSS brother FUT go
You and my brother can go.

(DAC unpub.)

In Diyari, Austin (1981a) observes that ICs have a tendency to be interpreted as referring to a kinship dyad or polyad when a kin term subset is used but he notes that this is an implicature rather than an entailment as other interpretations are also possible. As an example, he explains that the IC in (111) would usually be interpreted as referring to a dyadic kinship pair, but could be uttered in reference to the speakers' father and someone else who is unspecified.

(111) Diyari
pula ngapirri-yali wapa-yi
3.du.S father-ERG go-PRES
They (two) are going, (one is) father.

(Austin 1981a: 122)

In Dalabon, the occurrence of a possessed kin term as an IC subset restricts the reference of that IC to a dyadic kin pair of which the subset kin term is one member.

(112) Dalabon
kakkak-no barra-h-bo-n
mother's.mother-3.POSS 3.du-R-go-PRES
They two go, mother's mother and daughter's child.

(Evans pers. comm)

It was mentioned in § 5.4. that in the Yandruwandha IC the occurrence of kin terms with the proprietive case suffix as subsets give the IC a dyadic meaning as in (113). To what extent the expression *nguthu-ngurru* has become lexicalised and would be interpreted as a kinship dyad on its own is unclear. However, Breen (1976) gives a number of examples and all have a pronominal indicating the total number referred to.

(113) Yandruwandha
nguthu-ngurru pula thirri-nhana
elder.brother-PROP 3.du fight-PST
The two brothers were fighting.

(Breen 1976: 296)

The relationships between the IC and other constructions such as generic-specific constructions, part-whole constructions, collective plural constructions and kinship polyads reflect semantic similarities between the constructions. In addition, it is quite possible that these constructions are related historically.

8 (MISCELLANEOUS) SEMANTIC ASPECTS OF INCLUSORY CONSTRUCTIONS

In this section I wish to discuss ways in which the IC can be used to express a number of different meanings.

8.1 *Indefinite pronouns as subsets in Inclusory Constructions*

The subset term of an IC can be an indefinite pronoun term like the one in the first IC in (114).

- (114) Gurr-Goni
Djin-njatbu **dji-goni** **njiwurr-ni-∅**
 3II-what's.her.name 3II-this 1.a.S-sit-PRE
 What's the name of this woman we were with (lit. this female one we all sat)
- sister Hammer dji-garrapu djit-bu-guyuguyu, e, **Hammer** **njiwurr-ni-∅**
 sister <name> 3II-ANA 3II-DER-ahead yes <name> 1.a.S-sit-PRE
 Sister Hammer, she was the first one, yes, we were with Hammer.
- (Green 1995: 335)

In the example above, the second IC repeats the form of the verb, giving a definite subset in answer to the question the speaker asks him or herself.

An indefinite subset can also be part of a negative statement as in the Dalabon example in (115) in which the indefinite pronoun subset refers to 'nobody'.

- (115) Dalabon
 Mak **nabikerninjh** **yarrah-ni**, **yarrah-raworrin-iyan**, **bonj**.
 NEG who 1.du-sit 1.du-be.mates-FUT finished
 I don't sit down with anybody, I don't have a mate. That's all.
- (Evans, pers. comm)

8.2. *Type 2 Inclusory Constructions with reciprocal verbs*

Type 2 ICs have been found in a number of languages in which reciprocal morphemes can occur in the verb. The subset term refers to one of the participants in the reciprocal activity. An example is shown in (116) from Ngandi.

- (116) Ngandi
nyarri-bu-ydhi-ni **rni-yul-pula**
 1.du.ex-hit-RECIP-PST.CONT M.SG-aboriginal-ONE.OF.PAIR
 I and an (aboriginal) man were fighting
- (Heath 1978:291)

An example from Biniñ Gun-wok is shown in (117)

- (117) Biniñ Gun-wok
Ani-ma-rr-en **Al-mardgu**
 1.du-marry-RECIP-NPST <matrimoiety.name>
 I have to marry a woman of the Mardgu matrimoiety
 [lit.: We have to get married, me and an Al-mardgu woman]
- (Evans forth.:363)

In (118) below a Kalkatungu version and an Aboriginal English version of the same sentence are given, both using ICs. The Aboriginal English translation is the only example of a reciprocal Type 1 IC I have come across, but it may be a very literal translation of the Kalkatungu and not very natural speech.

(118) Kalkatungu
 Aka-ti-minha=**nhu** **tjaa** **marapayi.**
 Kiss-RECIP-IMPF=2.du this woman
 You and that woman are kissing one another
 (The original translation in Aboriginal English: 'Yountwofella kissing one another that woman')
(Blake 2001: 421)

8.3 Inclusive constructions and the nature of 'identity' in switch-reference systems

In his discussion of switch-reference in Mparntwe Arrente, Wilkins (1988) discusses the nature of the 'identity' that holds between referents marked as the same subject. In Mparntwe Arrente, entities can have a part-whole relationship and still be marked as same subject. Entities marked as same-subject can also have a relationship Wilkins dubs 'inclusion'. This covers an IC type of relationship between subjects but it also covers nonsingular nominals and entities included in their reference. Examples, (119) and (120) below show that switch-reference markers can create inclusive/exclusive distinctions just like the Arrente IC. The switch-reference markers are underlined.

(119) Mparntwe Arrente
 Unte tnye-ke ilerne lhe-me-le.
 2.sg(NOM) fall-PST.CONT 2.du(NOM) go-NPST.PROG-SS
 You fell while we (inclusive) were going along.
(Wilkins 1988: 165)

(120) Mparntwe Arrente
 Unte tnye-ke ilerne lhe-rlenge.
 2.sg(NOM) fall-PST.CONT 2.du(NOM) go-DS
 You fell while we (inclusive) were going along.
(Wilkins 1988: 165)

Austin (1981b) notes that an inclusion relationship can hold between entities marked as the same subject in Diyari and Dench (1995) observes the same phenomenon in Martuthunira. Both Diyari and Martuthunira also have ICs. It would be interesting to look at how strong the correlation is between the acceptability of marking subjects related by 'inclusion' as same-subject and the occurrence of ICs in a language.

