

Chapter 3

Descriptive preliminaries

In this chapter I develop and define various descriptive terms that will be used throughout the grammar. The relevant phenomena are introduced here only briefly, without full exemplification; ongoing references are given to the appropriate chapters later in the grammar.

3.1 Parts of speech and phrasal categories

From Dionysius Thrax onwards it has been normal grammatical practice to define parts of speech through a combination of morphological, syntactic and semantic criteria. This works well enough when all three criteria coincide, but is more problematic in languages where, for example, a given word may be a “syntactic noun”—defined perhaps by its ability to govern case agreement and follow a determiner—but a “morphological verb”—defined by the fact that it inflects for morphological categories such as tense, mood, and polarity.

Kayardild is such a language. Although morphological and syntactic criteria, taken alone, yield clearcut results, there are cases when they do not give the same category. In other words, the grammar sanctions various types of mismatch between morphological, syntactic and semantic criteria. In this section I proceed by first defining a set of word classes on predominantly morphological criteria; then looking briefly at the two phrasal projections of these classes found in Kayardild, namely NP and VC; and finally considering the various types of categorial mismatch that are possible.

3.1.1 Word classes

For Kayardild five major word classes may be set up, based on the suffixing possibilities of each word. These are mutually exclusive; each root belongs to just one class. A number of derivational processes change word class; those deriving nominals from verbals are discussed in 11.2 and 11.3, and those deriving verbals from nominals in 7.5. The word classes are:

1. Nominals
 - (a) noun/adjective
 - (b) pronoun
 - (c) locational
 - demonstrative
 - compass locational
 - positional
 - (d) manner nominal
 - (e) predicate nominal
 - (f) time nominal
2. Verbals
3. Particles
4. Interjections
5. Conjunctions

The noun/adjective subclass and the verbal class are essentially the only open classes, although a few English loans are passing into the particle and interjection classes (9.7.3).

The *nominal* and *verbal* classes are the most important and populous. In general nominals denote entities or attributes, and verbals denote actions. States like “know”, “be ignorant” and “be jealous” are expressed by predicate nominals in Kayardild. The two major classes have distinct inflectional possibilities. A nominal word is obligatorily inflected for case; a verbal word must take one of a rich set of tense / mood / polarity markers. Nominal and verbal words also have distinct sets of derivational suffixes.

3.1.1.1 The nominal class. Several subclasses must be distinguished within the nominal class.

As in many Australian languages, there is a large open class of NOUN/ADJECTIVES, with identical inflectional and derivational possibilities. Typically, members of this class have several functional possibilities within the NP: *wurkara*, for example, may designate an entity, ‘boy’, or may be an adjective-like qualifier, ‘male’. *Jambarnda* may mean ‘hollow’ (attribute) or ‘hollow log’ (entity). *Warngiida* may function as a quantifier, meaning ‘one’, as a qualifier, meaning ‘common, shared’, or as a determiner, meaning ‘a, a certain’. The various possibilities for noun/adjectives are discussed in 6.3. Noun/adjectives may also function as nominal predicates in verbless clauses (9.1) and as “second predicates” (9.4), as in ‘you will return home *a good fisherman*’.

PRONOUNS form a closed class. They distinguish person (1st, 2nd, 1st + 2nd or 1st inclusive, and 3rd) and number (singular, dual and plural). The pronominal case system is basically identical to that of other nominals; minor differences are discussed in 5.2.2.

LOCATIONALS are another closed class. They are inherently locative and do not normally inflect for the LOCative case. A number of special derivational suffixes are found only with this class. Locationals may be

further subclassified into the DISTANCE LOCATIONALS *dan-da* ‘this, here’ and *dathina* ‘that, there’, the COMPASS LOCATIONALS, and POSITIONALS like *marrwaa* ‘near’ and *dulkalarri* ‘outside’.

All locationals may function as local adjuncts. In addition, demonstrative and compass locationals may function as spatial determiners, as in *danda dangkaa* ‘this man’ and *bada dangkaa* ‘(the) west man’. The demonstrative *dathina* ‘that’ doubles as a discourse determiner. And compass locationals and positionals occur in complex NPs giving the relative location of two entities.

MANNER NOMINALS describe the manner in which an actor accomplishes some action, e.g. *kantharrkuru* ‘alone, unaided’, *junkuyarrada* ‘in return, in revenge’. Whereas normal noun/adjectives may function as heads, modifiers, nominal predicates or second predicates, manner nominals may only function as second predicates on semantic actors. This limits their case possibilities to the nominative, or, with verbs taking object complements (e.g. ‘I saw / found / left him sitting alone’), to a case appropriate to objects.

PREDICATE NOMINALS have nominal form and nominal derivational possibilities, but can only function as predicators: they cannot be used attributively, or inflect for case. Typical examples are *mibulka* ‘asleep’ and *mungurru* ‘knowing, knowledgeable’. Some, such as *mungurru*, may take quasi direct objects ‘knowing OBJ’; and some take quasi indirect objects, e.g. *mulurra* ‘jealous, suspicious (of IOBJ)’.

TIME NOMINALS give temporal specification. They too take only a subset of nominal case inflections: see 5.4.2.

INTERROGATIVES belong to a functional class cross-cutting the *morphological* classification given above: there are interrogative pronouns, locationals and verbs. Interrogatives are discussed with the syntax of questions, in 9.5.

3.1.1.2 The verbal class. Verbals primarily denote actions and processes, but may also provide adverbial type information about the manner in which these are carried out. Thus the verbal lexeme *kurulutha* ‘kill’ may describe the action of “killing”, but may also combine with another verb, adding the meaning “do intensely”, e.g. *kurulutha marrija* [kill listen] ‘listen intently’. A natural way of describing this is to postulate a “verbal complex” (VC), comprising one or more verbal lexemes, much as a “noun phrase” comprises one or more nominal constituents. A given lexeme may then function as a head (as with the “kill” meaning) or a modifier (as with the “do intensely” meaning) within this verb complex (8.2.1). A few verbal lexemes only permit the modifier function: thus *bakiija* ‘all S do; do to all O’ can only function as a modifier within the VC, never as a head.

3.1.1.3 Particles. Kayardild has a handful of particles. These are uninflected and express, *inter alia*, counterfactuality, frustrated expectation, non-existence, and quantification; a full list is in 9.7. They may have phrasal or sentential scope.

3.1.1.4 Interjections. These are likewise devoid of inflections, but unlike particles typically constitute a complete utterance.

The nominal, *warirra* ‘nothing’, may also serve as an interjection meaning ‘no’ or ‘I’ve got nothing’; when functioning as a nominal it inflects for case, but not when functioning as an interjection. This is the only word that may belong to more than one word class.

3.1.1.5 Conjunctions. There are two of these: *bana* ‘and’, which conjoins phrases and sometimes clauses, and *birra* ‘too’, limited to noun phrases. Like particles and interjections they are uninflected, but are distinguished from them by their inability to appear as free forms: they must always precede or follow other words in an utterance. Unlike all other parts of speech except clitics, their position is fixed, being limited to immediately before or after the conjoined elements.

3.1.2 Lexical and phrasal classes; category mismatches

For each of the two major word classes, nominals and verbals, it is useful to set up corresponding phrasal units:

NOUN PHRASES (NPs) consist of one or more nominal words, agreeing in case (3.4.2.1), whose order is largely determined by syntactic function (6.2.1); they are discussed in Chapter 6¹.

VERB COMPLEXES (VCs) comprise one or more verbal words, agreeing in “final inflection”, whose order is determined by function (8.2); they are discussed in Chapter 8².