8.4 The additive use of the IC

The IC interacts with other ways of expressing reference in a language to create complex, and multi-layered references to participants throughout a text. The use of both coordination

constructions and ICs can give an ‘additive’ type of chain of ICs in which more and more referents are added to the superset as in example (121).

(121) Mparntwe Arrente

[[[P. ilanthe] ante [Sandy uthene Elizabeth uthene]]
 [[[P. 1.du(-PATR)] and [Sandy and(BI)Elizabeth and(BI)]]

anwerne] lhe-ke,
 1pl(+PATR+GEN)(S)] go-PST.COMP

P., Sandy , Elizabeth and I went.

'P, and I, and Sandy and Elizabeth and I'

[lit. 'P. we two and Sandy and Elizabeth we all ‘ - where Speaker and P. are cross-cousins, and Sandy and Elizabeth are husband and wife.]

(Wilkins 1989: 410, brackets based on his tree diagram)

In (121) a simple IC occurs: '*P. ilanthe*'. This is conjoined to a coordination construction using the conjunction *ante*, derived from the English *and*. Coordination constructions and ICs in Mparntwe Arrente are both complex NPs so they can be conjoined. The whole *ante* coordination construction including the first IC and the *uthene* coordination construction then forms the subset of a second IC, the superset of which is *anwerne*. Wilkins notes that this example was given to him by his Arrente teacher in a transcription test. Three different translations are given, the expression being rather difficult to render accurately in English. The final pronominal *anwerne* is glossed as '+PATR' i.e. 'same patrimoiety' and '+GEN' 'harmonic generations' which suggests that it does not include the whole group because the two people referred to by the IC '*P. ilanthe*' are indicated to be in disharmonic generations to one another. However, the pronominal *anwerne* can also be used as a general pronominal to refer to any first person plural group regardless of moiety or generation which seems to be how it is used in the example, based on Wilkin's analysis of the entire expression, rather than his gloss.

The Nunggubuyu example in (122) similar additive IC can take place in a language with obligatory cross-referencing pronominals.

(122) Nunggubuyu

[[Roger nirn] marri yirriwurlwurldi nurru],
 [[<name> 1.du.ex.m] CONJ <name> 1.pl.ex]

nurru-gu=gubadha-ngi.

1.pl.ex-RDP=walkabout-PST2

'Roger and I, and Yirriwurlwurldi, the three of us went walking'

(Heath 1984:542)

Coordination constructions are not necessary for an IC to be 'additive'. A group can be described as dual and then plural, with more members added to the group as in (123) which has two ICs following each other.

(123) Kuku Yalanji
Ngaliny **ngayku** **dunyu** jakalba **nganjin** **Chris.**
 1.du.ex.S(NOM) 1.sg.POSS.S(ABS) husband.S(ABS) in.front 1.pl.ex.S.(NOM) <name>
 My husband and I were in the front together with Chris.

(Patz 1982: 424)

A similar example from Nunggubuyu is shown in (124) below. In this example the free conjunction *marri* is used to add referents to the group referred to. This is the only example of the use of a free conjunction in an Australian IC but *marri* may mean ‘also’ rather than ‘and’ in this context. I have put brackets around the ICs in the example.

(124) Nunggubuyu
[nirni: `yung **na-rlarrangana]** bani aba ni:ni=burri-O,
 1.du.ex.m.CONTRAST M.SG-<name> ANA.DEM then 1.du.ex.m-sit-PST2

[marri **gubindiyung, nurru],** **[marri** **ga:rdij, nurru=burri-O]** bani,
 CONJ <name> 1.pl.ex CONJ <name> 1.pl.ex-sit-PST2 ANA.DEM

Rlarrangana and I stayed there, along with Gubindiyung and Ga:rdij.

(Heath 1980b: 522)

In the Dhuwal example in (125) a group is built up from the singular to the dual to the plural to refer to a group of three people.

(125) Dhuwal²³
 bala rra marrci-ø-n **ngilinyu** **nhawi,** **gapiyingi,**
 that.way 1.sg go-NPST-NOW 1.du.ex what's.it <name>

I am going that way now. Me and what's-it? (The man) Gapiyingi.

nganapur **yangalka,** marrci-ø-n nganapur,
 1.pl.ex <name> go-NPST-NOW 1.pl.ex

He and me and (the man) Yangalka. We (three) are going now.

(Heath 1980a: 53)

8.5 Use of the Inklusory Construction in sections of text

One of my defining features of the IC is that it occur within a single clause – it is the argument of a single predicate. However, ICs involve pronominals, which participate in anaphora which reaches across clause boundaries. The reason for the single-clause defining feature is that it becomes very difficult to separate ICs from other related phenomena once we look outside of a single clause. The Dalabon example in (126) repeated from the previous section actually involves two clauses.

²³Voiced and voiceless consonant symbols indicate lenis and fortis consonants respectively in this example.

(126) Dalabon
 Mak **nabikerninjh yarrah-ni, yarrah-raworrin-iyen, bonj.**
 NEG who 1.du-sit 1.du-be.mates-FUT finished
 I don't sit down with anybody, I don't have a mate. That's all.

(Evans, pers. comm)

In (126) the subset 'who' seems to be the subset of both predicates although only mentioned overtly once. In many languages for which ICs are found, once a participant has been established in a discourse, it does not need to be mentioned overtly. Thus ICs are expected to occur without an overt subset in many languages. In Table 1, the various combinations of parameter I were laid out giving four types of ICs. However, one type has not been observed - the type without any representation of the superset at all. It is possible that such an IC could occur, in which the superset although not overt was pragmatically associated with the subset. However, no clear examples of such an IC have been found yet.

8.6 *The semantic difference between coordination of pronominals and the Inclusory Construction*

It is clear that in at least four of the languages investigated, it is possible to coordinate singular pronominals and nominals as an alternative to using the IC. These four languages are Lardil, Kriol, Djapu and Mangarrayi. In Lardil one can use a Type 1 IC like that in (127) or a coordination construction like that in (128) to refer to a group of people using pronominals and nominals.