The syntactic behaviour of elements within NPs and VCs can be used to define categories of “syntactic nouns” and “syntactic verbs” independently of their morphological characteristics. Syntactic nouns govern relational and/or adnominal case agreement, and may be modified by demonstratives, adjectives, quantifiers, adnominal NPs. Syntactic

¹ Note that case agreement is a necessary but not sufficient condition for shared membership of a NP: second predicates may agree in case with another NP but do not form a constituent with it.

² Although the term “verb phrase” would reflect better the isomorphic relation between nouns and noun phrases, on the one hand, and verbs and verb complexes, on the other, it has been used so often with the meaning of “predicate” or “verb plus non-subject arguments” that this would be confusing. I therefore use Dixon’s (1977) term “verb complex”. In the X-bar theory of phrase structure, it corresponds to a V’.

verbs govern agreement in tense, aspect, mood and polarity within the VC, and may be modified by aspectual, motional or adverbial coverbs.

Kayardild grammar sanctions a number of mismatches between categories belonging to different components of the grammar—morphological, syntactic, and semantic—and in the rest of this section I show how this can happen, what mismatches occur, and propose a precise descriptive terminology.

One main source of such mismatches is a class of inflections that change the word-class membership of their constituents, so that there is a mismatch between the syntactic and morphological categories of fully inflected words: morphological verbs may be syntactic nouns, and morphological nouns may be syntactic verbs. I illustrate these in 3.1.2.2, after first spelling out, in 3.1.2.1, language-specific tests that successfully distinguish inflectional from derivational morphology. A second source of mismatches is the existence of constructions with non-verbal predicates, some of which are two-place; these are discussed in 3.1.2.3.

3.1.2.1 Phrasal inflection and lexical derivation. The distinction between “inflection” and “derivation” is a fundamental and traditional one, well formulated by Anderson (1982: 588): “the central issue ... appears to be the difference between processes which operate with essential reference to structure beyond the word-level vs processes which simply provide alternate words on the basis of the (word-)initial structure of the base.” Derivational processes, that is, create new lexemes which would be listed in a dictionary; while inflection fits these into a larger syntactic whole.

Despite the importance of this distinction, it is not always easy to find formal tests that will label a morpheme unambiguously as inflectional or derivational.

One diagnostic often employed is word-position: inflectional affixes usually lie “outside” derivational affixes. Among Australianists this “followability criterion” has become something of a standard test. Blake (1977: 38), for example, writes of the genitive suffix in Australian languages that “the suffix to the possessed is usually regarded as a *stem-forming* affix (my italics—N.E.) and can be followed by case inflections”; and Dixon (1980: 322-3), writing on Australian languages in general, asserts that “each word has an obligatory root and final inflection; between these two constituents there can optionally occur one or more of a number of derivational suffixes.” However, the followability test is not suitable for Kayardild, which allows extensive multiple inflection, with sequences of up to four case-like inflections (3.4.7). For an overview of other Australian languages permitting multiple case inflection, see Dench—Evans (1988).

In Kayardild a more fruitful test is based on the insight that inflection essentially operates on units “beyond the word level”, in particular on phrases, while derivation applies to individual lexemes. In illustration of this, inflections exhibit concord over the relevant noun phrase or verb complex, so that ‘on that beach’ is *dathin-ki ngarn-ki* [that-LOC beach-LOC], and ‘will hit hard’ is *kurulu-thu bala-thu* [kill-POT hit-POT].

Derivational suffixes, on the other hand, never show phrasal concord, but must be limited to a single word. For example the inchoative suffix, deriving verbs of becoming from nominals, can apply to the word *mundundunkuru* ‘maggot-PROP, maggotty’ to give *mundundunkuruwatha* ‘become maggotty, become fly-blown’, but not to the phrase *jungarrawuru mundundunkuru* [big-PROP maggot-PROP] ‘full of fat maggots’. A different construction must be employed, using a copula with a NP complement (9.1.8). Alternatively, a new lexeme may be derived by compounding a noun and adjective, and this compound lexeme may then take the inchoative derivational suffix: thus *nalda birdi* ‘bad (in the) head’ yields the compound *nalbirdi* [head-bad] ‘mad, drunk’, which may then take the inchoative derivational suffix, giving *nalbirdiwatha* ‘go mad, get drunk’.

In this grammar the possibility of phrasal concord will be taken as the crucial test distinguishing inflection from derivation. This allows us to handle the multiple inflection discussed in 3.4.7. It also enables us to deal with suffixes which, though functionally inflections, change the word class of their targets.

Another characteristic of inflections is that they are fully productive and regular in meaning; whereas derivational suffixes are limited to a small number of lexemes and often produce fairly idiosyncratic changes in meaning. This distinction correlates well with the phrasal scope test. Note, though, that sometimes inflectional forms may have a derivational use, in which case their scope is limited to the word.

3.1.2.2 Inflections changing morphological word class.

Two types of inflection change morphological word class without changing syntactic word class.

VERBAL CASES are morphologically verbalizing suffixes that function in all respects like oblique cases: they are totally productive, appear on every word of a NP, and code such case-like meanings as beneficiary, direction of motion, purpose, and so on. For example, there is a suffix *-marutha*, glossed ‘Verbal Dative’, having a range of dative-type meanings, including beneficiary, recipient, communicatee, and direction of transfer. This attaches to each word of the relevant NP. However, each word thereby becomes morphologically verbal, and agrees in tense/mood/polarity with the main verb. All but one of these “verbal cases” derive from free verbs; the Verbal Dative, for example, derives from a free verb *marutha* ‘put’.

- (3-1) *ngada waa-ju wangarr-u [ngijin-maru-thu*
 1sgNOM sing-POT song-MPROP my-VD-POT
thabuju-maru-thu]_{NP}
 elder brother-VD-POT

‘I will sing a song for my elder brother.’

The range and use of verbal cases is discussed in 4.4.

NOMINALIZER suffixes have a range of uses. One is to mark ongoing uncompleted actions. Although nominalized verbs in this function are syntactically verbal, they are morphologically nominal, and take normal nominal case inflections. (Nonetheless they do have certain morphosyntactic properties not found with normal verbs: in particular, they trigger a special level of case-marking on their non-subject arguments—3.4.5). An example is:

- (3-2) *nyingka kurri-n-da warra-n-da wirdi-n-d*
 2sgNOM see-N-NOM go-N-NOM stay-N-NOM
 ‘You’re going around to see (people) a lot.’³

Although the changing of word-class membership is considered by most linguists (e.g. Anderson 1982) to be limited to *derivational* morphology, both “verbal case” and “ongoing nominalization” display the criterial inflectional characteristic of applying to whole phrases: to the NP *ngijinda thabuju* ‘my big brother’ in (3-1) and to the VC *kurrija warraja wirdija* ‘keep going to see’ in (3-2). In this grammar they are therefore treated as inflections, although they have the peculiarity that they change the morphological word-class membership of the words receiving them. Note, however, that there are formally identical suffixes that do have a derivational function, and that this derivational function is historically prior in all cases. See 4.4 and 11.5.3.

3.1.2.3 Mismatches between morphological, syntactic, and semantic categories. The existence of inflections that change word class produces a lack of exact fit between morphological and syntactic word class. Even though the unmarked situation is for NPs to be made up of words that belong to the nominal category on both morphological and syntactic criteria, and VCs to be made up of words that are verbal on both morphological and syntactic criteria, we can have NPs made up of syntactic nouns that are morphologically verbal and VCs made up of syntactic verbs that are morphologically nominal:

³ On the use of *warraja* and *wirdija* in verbal complexes see 8.2. Here *warraja* contributes the meaning ‘going around’ and *wirdija* the meaning ‘keep doing X’.