(127) Lardil
nya-anki ngithun kanhtha waang-kurr rriwu-rr.
 1.ex-du.DISHARM 1.SG.POSS father go-FUT east-FUT
 I and my father will go east.

(Hale 1966: 322)

(128) Lardil
 ngata pana ngithun kanhtha waang-kurr rriwu-rr.
 1.sg CONJ 1.SG.POSS father go-FUT east-FUT
 I and my father will go east.

(Hale 1966: 321)

Hale (1966) points out that there is a semantic difference between the two constructions because Lardil nonsingular pronominals encode information about generational harmony within the group referred to and this information is not conveyed in a normal coordination construction with singular pronouns. Coordination constructions involving pronominals are also commonplace in Kriol. Given that Kriol is lexically based on English it is not that surprising that coordination of pronominals, which is acceptable in English, is also acceptable in Kriol²⁴. Coordination of pronouns in Mangarrayi is described in § 7.3. Morphy (1983) notes that coordination of pronouns in Djapu is probably marginally acceptable. For the other languages with ICs I have

²⁴ A number of central Australian languages have borrowed the conjunction *and* and use it in nominal coordination but it is not acceptable to use the word to coordinate pronominals (Turpin 2000, Wilkins 1989).

looked at there is no evidence that coordination of pronominals is acceptable. However, it may simply be rare, as opposed to grammatically unacceptable. In Warumungu a singular free pronoun and a nominal can be coordinated when they occur in isolation or in a tag but not elsewhere (Hale 1973).

Out of an interest in the semantic difference between ICs and coordination constructions I interviewed a number of Kriol speakers about whether they felt there was a difference between using an IC or using a pronominal in a coordination construction. People seemed to approach the IC, coordination constructions and comitative constructions as simply different ways of saying the same thing. Both coordination of pronominals and the IC occur regularly in written and transcribed narratives. There is some evidence that the IC is seen as better stylistically, when referring to natural groups of people in personal narratives such as kin groups or friendship groups. In order to test people's stylistic preferences I wrote a short story of about eight sentences which described people meeting up and being picked up for a trip. For each sentence there were a number of alternative ways of referring to groups of people and I asked people which alternative would be better in the context of the story. One group who was referred to was a father and son. In this case most speakers suggested that the use of the dyadic kin term *dedi-gija* 'father-dyad' was better for the purpose of the story than the use of a coordination construction *dedi and(im) san* 'a father and his son'. However, when ICs and coordination constructions were presented as alternatives, speaker's responses were more mixed as to which would be better for the purpose of telling a story. Whatever the semantic differences between ICs, coordination constructions and comitative constructions are in Kriol, they are difficult to identify.

9 CONCLUSIONS: MY FINDINGS AND PREVIOUS TYPOLOGIES OF THE INCLUSORY CONSTRUCTION

In the second part of this section I develop a proposal for a global typology of the IC which is intended to be a starting point for further work on the IC. First I return to the work of Schwartz (1988a, 1988b), looking at where the Australian data causes problems for her characterisation of the IC.

9.1 Further comments on Schwartz (1988a) and Schwartz (1988b)

Schwartz notes that the IC is not a particularly rare or unusual construction and that it occurs among many areal and genetic groupings. Although she investigates the IC in a sizable number of languages, many of her generalisations are not supported by the Australian data. I have already noted that her claim that markers which occur in explicit ICs tend to also function as markers of comitative constructions does not apply to most Australian ICs. The most common explicit markers I found in Australian ICs were nominal number markers, only a small number of Australian ICs contain markers that have a comitative function outside of the IC. There are a number of other general observations Schwartz makes that I will now discuss.

Inclusory Constructions are mainly used to describe ‘unitary action’

Schwartz claims that ICs are usually used to describe mutual and reciprocal action by which she means activities that all participants are equally involved in such as moving, talking or playing music together. She predicts that ICs would rarely be used with stative predicates such as ‘be tall’ which describes an individual state. ICs do seem to be more common in describing actions in which the referents form a clear group. The most common type of IC I have come across is one describing a group of people travelling together but stative predicates also occur, such as examples (129) and (130) which refer to sharing of land ownership.

(129) Garawa
waluwa **ngali-ø-ya** **gugurdi-yunu-nji**
first 1.du.ex-S-IDENT grandmother-DECEASED-ERG
First, we two, (your) dead grandmother and I (held that land).

(Furby and Furby 1977: 101)

(130) Kugu Nganhcara
agu iiru **nganana** **ngathidhe ngathurumu-wu**
land this(ABS) 1.du.ex.DAT mother 1.sg.ABL-DAT
This land belongs to me and my mother.

(Smith and Johnson 2000: 434)

I have not been able to fully gloss the Arrente example in (131) but the two mothers are clearly referred to using an IC. Although giving birth, as a general event may be a shared activity – i.e. women helping each other - the actual act of giving birth is an individual one.

(131) Eastern and Central Arrente

Angkwereye atyinhe ilerne apurtele ampeatnyeneme
older.sister 1.sg.POSS1.du together 'give birth'²⁵

My older sister and I both had our babies [at the same time] ...

(Henderson and Dobson 1994 p.357)

Example (132) from Wardaman describes a shared experience, which is stative not active.

(132) Wardaman

yirri-guya yirr-geng-mi-yi-riri **dorij-guya**

1.nsg.ex-DU 1.nsg.ex-fear-MED-PST <name>-DU

the two of us were afraid, Doris and I

(Merlan 1994: 467)

Schwartz may be correct in describing a tendency for the type of events that ICs are used to encode and there may be restrictions on the types of events that ICs can be used with in particular Australian languages that have not yet been noted by linguists. However, Schwartz's generalisation seems to assume that ICs are restricted to subject position. The Australian data show that they are not, and for that reason ICs may not be active participants in any type of activity at all but simply the object of it as in (133) in which the people referred to by the IC are simply the object of another's longing.

(133) Yankunytjatjara

ngayulu Yami-nga tjana-nya-tjiratja watjil-ari-ngi

1.sg.NOM Yami-ACC 3.pl-ACC-INTENT(NOM) lonesome-INCH-PST.IMPF

I was lonesome for Yami and the others.