Morphological category of constituents	Phrasal category	
	NP (N')	VC (V')
Nominal	(default)	progressive nominalization
Verbal	verbal case	(default)

In addition, the basic tendency of languages to employ verbs as predicates and nominals as arguments is not strictly adhered to, for Kayardild shares with many other Australian languages the possibility of using nominal words or NPs as predicates in “nominal sentences”. There is even a small set of nominals, mostly referring to states, that may be described as “transitive” or “semi-transitive”: the noun/adjectives *mungurru* ‘know, knowing’ and *burdumbanyi* ‘ignorant’, for example, take quasi direct objects, and *mulurra* ‘jealous’ takes a quasi indirect object (9.1.7). However, it is not possible for verbals to act as arguments without undergoing some derivational process. This gives us the following picture:

Semantic function	Word-class category (phrasal category)	
	nominal (NP)	verbal (VC)
argument	+	-
predicate	+	+

Proposals as to how to handle categorial mismatches have been made by Sadock’s (1991) theory of autolexical syntax; in a formal grammar of Kayardild such mismatches could be stipulated in the lexical entry of the category-changing inflectional suffix, stating the morphological and syntactic categories they assign to their host. What is important for the purposes of this reference grammar is that a terminological distinction be maintained, where needed, between logical function (argument, predicator), phrasal category (NP, VC) and word class as defined by morphology (e.g. “morphological noun”) and by syntax (e.g. “syntactic noun”).

3.2 Word order and ellipsis

3.2.1 Word order

The order of phrases in Kayardild is basically free, with all orders attested. Case marking, not word order, codes syntactic relations.

Discussion of word order is rendered both difficult and unimportant by the frequent ellipsis of arguments, which leaves some clauses with nothing but verbs. On the other hand, phrases may be repeated within the one sentence, either as afterthoughts or for emphasis, and it is not always clear which NP to use in deciding constituent order.

Below I give word order counts taken from seven narrative texts (including six given in Part II); repetitions and subordinate clauses were ignored in the count. Ellipsed arguments are given in brackets, arbitrarily placed before non-ellipsed ones.

Transitive sentences (N=68)					
SVO	4	(5.8%)	(S)VO	14	(20.6%)
SOV	4	(5.8%)	(S)OV	17	(25%)
			(S)(O)V	15	(22%)
OSV	1	(1.4%)	(O)SV	7	(10.3%)
OVS	5	(7.3%)			
VOS	1	(1.4%)			
Intransitive sentences (N=67)					
SV	34	(50.7%)	(S)V	27	(40.3%)
VS	6	(8.9%)			
Semi-transitive sentences (N=5)					
(S) IO V	3	(60%)	(S) V IO	1	(20%)
V S IO	1	(20%)			

These figures illustrate the high incidence of argument ellipsis: 77.9% of transitive sentences have at least one argument ellipsed, and 67.6% have ellipsed subjects. The great freedom of word order is also shown: five out of the six orders possible with transitive clauses are found in this relatively small sample, and the other (VSO) has also been attested (e.g. *raaja ngada bijarrbay* 'speared I (the) dugong')⁴. It also illustrates the

⁴ When I was first working on the language and failed to understand a sentence, certain speakers would systematically permute the word order for me.

near-impossibility of ascribing a “basic word order” to the language, unless we do something like arbitrarily count ellipsed arguments as sentence-initial (as done above), which would give SOV and SVO as the two most common word orders.

There is a tendency for new discourse participants to be fronted, regardless of their grammatical function. Because new information tends to be fronted, it is common in extended narratives for the verb, which refers to a new event, to precede the subject pronoun, which refers to a well-established participant:

- (3-3) *barrbiru-tha manharr-iy, kiyarrng-ki kamarr-i wuu-j,*
 raise-ACT torch-MLOC two-LOC stone-LOC put-ACT
bala-tha ngad
 hit-ACT 1sgNOM

‘(I) lifted the torch, put it on two stones, then I hit (the diver birds).’

As this example illustrates, the reappearance of the subject pronoun after a series of clauses in which it is elided suggests a faint change in discourse direction, often translatable by English ‘then’.

With third person pronominal subjects this is almost a frozen idiom; the reduced form *ni* is only found in phrase-final, postverbal position.

- (3-4) *rabi-ja niya warngiid-a barmgka-a niwan-ji nal-i,*
 get up-ACT 3sgNOM one-NOM lily-NOM 3sg-LOC head-LOC
wanjii-ja ni, kamburi-ja ni
 go up-ACT 3sgNOM say-ACT 3sgNOM

‘He stood up, with a water lily on his head, he went up, and said ...’

Within both NPs and verb complexes word order is relatively fixed. This is discussed in Chapters Six and Eight.

Finite subordinate clauses are normally adjoined, preceding or following the main clause (Chapter 12). But they are occasionally embedded, particularly when coding purpose or parenthetical clauses. In such cases all words of the adjoined clause are contiguous, and are easily identifiable from the presence of “complementizing case-marking”.

3.2.2 Ellipsis

Kayardild is characterized by frequent NP ellipsis. Any participant whose referent has already been established can be anaphorically ellipsed.

The referent need not have been established within the one speech-session—especially if the genre is mythological narrative, whose story line is at least partly known to everyone in the Kayardild social

universe of about 120 people. This opening sentence from Dugal Goongarra's telling of the Rock Cod story at least contains a pronoun, albeit one whose reference is never made explicit:

- (3-5) *mildala-tha ni*
cut out-ACT 3sg
'He (Rock Cod) cut it out ...'

But in (3-6), again an opening line of a myth (this time the Kajurku story, also told by Dugal Goongarra), no such concession is made:

- (3-6) *rayin-da thula-tha tharda-a manharr-u,*
from south-NOM go down-ACT shoulder-NOM torch-PROP
wuu-ja kamarr-i, manarr-iy
put-ACT rock-MLOC torch-MLOC
'From the south (he) went down with a torch on his shoulder, and put the torch on a rock.'

NPs referring to people or things whose identity is unimportant may also be omitted, even if their reference has not been established. In (3-7) the subject of the second clause, 'they/someone', is omitted—its identity is not important. And in (3-8) the object is omitted, with context showing it to be fish whose species is irrelevant.

- (3-7) *dathin-a dangka-a yuuma-nangarr, [buru-tharra-nth]*COBL
that-NOM man-NOM drown-ALMOST grab-PST-COBL
'That man almost drowned, but (they/someone) pulled (him) out.'

- (3-8) *ri-lung-ka kada thaa-th, mar-maru-tha mijil-i*
east-ALL-NOM again return-ACT hand-PUT-ACT net-MLOC
yalawu-j barrbiru-th, bilarri-ja thaa-tha ra-rung-k,
catch-ACT raise-ACT empty-ACT return-ACT south-ALL-NOM
wuu-j
put-ACT
'(He) went back east again, took the net in his hand and caught (some fish), lifted (them) up, went back south to empty (them), put (them) there.'

Verbs are also omitted (though rather less frequently), either because they are clear from context, as in (3-9), because a directional case is present (9.1.6), or because the type of action has been established in a preceding sentence (3-10).

- (3-9) *jinamulu-na* *bijarrba-na* *bi-l-d?*
 how many-MABL dugong-MABL 3-pl-NOM
- warngiij-iya* *bi-l-da* *bijarrba-y*
 one-MLOC 3-PLU-NOM dugong-MLOC
- ‘How many dugong did they (catch)? They (caught) one dugong.’

- (3-10) (Discussing who is an appropriate circumcizer:)

PG: *wirrka-a-n-ngarrba* *dangka-a* *kala-th*
 circumcize-M-N-CONS man-NOM cut-ACT

NE: *niwan-da* *ngaak?* *kakuju?*
 his-NOM whoNOM uncleNOM

PG: *kardu* *kardu* — *kakuju-y*
 father-in-lawNOM fa-in-law uncle-MLOC

PG: ‘An initiated man does the cutting.’

NE: ‘His who? his uncle?’

PG: ‘The father-in-law. The father-in-law (cuts) the uncle.’

Except where anaphoric ellipsis is being specifically discussed, the examples used in this grammar are atypically rich in arguments, for clarity of exposition.

3.3 Grammatical and discourse relations

Kayardild is a language where both grammatical relations like subject and object, and the discourse relation of topic, are syntactically important. In Li and Thompson’s (1976) terminology, it is a language where both subject and topic are prominent.

It is useful to make a further terminological distinction between *topic* (roughly: what the clause is about) and *pivot*. I define this as “the shared topic of two clauses in a complex construction”; an alternative definition is “the (or the most salient) coreferential NP”, e.g. ‘where is *the dugong*, *which* you speared’. Pivots, that is, are syntacticized topics⁵. I will reserve the term *topic* for coordinated discourse, where a number of coordinated sentences are about the same entity, e.g. ‘*the pandanus nuts*

⁵ Dixon (1979) defines “pivot” as a “coreferential NP”, though in his earlier description of Dyirbal (Dixon 1972) the term “topic” was used roughly in the sense of “pivot”. Foley—Van Valin (1984) define “pivot” as “the NP which is crucially involved (in a construction—N.E.) ... i.e. the NP around which the construction is built”.

fall with the north wind. One can go on eating *pandanus nuts* for a long time’.

Although subjects are the unmarked choice for topic/pivot, non-subject topic/pivots are permitted. This is discussed in 12.2 and 12.5.

3.3.1 Grammatical functions

3.3.1.1 Core functions, adjuncts and complements. Many syntactic and morphological phenomena are best described in terms of *grammatical functions* (or *grammatical relations*) such as subject, object, indirect object, complement and adjunct.

Although these ultimately reflect the detailed semantics of the proposition, the link may be complex: the “subject” may be an agent, patient, perceiver or location; the “object” may be, inter alia, a patient, location or perceived entity. But many syntactic phenomena, such as causativization, passivization, and the formation of non-finite and finite subordinate clauses, can be characterized directly in terms of grammatical functions, without recourse to semantic role. Grammatical functions are thus syntactic mediators between the semantic and morphological levels.

A major distinction must be made between *subcategorizable* or *core* functions, whose meaning depends on the verb of which they are an argument, and *non-subcategorizable functions*⁶ or *adjuncts*, which have “an invariant way of contributing to the meaning of the sentence, and appear whenever they are semantically appropriate” (Andrews 1982: 4).

Subjects, objects and indirect objects are always subcategorizable and “semantically unrestricted” inasmuch as they can express a range of meanings, depending on the governing verb. Every verb lexeme subcategorizes for one or more “core” functions: all transitive verbs have a subject and an object, all intransitives, a subject, and so on. Because their meaning depends on the syntactic configuration in which they appear, the main discussion of core functions is in Chapter 9 which deals with the syntax of the simple clause.

Non-subcategorizable functions, or “adjuncts”, have constant meanings directly related to their case or adpositional marking, and independent of the rest of the proposition. The local NP ‘on the sandbank’, for example, will mean the same regardless of whether the rest of the proposition is ‘we speared turtle’, ‘I was seen’, ‘they slept’ etc⁷.

⁶ “Core functions” correspond closely to the “actants” of Tesnière’s (1959) dependency grammar, while his “circonstants” merges complements and adjuncts.

⁷ In fact this is not quite true—locatives are infelicitous with stative predicators: ‘?He knew/knows Kayardild on the sandbank’. Although such limitations should not be underplayed, they are ignored here.

Between the semantically unrestricted, subcategorizable core functions of subject, object and indirect object, and the semantically transparent and freely addable adjuncts, are a class of *complement* functions which, though semantically transparent, “complete” the meaning of their predicator and would be part of a full dictionary entry for their governing verb. The verb *balatha* ‘hit’, for example, optionally takes a complement in the instrumental or propriative case, denoting the instrument used, while motion verbs optionally take complements in the allative or ablative case, giving the direction or source of motion. Such “semantically restricted” complements directly reflect the underlying meaning, but unlike adjuncts they only occur with certain verbs.

Because their meaning can be characterized directly, the main discussion of adjuncts and complements is in Chapters 4–6, which deal with nominals and noun phrases.

Certain verbs subcategorize “subject complements” or “object complements”, which are distinct NPs agreeing in case with subject or object⁸. For example, there is a verb *ngaarrngija* meaning ‘(unborn child) manifest its conception by the appearance of a sign’. This verb takes as subject the person who has been conceived, and as subject complement the entity appearing as a sign; both subject and subject complement take NOMinative case—see 9.2.2.2, for example. A number of verbs optionally take object complements; ‘find’ for example, takes the entity found as object, and the state the entity was found in as object complement, e.g. ‘I found him (object) alone (object complement)’. The range of verbs taking subject and object complements is discussed in 9.2.

3.3.1.2 Language-internal evidence for subject, object and indirect object. The core grammatical functions of Kayardild, and their defining properties, are summarized below; as we shall see, subjects can be identified unambiguously, objects can be characterized but with some difficulty, and the evidence for indirect objects is weak.

SUBJECTS:

- (i) are actors in the most basic clause types.
- (ii) are always nominative, except that they may bear complementizing case (like all words in the clause). As a corollary, they always escape modal case.
- (iii) With the exception of a small class of meteorological verbs, every verb governs a subject.
- (iv) are always coreferential with the reflexive pronoun *marinda* ‘self’.
- (v) are the pivot of non-finite subordinate clauses, from which they are obligatorily omitted.

⁸ In other words, they are second predicates subcategorized by particular verbs.

- (vi) are the unmarked choice for pivots in finite subordinate clauses, and for topics in discourse.
- (vii) Except in object complement constructions, subjects always control manner nominals.
- (viii) are the semantic controllers of “subject-oriented NPs” (10.3.2).
- (ix) Their person and number conditions the choice between oblique and locative complementizing case (12.1.4).

Properties (i) to (viii) are typical of subjects in most languages; property (ix) is peculiar to Kayardild⁹.

OBJECTS:

- (i) take no “relational” case, but may take modal or associating OBLique cases.
- (ii) feed the passive and reciprocal, though not all objects passivize easily (9.3).
- (iii) feed resultative nominalizations (11.2.7).
- (iv) obligatorily take the nominative in imperatives if non-pronominal, and optionally if pronominal (7.2.3).

The identification of objects is not always easy. Inflection for modal case fails to distinguish OBJects from LOCative adjuncts: only imperative examples, which leave non-object (i.e. adjunct) locations in the LOCative, are reliable here. Passivization sometimes works with non-object locations (9.3.2.3) but is not attested with certain apparently transitive verbs, such as *yulaaja* ‘fear’ (9.2.4.1).