(Goddard 1985: 55)

Animacy

Schwartz found that the IC tends to be used for humans only in some languages, and animates only in others. For example, in Chilean Spanish she found 'my dog' was an acceptable subset term. I have suggested that the Australian IC prototypically refers to humans because I have not found any examples even with pet dogs, which sometimes have a special status among animates in Australian languages (Heath 1984). It seems likely that the IC is restricted to humans and mythological beings for some Australian languages but this has not been investigated in the field as yet. Certainly it merits investigation because out of a fairly large sample, only one example was found which did not refer to humans or mythological beings – the Yankunytjatjara example referring to place names in (30).

Case

Schwartz investigates the case marking of the IC in European languages and Tagalog. In general she states that case in the IC is governed by the superset. In situations in which differences arise

²⁵ This gloss is not very precise because I used information from Henderson and Dobson (1994) to write the gloss. They note that *ampe atnyeneme* means 'to give birth' but I do not have an individual gloss for each of the two words.

between the case assignment by the clause level role of the IC and the case of the subset she explains that the case of the subset is governed by the case assigning preposition that is occurring as an explicit marker in the IC. It is not clear that Australian case systems are directly comparable to European ones both because case stacking may lead to both cases being overtly marked on the subset (e.g. in Kayardild) and because assignment of case by prepositions is rare.

Person of Inclusory Construction

Schwartz finds that the third person IC is dispreferred or unacceptable in a number of languages. I also found that the first and second person IC are sometimes better defined, the third person IC being a less well defined construction. For example in Wik-Mungkan third person ICs the ordering restrictions of superset and subset are lifted and the explicit marker *-ang* is optional. These features align the third person IC with coordination constructions formally. I did not find any reports that the third person IC was unacceptable for any language. Schwartz argues that first and second person nonsingular pronominals are very different to nonsingular third person pronominals and nonsingular nominals because they refer to heterogeneous groups (i.e. the central member and third persons) and this is why third person nonsingular pronominals may show similarities to nonsingular nominals in their behaviour.

Ordering of Inclusory Construction

Schwartz (1988a) claims that the superset always occurs first in the IC. This generalisation clearly does not hold for the Australian data surveyed. As discussed in § 7.1 some Australian ICs are 'superset first' and some are 'superset last' with 'superset first' order being slightly more common. The problem with Schwartz's generalisation suggests that although the data she uses is from a wide range of geographical areas and language families, she fails to sample the full range of typological options found in the world's languages.

Type 2 Inclusory Constructions

Schwartz proposes an interesting explanation for the occurrence of Type 2 ICs. She notes that in positions which are obligatorily cross-referenced, optional free pronouns fulfill particular pragmatic and discourse functions and for this reason, languages need a construction in which the speaker can refer to both a pronominal and a nominal, without placing the pronominal in a special discourse role. The Type 2 IC fulfills this function, referring to both a pronominal and a nominal without using a free pronominal. However it seems likely that there are languages with obligatory pronominal cross-referencing in which free pronouns do not have any special discourse or pragmatic properties. Mangarrayi may be one of these and this is why coordination of a free pronoun and a nominal is the unmarked way of referring to a group, rather than the Type 2 IC. Schwartz's idea can explain the fact that singular pronominals are not usually found occurring in nominal coordinations which are cross-referenced by bound pronominals.

Finer semantic meanings

Schwartz finds that in some languages the IC is restricted to referents who have intimate types of relationships such as family and close friends but in other languages any referents can be referred to by an IC. Such fine-grained semantic distinctions may occur in some Australian languages but unfortunately I do not have any information at this level of detail.

9.2 A working model for a global typology of the Inclusory Construction

In § 1 parameters I and II were described. They are formulated as questions below:

I Is the superset referred to by a bound pronominal or a free pronominal?

As discussed in § 1 there are four possible answers to the question posed by parameter **I**:

- free pronoun refers to superset
- bound pronominal refers to superset
- both free and bound pronominals refer to the superset
- neither free nor bound pronominals refer to the superset

It is not clear at this stage a type of IC exists that would be described by the fourth option.

Parameter **II** asks the question:

II Does the Inclusory Construction contain any extra markers that highlight the presence of an IC?

An answer to the question made by parameter **II** could include reference to some of the following types of markers:

- Adnominal case markers
- Arbitrary 'one of a group' or 'one of a pair' markers
- Paral 'one of a pair' markers
- nominal coordination markers
- Associatives

There is also the question of when explicit markers occur in ICs - whether are always obligatory, or optional, or occur in specific contexts.

The roles of case markers in Australian languages are extremely varied. As discussed in § 4.3 adnominal case markers function as explicit markers in Australian ICs while relational and

referential case markers do not. Relational or referential case marking of superset and subset indicates that superset and subset are linked by dependency relations and may or may not indicate that they form a phrase. It is likely that word order in many languages carries out the same role as that described for case marking by parameter III - indicating constituency and dependency relations (Nordlinger 1998a). The third parameter proposed for the IC is formulated as a question below. Clause word order is given as one possible answer as in many non-Australian languages clause word order is important in identifying core grammatical functions and constituency.

III What morphosyntactic features indicate dependency relations between the superset and subset?

The answer to the question posed by parameter III may include one or more of the following or none of them:

- relational case marking
- referential case marking
- clause word order

Parameter III is needed to separate the different roles of case markers in Australian ICs so that Australian ICs can be properly compared with ICs in other languages. Referential and relational case marking functions are comparable to the functions of clausal word order in many other languages whereas adnominal case marking functions are comparable with prepositions and conjunctions in the ICs of other languages.

The three parameters that have been proposed are listed together below:

I Is the superset referred to by a bound pronominal or a free pronominal?

II Does the Inclusory Construction contain any extra markers that highlight the presence of an IC?

III What morphosyntactic features indicate dependency relations between the superset and subset?

There are three separate elements to the typology of ICs which is being proposed here. The first element is the set of defining features that define what should be considered an IC in the first place. The second element is the set of three parameters. These describe the basic parameters along which ICs are expected to vary. The third element in this typology is the set of prototypical features. These are a set of generalisations about the IC and the form it tends to take. There are still many large language groups in which little cross-linguistic work on the IC has

been carried out so this typology is proposed only as a working model for further work to build upon.

9.3 Problems and prospects

One area in which more information is needed with respect to Australian ICs is in the area of ambiguous expressions which can be interpreted as ICs or another type of construction. The only such expression that has been discussed is the expression that can be a Warlpiri IC. It is very likely that the ICs with comitative markers in Bunuba and Maranungku are also ambiguous expressions - which can either be interpreted as ICs or as comitative constructions - like those European ICs with comitative markers. Another area of ambiguity that is expected to occur, but which has not been discussed by the authors of any grammars - is that between definite NPs and ICs. In many Australian languages with ICs, pronominals can act as definite determiners (Blake 2001, Bittner and Hale 1995). Undoubtedly some in some contexts ambiguity would arise as to whether a definite nonsingular NP or an IC was the intended meaning of an expression consisting of a pronominal and a nominal. However, I have not found any examples which have been described to have this ambiguity. Perhaps this highlights a reticence on the part of authors to give all possible translations of ambiguous examples, for fear of confusing the reader.

Another area that needs further research is the semantic range of the IC. Some of the ICs collected come from texts but many are just one of a few examples given in a grammar and these are more likely to be typical ICs than unusual ones. It seems that few researchers have engaged in active testing of the acceptability of the construction in different grammatical functions or with different referents. It is important to find out for each language whether the IC can occur in all possible grammatical functions – A, S, O and oblique functions. It is also necessary to find out who an IC can refer to. Must its referents habitually engage in shared activities? If so, there may be some overlap between the semantics of the IC and associative constructions. Whether any Australian ICs can refer to non-humans is an interesting question. References to mythological characters abound but in many cases they are described as beings who were once human or have human properties.

If a global typology of the construction is attempted in the future, it would probably be best to consider clear cases of the IC separately from those ICs which are only one interpretation of an ambiguous expression. This might help to map the range of formal structures which fully grammaticalized ICs can take. More work on ICs which are one possible meaning of ambiguous expressions would also be interesting. Because this study has been based primarily on published sources rather than field work many questions have been left unanswered. However, it has nonetheless been possible to come up with some interesting generalisations. Some important points which have been made are that it is possible to define the Inclusory Construction as a

distinct construction even for languages in which it contains no special marker or pattern of case marking. This is achieved through reference to semantic and syntactic features of the construction.

That the IC is common cross-linguistically in Australia is clear but it would be interesting to find out how frequently it is used in particular languages, compared to alternatives. Since it appears to be a distinct construction, one of the most interesting questions about the IC is "What is the difference in meaning between the IC and coordination of a pronominal and a nominal in languages in which both are possible options?". It is likely that in languages with both alternatives - the IC and coordination of pronominals - each has a different meaning. In my brief field work on the Kriol IC I was unable to find out if speakers felt there was any difference in meaning between the two expressions. How speakers make linguistic choices is not easy to find out when the choice comes down to subtle stylistic differences. For example, despite undertaking a detailed study of kinship dyads and polyads in Gooniyandi, McGregor (1996) was unable to explain the choices speakers made between using polyadic kinship terms and coordination constructions in many contexts. In any case it seems likely that the different meanings attached to the alternative constructions are likely to be language-specific. More detailed studies of the IC in individual languages along the lines of Lichtenberk (2000) could bring such important information about the semantic range and syntactic properties of ICs to light.

APPENDIX 1

For languages for which the IC has been discussed by a linguist, the page reference to the discussion of the discussion is given in bold and if the author has discussed the IC under a particular heading this is given in quotes. Page numbers not highlighted in bold refer to pages which contain examples of the IC. Languages for which possible examples of the Inclusory Construction was found but not discussed by the author lack a page number which is highlighted in bold, page numbers refer to examples.

Language name	fig.
Alyawarra (Yallop 1977: 120) ‘summarising pronouns’	1
Arrente – Central and Eastern (Henderson and Dobson 1994: 357) ‘special use of pronominals’	1
Arrente – Mparntwe (Wilkins 1989: 407 , § 10.1.1.2) ‘Plural Pronoun Construction’	1
Arrente (Lower Aranda) (Hale 1966: 323-324) ‘compound-reduction’	1
Badimaya (Dunn 1988: 49) ‘pronoun-noun inclusion constructions’	1
Bininj Gun-wok (Evans forth.: 6.2.4.1) ‘set/subset construction’	2
Bunuba (Rumsey 2000: 62 , 66) ‘nonsingular agreement with comitative constructions’	1
Dalabon (Nicholas Evans field notes)	2
Dhuwal (Heath 1980a: 53, 85, 138) - see Yolngu group on map	2
Diyari (Austin 1981a: 122)	1
Djapu (Morphy 1983: 87) - see Yolngu group on map	2
Djaru (Tsunoda: 92) ‘inclusive NP’	1
Djinang and Djinba (Waters 1989: 199) - see Yolngu group on map	2
Dyirbal (Dixon 1972: 63) ‘pronominal noun phrases’	1
Garawa (Furby and Furby 1977: 101)	1
Gooniyandi (McGregor 1990: 286) ‘elaboration of NPs’ (McGregor 1996: 240)	1
Gunin/Kwini (McGregor 1993: 56)	1
Gurr-goni (Green 1995: 75, 335, 342, 343)	2
Guugu Yimidhirr (Haviland 1979: 105) ‘type of NP’	1
Jiwarli (Austin 1997: 197, 199)	1
Kalkatungu (Blake 1979: 109) ‘special NP type’, (Blake 2001: 421) ‘Inclusive Construction’	1
Kayardild (Evans 1995: 249) ‘part-whole types’	1
Kaytetye (Turpin 2000: 87) ‘ways to join words together’ (Harold Koch fieldnotes)	1
Kriol (Sandefur 1979: 108)	1
Kugu Nganhcara (Smith and Johnson 2000: 434) ‘conjoined NPs’	1
Kuku Yalanji (Patz 1982: 198) ‘types of NPs’	1
Kungkari (Breen 1990: 22)	1
Kunjen (Sommer 1972: 24)	1