INDIRECT OBJECTS:

It is standard practice for grammarians to take the recipient of the verb ‘give’ as the prototypical indirect object, but this procedure is problematic in Kayardild. Ditransitive verbs like *wuuja* ‘give’ allow a rich variety of case frames (9.2.6), and the recipient may be marked with the verbal dative case, with the locative, or just with modal case. Although the choice of the verbal dative case is unmarked both in its semantics and in terms of frequency, there are problems with taking NPs with the verbal dative as indirect objects: they cannot be relativized upon (4.4.3.3) and do not feed reciprocal formations. They do, however, display a productive alternation with direct objects in ditransitive constructions (9.2.5.1).

In terms of their more general morphosyntactic behaviour, the best candidates for indirect objects in Kayardild are arguments in the

⁹ There are of course many other typical subject properties lacked by Kayardild subjects. For example, the absence of argument cross-referencing means that Kayardild subjects do not control agreement.

PROPriative case, denoting the “intentional objects” (Quine 1960: 219-22) of verbs like *ngakatha* ‘wait for’ and *janija* ‘look for’. One reason to treat them as indirect objects is the presence of a productive alternation between transitive constructions (with regular objects) and middle constructions (with PROPriative “indirect objects”), reflecting the semantic difference between achievements and attempts, e.g. ‘shoot (OBJECT)’ vs ‘shoot at (INDIRECT OBJECT)’. Another reason for treating them as indirect objects is the possibility of deriving reciprocal clauses from basic clauses containing such PROPriative arguments, a possibility otherwise restricted to direct objects.

It is clear that Kayardild does not have straightforward, prototypical “indirect objects”. In this grammar I will term the abovementioned PROPriative arguments “indirect objects”, but the reader should bear in mind that this label is somewhat misleading, and a plausible alternative analysis would treat them as complements.

3.3.1.3 Alternate argument structures. Derived verb forms with different numbers or arrangements of arguments are found in the passive, reflexive, causative and reciprocal constructions (9.3). Identical verb forms may also govern different numbers of arguments or set them in different case frames. Intransitive motion verbs may add locative objects; indirect objects may be added to intransitive verbs; direct objects may be demoted to indirect, showing “anticipated affectedness”; indirect objects may be promoted to direct showing “failure of anticipated affectedness”; and ditransitive verbs allow a number of case-marking possibilities.

3.3.2 Non-subject pivots and topics

The grammatical relation of *subject* is the key to most syntactic processes in Kayardild: passivization, reciprocalization, causativization, and the formation of non-finite subordinate clauses. Subjects are the unmarked pivots in clause union and the unmarked topics in discourse.

However, there is one very productive type of clause union, involving finite subordinate clauses, where the pivot NP may be in any grammatical relation in either clause. It may be a subordinate subject, as in (3-11), but it may equally well be, say, a subordinate object, as in (3-12). Ellipsis of the downstairs NP is normal but not obligatory.

- (3-11) *jina-a* *maku-wa* *warra-j,* *dan-kina*
 where-NOM woman-NOM go-ACT this-MABL

muri-na *nguku-na* *kurrka-tharr*
 baler.shell-MABL water-MABL take-PST

‘Where did the woman go, (who) took this baler shell of water?’

- (3-12) *jina-a* *bijarrb,* [*dangka-ntha* *raa-jarra-nth*]COBL
 where-NOM dugongNOM man-COBL spear-PST-COBL
 ‘Where is the dugong, (which) the man speared?’

Simplifying somewhat, when the pivot NP is not subject of both clauses, the subordinate clause is marked by a “complementizing case” (here, the OBLique) appearing on all its constituents. The exact triggering conditions are discussed in 12.2.

Just as the pivot in this type of clause is not restricted to subjects, neither is the “topic” in discourse consisting of coordinated clauses. In (3-13), for example, the topic ‘food’ is object of the first two clauses. Again “complementizing case” is triggered over the clause, although it bypasses the topical object NP.

- (3-13) [*mutha-a* *wuran-da* *ngalawa* *diya-jarra-ntha* *wakaku*],
 much-NOM food-NOM 1pl:SUBJ:COBL eat-PST-COBL sandfrogNOM
- [*mutha-a* *wuran-da* *ngalawa* *yakuri-ya* *diya-jarra-nth*]
 much-NOM food-NOM 1pl:SUBJ:COBL fish-NOM eat-PST-COBL
- nga-l-da* *kala-tharra* *rawalan-ku,* *nga-l-da* *birangkarra* *warra-ja*
 1-pl-NOM cut-PST baler-PROP 1-pl-NOM always go-ACT
- wirdi-ja* *walbu-y,* *yurda-y*
 stay-ACT raft-LOC open sea-LOC

‘We used to eat lots of sandfrogs as food, we used to eat lots of fish, we used to cut (things) with baler shells, we were always going about on rafts, far out to sea.’

The phenomena exemplified by (3-12) and (3-13) are clearly linked, even though the first involves a subordinate and the second a main clause. In both, the *topic*—the NP which continues through the discourse—is not in the expected subject relation, but in some other relation. It is object in these examples, but other relations are possible (Chapter 12).

In general, then, non-subject pivots and topics are possible in Kayardild, but require special case-marking over the whole clause.

3.4 Functional domains of case inflection

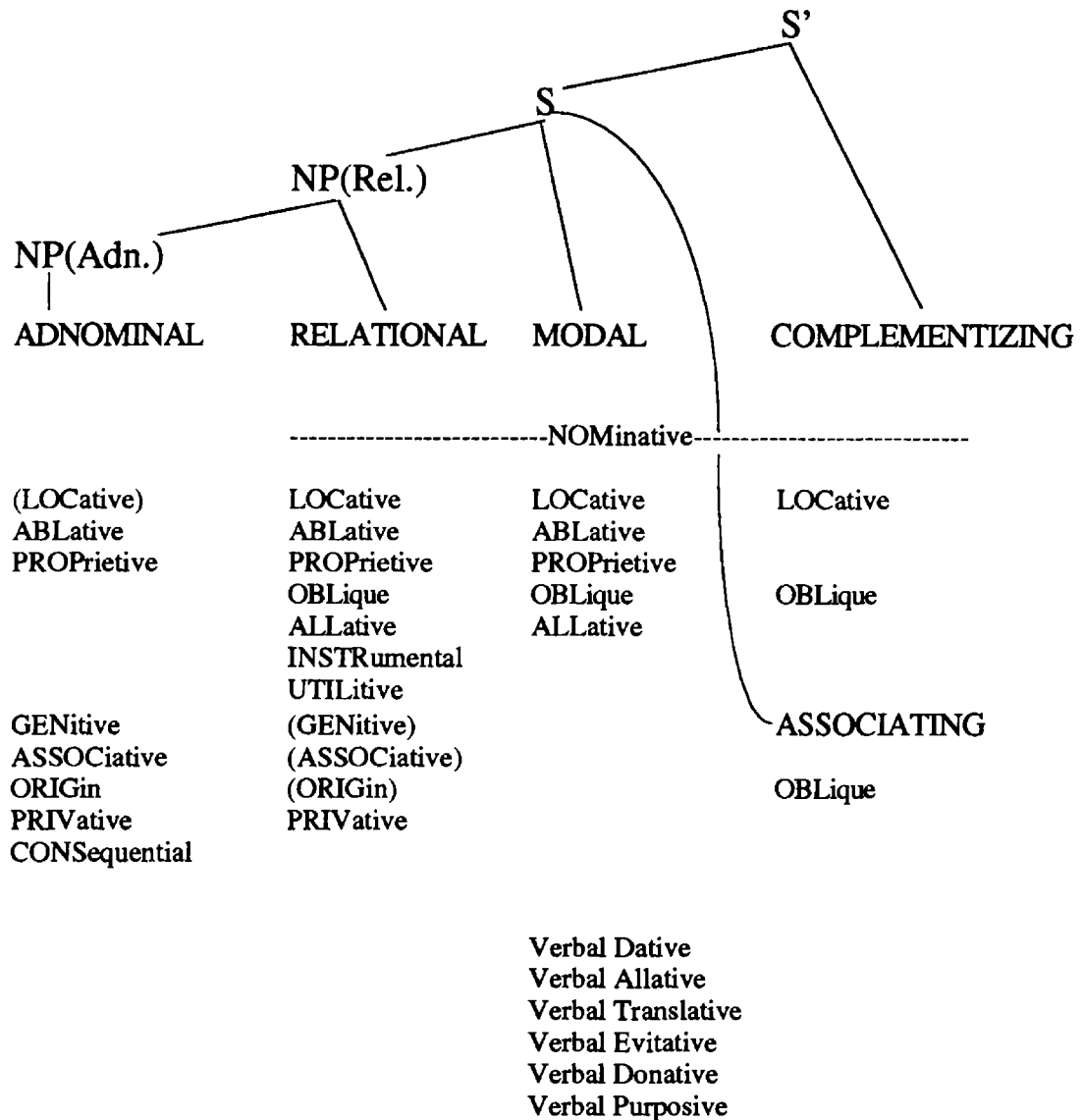
As we saw in 1.1, Kayardild is unusual in the number of functional domains in which case operates. This follows from the ability of a case marker to operate at a number of syntactic levels taking items of different syntactic rank as its arguments. Functioning adnominally, for example, it relates possessive and other NPs to the head of a NP; functioning as a complementizer, it relates clauses to other clauses, and so forth. These various functional domains are introduced and exemplified in this section; in 3.4.8 I justify treating them all as “case”.