Larrikiya (Capell: 1984: 90)	2
Lardil (Hale 1966: 318-323) ‘compound-reduction’	1
Language name	Fig
Mangarrayi (Merlan 1982: 104) ‘compound reduction’	2
Mara (Heath 1978: 302 , 376, 377)	2
Maranungku (Tryon 1970: 68) ‘accompaniment’	2
Martuthunira (Dench 1995: 201 , 252) ‘adjoined noun phrase structures’	1
Ndjébbana (McKay 2000: 290 , 325)	2
Ngalakgan (Merlan 1983: 81-82 , 155) ‘compound reduction’	2
Ngandi (Heath 1978: 128 , 251, 253, 254, 256, 257, 259, 260, 292, 293) ‘conjunction’	2
Ngiyambaa (Donaldson 1980: 265)	1
Nunggubuyu (Heath 1984: 542 , 545 , Heath 1980b: 137, 294, 522, 525, 528)	2
Nyaanytjarra (Glass: 1983: 33)	1
Pitta Pitta (Blake 1987:93)	1
Rembarrnga (McKay 1975: 77, 385)	2
Ritharngu (Heath 1980c: 112 , 140) ‘conjunction’	2
Tiwi (Osborne 1974: 81, 82, 83, 84, 93, 94, 100, 101)	2
Torres Strait Creole (Schnukal 1988: 42, 325, Schnukal 1991: 190)	1
Ungarinjin (Rumsey 1982: 139)	1
Walmatjari (Hudson 1974: 94, 95)	1
Wambaya (Nordlinger 1998b: 154)	1
Wardaman (Merlan 1994: 467, 506[Kriol])	2
Warlpiri (Hale 1973: 320f , Nash 1986: 212 , Mary Laughren fieldnotes and forthcoming dictionary)	1
Warumungu (Hale 1973: 342)	1
Wik-Mungkan (Kilham <i>et al.</i> 1986: 418 , Kilham 1977: 74-75 , Sayers 1976: 54-55, 81, 82, 99, 114, 130) ‘coordination noun phrases’	1
Yandruwandha (Breen 1976: 296, Austin 1981a:123)	1
Yankunytjatjara (Goddard 1985: 54, 56, 100-102) ‘the inclusive construction’	1
Yidiny (Dixon 1977: 177-178)	1

REFERENCES

- Aissen, Judith L. (1989) Agreement controllers and Tzotzil comitatives. *Language*, 65: 518-536.
- Austin, Peter (1997) *Texts in the Mantharta languages, Western Australia*. Tokyo: Institute for the study of languages and cultures of Asia and Africa.
- Austin, Peter (1981a) *A grammar of Diyari, South Australia*. Cambridge: Cambridge University Press.
- Austin, Peter (1981b) Switch-reference in Australia. *Language*, 57(2): 309-334.
- Austin, Peter, Ellis, R and Luise.A. Hercus (1976) Fruit of the eyes: semantic diffusion in the lakes languages of South Australia. In *Papers in Australian Linguistics No.10*. Pacific Linguistics A-47, Canberra. pp. 57-69.
- Bickel, Balthasar. (2000) On the syntax of agreement in Tibeto-Burman. *Studies in language*, 24 (3): 583-609.
- Bickel, Balthasar (manuscript, 1999) Grammatical relations, agreement and genetic stability. Available at <http://ist-socrates.berkeley.edu/~bickel/papers/>
- Bittner, Maria and Ken Hale (1995) Remarks on definiteness in Warlpiri. In Bach, Emmon, Eloise Jelinek, Angelika Kratzer and Barbara H. Partee (eds.) *Quantification in natural languages*. Dordrecht: Kluwer Academic. pp.59-80.
- Blake, Barry J. (2001) The noun phrase in Australian languages. In Jane Simpson, David Nash, Mary Laughren, Peter Austin and Barry Alper (eds.) *Forty years on: Ken Hale and Australian languages*. Canberra: Pacific Linguistics. pp.415-426.
- Blake, Barry J. (1987) *Australian Aboriginal Grammar*, Beckenham: Croon Helm.
- Blake, Barry J. (1979) *A Kalkatungu grammar*. Pacific Linguistics B-57, Canberra.
- Breen, J. Gavan (1990) *Salvage studies of Western Queensland Aboriginal languages*. Pacific Linguistics B-105, Canberra.
- Breen, J. Gavan (1976) Proprietary markers and kinship terms. In Dixon, R.M.W. (ed.) *Grammatical Categories in Australian languages*. Canberra: Australian Institute of Aboriginal Studies. pp.290-297.
- Bresnan, Joan and Sam A. Mchombo (1987) Topic, pronoun and agreement in Chiche_a. *Language*, 63: 741-782.
- Capell, Arthur (1984) The Laragia language. In *Papers in Australian linguistics No. 16*, Pacific Linguistics A-68, Canberra. pp.55-106.
- Corbett, Greville G. & Marianne Mithun (1996) Associative forms in a typology of number systems: evidence from Yup'ik. *Journal of Linguistics*, 32: 1-17.
- Dench, Alan C. (1995) *Martuthunira, a language of the Pilbara region of Western Australia*. Pacific Linguistics C-125, Canberra.
- Dench, Alan C. (1987) Kinship and collective activity in the Ngayarda languages of Northwest-Western Australia. *Language in Society*, 16: 321-339.
- Dench, Alan C. and Nicholas Evans (1988) Multiple case-marking in Australian languages. *Australian Journal of Linguistics*, 8: 1-47.
- Diwurruwurru-jaru Aboriginal Corporation (unpublished) Notes on my interviews with Kriol speakers in Ngukurr, Northern Territory about the Inclusive Construction. Stored in the library of Diwurruwurru-jaru Aboriginal Corporation, Katherine, Northern Territory.
- Dixon, R.M.W. (1980) *The languages of Australia*. Cambridge: Cambridge University Press.
- Dixon, R.M.W. (1977) *A grammar of Yidiny*. Cambridge: Cambridge University Press.
- Dixon, R.M.W. (1972) *The Dyirbal language of north Queensland*. Cambridge: Cambridge University Press.
- Donaldson, Tamsin (1980) *Ngiyambaa: the language of the Wangaaybuwan*. Cambridge: Cambridge University Press.

- Dunn, Leonie (1988) Badimaya, a Western Australian language. In *Papers in Australian Linguistics No. 17*, Pacific Linguistics A-71, Canberra. pp.19-149.
- Evans, Nicholas (forthcoming) *A grammar of Bininj Gun-wok*, Canberra: Pacific Linguistics.
- Evans, Nicholas. (1995) *A grammar of Kayardild*, Berlin: Mouton de Gruyter.
- Evans, Nicholas and Wilkins, David P. (2000) In the mind's ear: the semantic extensions of perception verbs in Australian languages. *Language* 76: 546-592.
- Furby, F.S. and Furby C.E (1977) *A preliminary analysis of Garawa phrases and clauses*. Pacific Linguistics B-42, Canberra.
- Glass, Anee (1983) *Nyaanyatjarra sentences*. Work papers of SIL-AAB, Series A, Volume 7. Darwin: Summer Institute of Linguistics.
- Goddard, Clifford. (1985) *A grammar of Yankunytjatjara*. Alice Springs: Institute for Aboriginal Development.
- Goldberg, Adele E. (1995) *Constructions: a construction grammar approach to argument structure*. : Chicago: University of Chicago Press.
- Green, Rebecca (1995) *A grammar of Gurr-Goni*. PhD, Australian National University, Canberra.
- Greenberg, J. H. (1988) The first person inclusive dual as an ambiguous category. *Studies in Language*, 12(1): 1-18.
- Hale, Kenneth. (1973) Person marking in Walbiri. In Anderson, S. and Kiparsky, P. (eds.) *A festschrift for Morris Halle*, New York: Holt, Rinehart and Winston. pp. 308-344.
- Hale, Kenneth. (1966) Kinship reflections in syntax, *Word*, 22: 318-324.
- Hale, Kenneth L. Mary Laughren and Jane Simpson (1995) Warlpiri. In Jacobs, Joachim, Arnim von Stechow, Wolfgang Sternefeld and Theo Vennemann (eds.) *Syntax: ein internationales Handbuch zeitgenössischer Forschung*, Part 2. Berlin: Mouton de Gruyter. pp.1430-1451.
- Harris, John (1984) *Language contact, pidgins and the emergence of Kriol in the Northern Territory: theoretical and historical perspectives*. PhD thesis, University of Queensland, Brisbane.
- Harvey, Mark and Nicholas Reid (eds.)(1997) *Nominal classification in Aboriginal Australia*. Amsterdam: John Benjamins.
- Haspelmath, Martin (1997) *Indefinite pronouns*. Oxford: Clarendon Press.
- Havidland, J. (1979) Guugu Yimidhirr. In Dixon, R.M.W. and Blake, B.J. (eds) *Handbook of Australian Languages Volume 1*, Canberra: Australian National University Press. pp. 27-180.
- Heath, Jeffrey (1986) Syntactic and lexical aspects of nonconfigurationality in Nunggubuyu (Australia). *Natural language and linguistic theory*. 4: 375-408.
- Heath, Jeffrey. (1984) *Functional grammar of Nunggubuyu*. Canberra: Australian Institute of Aboriginal Studies.
- Heath, Jeffrey. (1981) *Basic materials in Mara: grammar, texts and dictionary*. Pacific Linguistics C-60, Canberra.
- Heath, Jeffrey (1980a) *Dhuwal (Arnhem land) texts on kinship and other subjects with grammatical sketch and dictionary*. Oceania linguistic monographs No. 23.
- Heath, Jeffrey. (1980b) *Nunggubuyu myths and ethnographic texts*. Canberra: Australian Institute of Aboriginal Studies.
- Heath, Jeffrey (1980c) *Basic materials in Ritharngu: grammar, texts and dictionary*. Pacific Linguistics B-62, Canberra.
- Heath, Jeffrey. (1978) *Ngandi grammar, texts and dictionary*. Canberra: Australian Institute of Aboriginal Studies.
- Heath, Jeffrey and Francesca Merlan (1982) Dyadic kinship terms. In Heath, Jeffrey, Francesca Merlan and Alan Rumsey (eds) *Languages of kinship in Aboriginal Australia*. Oceanic Linguistic Monographs No. 24, pp. 107-124.
- Henderson, John and Veronica Dobson (compilers) (1994) *Eastern and Central Arrente to*