Five types of functional domain (henceforth often abbreviated as “function”) must be distinguished for Kayardild case¹⁰. The *adnominal* function, typified by the GENitive of possession, relates one NP to another. The *relational* function either relates core arguments to the verb (e.g. nominative on subjects) or peripheral arguments like location, destination, etc., to the clause as a whole. *Modal* case indicates the mood/tense/aspect of the clause. *Associating* case links NPs with nominalized verbs. *Complementizing* case applies to whole clauses, and indicates either that they are an argument of the matrix clause, or that certain marked coreference relationships exist between matrix and subordinate clause. With some exceptions all five functions show complete concord over their domain—for example, when the OBLique case is used in complementizing function it appears on all words of the complementized clause.

Nominals may take up to four cases, whose functions follow the order adnominal, relational, modal, then complementizing or associating; the last two are mutually exclusive.

(3-14) Stem + Adnominal* + Relational + Modal + Associating /
Complementizing

¹⁰ My use of “function” as an abbreviation for “functional domain” here should not be confused with the more usual meaning of case “function” in a phrase like “another function of the dative in Russian is to mark the deep subjects of certain types of verb”; I shall also use “function” with this second sense. The presence of such qualifiers as “modal function”, “adnominal function” etc. should disambiguate the two senses of “functional domain” and “function within a domain” (e.g. marking instruments, within the relational functional domain).



Not every entry can be justified here; the reader is referred to Chapter 4 for details. Unclear cases are in brackets—the GENitive, ORIGIn and ASSOCiative, for example, are used with demoted agents of “resultative nominalizers”, and this could be treated as either an “adnominal” or a “relational” use. The LOCative may only be used adnominally if no other case suffix follows. The NOMinative is an “elsewhere case”, in equipollent opposition to all other cases: it appears only where no relational, modal, associating or complementizing case is assigned.

Figure 3-1. Functional domains of Kayardild cases

All five case functional domains draw on the same set of case suffixes, although a given functional domain may only use a subset of these. Figure 3-1 summarizes the range of functions discharged by each suffix, and diagrammatically relates their morphological order to the syntactic level at which they operate. In general case suffixes appear on all words over which they have semantic or syntactic scope. Adnominal and relational cases are marked over entire NPs, and complementizing case over all words in a clause, including the verb¹¹. The distribution of modal case is basically all NPs except the subject and some NPs linked to it semantically or syntactically; associating case has a slightly larger domain (10.3).

I will now examine individually the five functions of case suffixes in Kayardild.

3.4.1 Relational function of case

The canonical use of case inflection, as traditionally understood, is to mark a syntactic or semantic relation between a nominal argument and either the verb or the clause as a whole. In K, such case relations are marked by suffixes on every word of the NP constituent. Temporarily leaving aside the marking of subjects and objects we can see that, among other things, case inflections may mark LOCation (3-15), INSTRument (3-16), and direction of motion, glossed ALLative (3-17):

(3-15) *dathin-a yarbud barri-ja nal-iya kamarr-i*
 that-NOM snakeNOM crawl-ACT head-LOC stone-LOC
 ‘That snake is crawling round on top of the stone.’

(3-16) *dangka-a mardala-a-ja rirr-nguni*
 man-NOM rub-M-ACT fat-INSTR
 ‘The man rubs himself with fat.’

(3-17) *warra-ja nga-ku-l-da natha-r nga-ku-lu-wan-jir*
 go-IMP 1-INC-pl-NOM camp-ALL 1-INC-pl-POSS-ALL
 ‘Let’s go to our camp!’

To avoid confusion with the other functions of case-like morphemes that will be discussed here, I shall refer to functions such as those exemplified above as “relational”. This is intended to include both the essentially adverbial “semantic” cases like the LOCative, INSTRumental and ALLative, and the core “syntactic” cases signalling grammatical relations of subject (NOMinative) and indirect object (PROPrietary). As we

¹¹ Particles and conjunctions, and pronominal subjects under certain conditions, are excepted—see 12.1.6.

shall see, the marking of direct objects is complex and does not involve relational case.

This is by no means an exhaustive list of relational cases in Kayardild: the full set is discussed in 4.3. Note that some primarily adnominal cases, such as the ABLative, may also be used relationally (3.4.2.2). Furthermore, many case relations can be marked by “verbal cases” (4.4). These have relational functions, including the marking of some types of indirect object and various sorts of complement and adjunct, but their further morphology is somewhat different—their further inflections signal verbal categories, as a result of verbal case converting their morphological category to verbal. Compare (3-17) with the synonymous (3-18), which uses the verbal allative; note in particular the presence of the imperative, i.e. a verbal inflectional category, on the latter.

- (3-18) *warra-ja* *nga-ku-l-da* *natha-yiwa-tha*
 go-IMP 1-INC-pl-NOM camp-VALL-IMP
- nga-ku-lu-wan-jiyiwa-th !*
 1-INC-pl-POSS-VALL-IMP
- ‘Let’s go to our camp!’

3.4.2 Adnominal function of case inflections

Another function of case is to show the relation of one NP to another, linking two arguments in an attributive relationship, rather than an argument and a predicate. Traditionally this is called the “adnominal” function.

Besides their attributive use, all adnominal cases may be used predicatively in nominal clauses—cf. ‘the man’s boomerang’ and ‘the boomerang (is) the man’s’ (9.1.4). They may also be used as second predicates (9.4).