- English dictionary*. Alice Springs: Institute of Aboriginal Development Press.
- Hercus, L.A. (1987) Linguistic diffusion in the Birdsville area. In Laycock, D.C. and W. Winter (eds.) *A world of language: papers presented to Professor S.A. Wurm on his 65th birthday*. Pacific Linguistics C-100, Canberra. pp.245-255.
- Himmelman, Nikolaus P. (1997) *Deiktikon, Arkikel, Nominaphrase: Zur Emergenz syntaktischer Struktur*. Tübingen: Max Niemeyer Verlag.
- Hudson, Joyce (1983) *Grammatical and semantic aspects of Fitzroy Valley Kriol*, Work papers of SIL-AAB, Series A, Volume 8. Darwin: Summer Institute of Linguistics.
- Hudson, Joyce (1978) *The core of Walmajari grammar*. Canberra: Australian Institute of Aboriginal Studies.
- Kilham, Christine (1977) *Thematic organization of Wik-Munkan discourse*. Pacific Linguistics B-52, Canberra.
- Kilham, Christine, Mabel Pamulkan, Jennifer Pootchemunka and Topsy Wolmby (1986) *Dictionary and sourcebook of the Wik-Mungkan language*, SIL-AAB, Darwin: Summer Institute of Linguistics.
- Ladusaw, William A. (1989) Group reference and the plural pronoun construction. In *Papers on the plural pronoun construction and comitative coordination*. Syntax Research Center, University of California, Santa Cruz.
- Lichtenberk, Frantisek (2000) Inclusive Pronominals. *Oceanic Linguistics*, 39(1):1-32.
- McGregor, William (1996) Dyadic and polyadic kin terms in Gooniyandi. *Anthropological Linguistics*, 38(2): 216-247.
- McGregor, William (1993) *Gunin/Kwini*. München: Lincom Europa.
- McGregor, William (1990) *A functional grammar of Gooniyandi*, Philadelphia: John Benjamins.
- McKay, Graham (2000) Njébbana. In Blake, Barry J. and Dixon, R.M.W. (eds.) *Handbook of Australian languages, Volume 5*. Oxford: Oxford University Press. pp.155-356.
- McKay, Graham R. (1975) *Rembarrnga: a language of Arnhem land*. PhD Thesis, Australian National University, Canberra.
- Merlan, Francesca (1994) *A grammar of Wardaman: a language of the Northern Territory*. Berlin: Mouton de Gruyter.
- Merlan, Francesca (1983) *Ngalakan grammar, texts and vocabulary*. Pacific Linguistics B-89, Canberra.
- Merlan, Francesca (1982) *Mangarayi*, *Lingua Descriptive Studies Volume 4*. Amsterdam: North Holland Publishing Company.
- Morphy, Frances. (1983) Djapu, a Yolngu dialect, In R.M.W. Dixon and Barry J. Blake, (eds.) *Handbook of Australian Languages Volume 1*, Canberra: Australian National University Press. pp. 1-304.
- Nash, David (1986) *Topics in Warlpiri Grammar*, PhD thesis, Massachusetts Institute of Technology.
- Nordlinger, Rachel (1998a) *Constructive case: evidence from Australian languages*. Stanford: CSLI Publications.
- Nordlinger, Rachel (1998b) *A grammar of Wambaya, Northern Territory (Australia)*. Canberra: Pacific Linguistics.
- Osborne, C.R. (1974) *The Tiwi language*. Canberra: Australian Institute of Aboriginal Studies.
- Patz, Elizabeth (1982) *A grammar of Kuku Yalanji language of North Queensland*, PhD, Australian National University, Canberra.
- Rukeyser, Alison (1997) *A typology of the nominal dual: evidence from Indo-European, Finno-Ugric, Semitic and Australian languages*. Masters thesis, University of California, Davis. Available online Davis Working Papers in Linguistics: <http://linguistics.ucdavis.edu/linghp34.html>
- Rumsey, Alan (2000) Bunuba. In Dixon, R.M.W. and Blake, B.J (eds.) *Handbook of Australian*

- languages*, Volume 5. Oxford: Oxford University Press. pp.35-154.
- Rumsey, Alan (1982) *An intra-sentence grammar of Ungarinjin, North Western Australia*. Pacific Linguistics B-86, Canberra.
- Sandefur, John R. (1979) *An Australian creole in the Northern Territory: a description of Ngukurr-Bamyili dialects [Part I]*. Work papers of SIL-AAB, Series B, Volume 3. Darwin: Summer Institute of Linguistics.
- Sayers, Barbara J. (1976) *The sentence in Wik-Mungkan: a description of the propositional relationships*. Pacific Linguistics B-44, Canberra.
- Schnukal, Anna (1991) Torres Strait Creole. In Romaine, Suzanne (ed.) *Language in Australia*. Cambridge: Cambridge University Press. pp.180-194.
- Schnukal, Anna (1988) *Broken: an introduction to the creole language of the Torres Strait*. Canberra: Pacific Linguistics.
- Schultze-Berndt, Eva (2000) *Simple and Complex verbs in Jaminjung: A study of event categorisation in an Australian language*. PhD thesis, Katholieke Universiteit Nijmegen.
- Schwartz, Linda (1988a) Conditions for verb-coded coordinations In Hammond, Michael, Edith A. Moravcsik and Jessica R. Wirth (eds.) *Studies in Syntactic Typology*, Typological Studies in Language 17, Amsterdam: John Benjamins. pp. 53-73.
- Schwartz, Linda (1988b) Asymmetric feature distribution in pronominal 'coordinations'. In M. Barlow and A. Ferguson (eds.) *Agreement in Natural Language: Approaches, Theories, Descriptions*, Center for the Study of Language and Information, Stanford: Stanford University Press. pp. 237-249.
- Simpson, Jane and Joan Bresnan (1983) Control and obviation in Warlpiri. *Natural language and linguistic theory*, 1: 49-64.
- Smith, Ian and Steve Johnson (2000) Kugu Nganhcara. In Blake, Barry J. and Dixon, Robert R.M.W. (eds.) *Handbook of Australian languages*, Volume 5. Oxford: Oxford University Press. pp.357-507.
- Sommer, Bruce A. (1972) *Kunjen syntax: a generative view*. Canberra: Australian Institute of Aboriginal Studies.
- Stassen, Leon (2000) AND-languages and WITH-languages. *Linguistic Typology*. 4(1): 1-54.
- Tryon, Darrell (1970) *An introduction to Maranungku (Northern Australia)* Pacific Linguistics B-15, Canberra.
- Tsunoda, Tasaku (1981) *The Djaru language of Kimberley, Western Australia*. Pacific Linguistics B-78, Canberra.
- Turpin, Myfany (compiler) (2000) *A learner's guide to Kaytetye*. Alice Springs: Institute of Aboriginal Development Press.
- Waters, Bruce E. (1989) *Djinang and Djinba - a grammatical and historical perspective*. Pacific Linguistics C-114, Canberra
- Wilkins, David P. (1989) *Mparntwe Arrente (Aranda): studies in the structure and semantics of grammar*, PhD thesis, Australian National University, Canberra.
- Wilkins, David P. (1988) Switch-reference in Mparntwe Arrente (Aranda): form, function and the problems of identity. In Austin, Peter (ed.) *Complex sentence constructions in Australian languages*, Amsterdam: John Benjamins. pp. 141-176.
- Yallop, Colin (1982) *Australian Aboriginal languages*. London: Andre Deutsch.
- Yallop, Colin (1977) *Alyawarra: an aboriginal language of Central Australia*. Canberra: Australian Institute of Aboriginal Studies.



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