The GENitive or ABLative cases, for example, may mark possessors (3-19); they link the head noun denoting the thing possessed to a modifying noun denoting the possessor (in this construction the two are virtually synonymous). The PROPrietary case codes a similar relationship, but takes the possessor as head (3-20; see 4.3 for fuller discussion).

- (3-19) *dangka-na wangalk* / *dangka-karra wangalk*
 man-ABL boomerangNOM man-GEN boomerangNOM
 ‘The man’s boomerang.’

- (3-20) *wangalk-uru* *dangka-a*
 boomerang-PROP man-NOM
 ‘The man with/having the/a boomerang.’

It could be argued that the ABLative and PROPriative here are “deriving” adjectives (cf. Dixon 1972, Blake 1977¹²). But elsewhere in the grammar there is no good reason for setting up an adjective class in Kayardild, since (a) there are no morphological distinctions between nouns and adjectives, and (b) nominals may modify other nominals within complex NPs in a number of ways (e.g. generic-specific, part-whole etc.— 6.3), only one of which could be called “adjectival”. It is therefore more consistent with other parts of the grammar to say that adnominals are, syntactically, one type of nominal modifier, than to call them “derived adjectives”.

This is not to deny that certain adnominal suffixes cannot also function derivationally, in the sense of deriving new lexemes. The PROPriative, for example, is a productive derivational suffix—see 4.3.5 for discussion and examples. But other adnominal suffixes, such as the GENitive and ABLative, do not function derivationally.

3.4.2.1 Concord, double case-marking and suffix ordering. When modifying a non-nominative head, adnominal suffixes are followed by a further suffix agreeing with their head:

- (3-21) *dan-kinaba-nguni* *dangka-naba-nguni* *mirra-nguni* *walbu-nguni*
 this-ABL-INSTR man-ABL-INSTR good-INSTR raft-INSTR
 ‘... with this man’s good raft.’

Double case-marking follows from the “total concord” principle in Kayardild, which distributes case inflections, whatever level they originate at, over all constituents. This may be formulated in a general way as:

- (3-22) $X^n[\beta \text{ Case } (, \alpha \text{ Case}...)] \rightarrow$
 $X^{n-1}[\gamma \text{ Case}, \beta \text{ Case } (, \alpha \text{ Case}...)] \quad Y[\beta \text{ Case } (, \alpha \text{ Case}...)]$

This is similar to rules for feature inheritance that have been proposed for other languages, except that the percolation of features can continue

¹² In addition to Dixon’s and Blake’s arguments within the Australianist literature, Plank (1990) points out more generally that “for nouns in an attributive relation to agree with their head nouns in case ... is apparently so out of the ordinary that grammarians faced with it feel tempted to annul it terminologically, by labelling case-agreeing attributive nouns adjectives solely on the strength of their agreeing in case”. He names Bopp (1848), in his treatment of Georgian, as the first to do this.

indefinitely, and that constituents may inflect for a sequence of case values rather than just one.

The ordering of multiple case suffixes is iconic: of two case suffixes X and Y representing categories originating at nodes X' and Y' of a syntactic representation, X will lie outside Y morphologically if X' dominates Y'. A number of syntactic accounts attempt to build this behaviour into universal grammar, ranging from Baker's (1985) GB-based "mirror principle", in which inflections are cogenerated with syntactic rules at the appropriate level, and Andrews' (1991) proposal of "inside-out unification" of inflectional features within an LFG framework, in which unification of morphosyntactic features proceeds morphologically by working outward from the stem morphologically, and syntactically by working outward from the terminal node of constituent structure to successively more remote layers of constituency. The most recent and best worked-out statement of this principle is the "linearity constraint", stated as an element of the theory of autolexical syntax in Sadock (1991: 103) in a strong and a weak form:

Linearity Constraints

a. Strong

The associated elements of morphological and syntactic representations must occur in the same linear order.

b. Weak

The associated elements of morphological and syntactic representations must occur in as close to the linear order as the morphological requirements allow.

The iconic nature of multiple case ordering in Kayardild is consistent with all these formulations, with the exception that the ordering of modal and associating case suffixes may be anti-iconic due to morphological constraints on the position of the OBLique case—see 4.1—and hence favours the weak rather than the strong version of the "linearity constraint".

In some cases the ordering of suffixes is determined by semantic rather than syntactic factors, as there is no plausible syntactic structure from which to derive the ordering. This is illustrated by the following minimal pairs, only two of many comparable examples:¹³

- | | | |
|--------|-----------------------------------------------------------------------------|----------------------------------------------------------------------------|
| (3-23) | (a) <i>karndi-nurru-walad</i>
wife-ASSOC-MANY
'many (men) with wives' | (b) <i>karndi-wala-nurru</i>
wife-MANY-ASSOC
'(man) with many wives' |
|--------|-----------------------------------------------------------------------------|----------------------------------------------------------------------------|

¹³ Besides the literal translations given for 3-24, Kayardild speakers would supply the more idiomatic interpretations (a) 'lacking the rainbow serpent' (often known by the circumlocution 'the two-eared one') (b) 'the two stupid ones' ('earless' or 'deaf implying 'stupid').

- (3-24) (a) *marral-iyarr-warri* (b) *marral-warri-yarrng-k*
 ear-du-PRIV(NOM) ear-PRIV-du-NOM
 ‘without the two-eared one’ ‘the two earless ones’

I shall refer to both classes of ordering phenomenon—those where the morphological ordering mirrors the syntax, and those where it mirrors the semantics—by the common term “concentric scoping”.

Double case-marking of adnominals, and the fact that adnominal suffixes precede relational ones, thus follow from general principles needed elsewhere in the grammar; in the case of suffix ordering these rules are probably universal. There is no need, therefore, to treat them in a special fashion as “derivational suffixes” simply because they can be followed by other case suffixes.

In 4.1 I argue that the first rank of inflectional suffixes in K includes both adnominal and number suffixes, and that this level is recursive (needed to account for theoretically possible phrases like ‘with the many spears belonging to the two men’). The concentric scoping principle solves the problem of ordering suffixes within the same rank, and also accounts for the positioning of the relational case suffix outside the adnominal/number suffixes.

3.4.2.2 Relational use of adnominal cases. Although their primary use is adnominal, these suffixes may also function relationally. The ABLative may, for example, mark the demoted agent in a passive (9.3.2), and the PROPriative may mark instruments or the “intentional objects” of verbs like ‘wait for’ or ‘search for’ (4.3.5). The PRIVative may likewise function both adnominally and relationally.

Rather than postulate pairs of homophonous “adnominal” and “relational” suffixes, I shall assume that a single “case” suffix should be set up, but that its possible functions (adnominal vs relational) should be distinguished. I will assume, that is, that case suffixes can have a number of functions, and that their domain and rank depend on their syntactic and/or semantic scope. Whether the meaning differences between modal and relational functions of the “same” case in K are significantly greater than those obtaining between different “uses” of the “same” case in a more familiar language is a question I discuss briefly in 10.2.

3.4.3 Modal case

Consider the following sentences:

- (3-25) *ngada warra-ja ngarn-kir*
 1sgNOM go-ACT beach-ALL
 ‘I am going/have gone to the beach.’

(3-26) *ngada warra-ju ngarn-kiring-ku*
 1sgNOM go-POT beach-ALL-MPROF
 'I will go to the beach.'

(3-27) *ngada warra-jarra ngarn-kiring-kina*
 1sgNOM go-PST beach-ALL-MABL
 'I went to the beach.'

(3-28) *ngada warra-da ngarn-kiring-inj*
 1sgNOM go-DES beach-ALL-MOBL
 'I would like to go to the beach.'

The PROPrietary, ABLative and OBLique suffixes here are being used “modally”: together with the verb inflection, they are providing information about the mood, tense and/or aspect of the clause¹⁴. The PROPrietary shows futurity; the ABLative “prior occurrence”; the OBLique indicates a strong emotion (in this instance desire) towards the event. The ALLative may also be used modally; it shows that the event is spatially oriented towards the speaker, or that it is just beginning, or just coming into the speaker’s awareness (see 7.2.3.12 for examples). The exact modal meanings this series encodes are discussed in 10.1.

Modal case appears on all NPs in the VP, except those semantically oriented towards the subject in some way, such as “intentional objects” (3-29) which give the private intention of the subject (10.3.2).

(3-29) *ngada jani-jarra ngumban-ju (*-na)*
 1sgNOM search-PST 2sg-PROP (*-MABL)
 'I searched for you.'

Although modal case generally correlates with verb inflection, in certain circumstances it may be used independently (10.1.3).

Cases on non-core arguments are followed directly by the modal case suffix, as with the ALLative in (3-26), and the INSTRUMENTAL in (3-30). Objects, however, take modal case alone:

(3-30) *ngada yalawu-jarr yakuri-na mijil-nguni-na*
 1sgNOM catch-PST fish-MABL net-INSTR-MABL
 'I caught fish with the net.'

¹⁴ Modal case is a *morphosyntactic* category whose mapping onto *semantic* categories is not always clearcut. The semantic categories it represents are a mixture of tense, modality, and “associated motion” or “inceptive aspect” in the case of the Modal ALLative. Although I use the term “modal case” for brevity, I do not wish to imply that only modality is involved.

- (3-31) *ngada yalawu-ju yakuri-wu mijil-nguni-wu*
 1sgNOM catch-POT fish-MPROP net-INSTR-MPROP
 ‘I will catch fish with the net.’

A further two modal cases can be set up, although the pattern is less regular. Consider the following sentences:

- (3-32) *dathin-a ngunguk-a balmbi-marra karrngi-j!*
 that-NOM story-NOM morrow-UTIL keep-IMP
 ‘Save that story for tomorrow!’

- (3-33) *birangkarra bi-l-da mardala-tha dangka-walath-i,*
 long time 3-pl-NOM paint-ACT man-LOT-MLOC

ngimi-marra-y
 night-UTIL-MLOC

‘They have been painting the men for a long time, getting ready for (the dance) tonight.’

In (3-33) the LOCative on object and time NPs is functioning modally, signalling that the proposition has actually taken place, a modality I will refer to as “instantiated”. This is the default modality in Kayardild.

In (3-32) the object is not marked for modal case and appears in the NOMinative¹⁵; the UTILitive case is likewise not followed by a further modal case. This zero modal case marking is characteristic of imperatives and nominalizations expressing ongoing, uncompleted actions.

The distinctness of the modal LOCative and zero cases is less clear than with the other modal cases:

(a) Unlike noun/adjectives, pronominal objects are only optionally unmarked with imperatives—they may instead take the LOCative:

- (3-34) *(nyingka) dana-tha dathin-a dangka-a /*
 2sgNOM leave-IMP that-NOM person-NOM

**dathin-ki dangka-y*
 that-LOC person-LOC

‘Leave that person (behind, alone)!’

- (3-35) *(nyingka) dana-tha ngad / ngijin-ji*
 2sgNOM leave-IMP 1sgNOM 1sg-LOC
 ‘Leave me (behind, alone)!’

¹⁵ Recall that the NOMinative is an “elsewhere case” appearing when no relational, modal, associating or complementizing case is assigned.

(b) Some NP types that normally take modal case, such as ALLatives (3-26—3-28) and PROPrieties expressing instrument or theme do not take the modal LOCative.

(c) Objects of ACTual clauses may take the nominative as a result of topicalization (12.5.1.1), and the nominative on imperative objects could be attributed to topicalization rather than the operation of modal case¹⁶.

Despite these differences (which led me to consider collapsing the LOCative and zero modal cases, and attributing the choice to other factors, such as topicalization), the choice between LOCative and zero is sufficiently exploited to justify setting them up as two modal cases: the appearance of the LOCative after UTILitive, INSTRUMENTAL and (in some constructions) ABLative cases, in ACTual clauses only, could not otherwise be explained.

Table 3-1. Summary of modal case system

Modality	Modal Case	Domain, i.e. NPs taking modal case:		
		Object, Instrumental, Utilitive	Allative, Etc.	Proprietary "intentional object", etc.
Present unrealized	Zero	-	-	-
Instantiated	Locative	+	-	-
Future	Proprietary	+	+	-
Prior	Ablative	+	+	-
Emotive	Oblique	+	+	-
Directed	Allative	+	+	-

A summary of the Kayardild modal case system is given in Table 3-1. The meaning of each modal case, the verb inflections they correlate with, and their exact domain, are discussed in detail in Chapter 10.

¹⁶ The diachronic explanation for the nominative on imperative objects is that it is the one construction preserving the old absolutive case—see 10.4.

3.4.4 Identifying the modal function of case suffixes

Although word-position and domain often suffice to identify an inflection as either modal or relational, there are many instances in which paradigmatic tests are required. Consider the following pairs of clauses:

- (3-36) a. *ngada* *raa-ju* *ngumban-ju*
 1sgNOM spear-POT 2sg-MPROP
 'I will spear you.'
- b. *ngada* *raa-jarra* *ngumban-jina*
 1sgNOM spear-PST 2sg-MABL
 'I speared you.'
- (3-37) a. *ngada* *jani-ju* *ngumban-ju*
 1sgNOM search-POT 2sg-PROP
 'I will search for you.'
- b. *ngada* *jani-jarra* *ngumban-ju*
 1sgNOM search-PST 2sg-PROP
 'I searched for you.'

Considering only the first of each pair, it is impossible to discern the function of the proprietive suffix. However, paradigmatic variation of modality will change the suffix in (3-36) but not in (3-37), showing the former to be a modal inflection, the latter a relational. Throughout this grammar all suffixes glossed with a preceding M, e.g. MABL in (3-36), have been determined to be modal by paradigmatic variation, even where limitations of space prevent me from furnishing all examples with variants in multiple modalities.

3.4.5 Associating function of case inflections

The OBLIQUE case is also used to associate NP arguments with their nominalized verbs. As these verbs are morphologically nominal this could perhaps be treated as a type of adnominal function, but the peculiarities of K nominalized clauses introduce rather different morphosyntactic properties.

Verbs in K may be nominalized by adding the derivational suffix *-n-* (glossed N for Nominalizer) to their stem, then adding a case suffix agreeing with the subject of the nominalized verb. Such nominalized verbs may be used independently as predicators showing ongoing uncompleted action (3-38), or as complements of immediate perception predicates in the matrix clause (3-39). In the latter function they agree in modal case with their antecedent.

(3-38) *dathin-a kunawuna rajurri-n-d*
 that-NOM childNOM walk about-N-NOM
 ‘That child is walking around.’

(3-39) *ngada kurri-ja dathin-ki kunawuna-ya rajurri-n-ki*
 1sgNOM see-ACT that-MLOC child-MLOC walk.about-N-MLOC
 ‘I saw that child walking around.’

Although the subjects of these nominalized verbs do not receive special case-marking, the other NPs in the clause, whether in core or peripheral functions, receive an “associating” OBLique case, glossed AOBL.

(3-40) *niya kala-n-da thungal-inja bijarrba-marra-ntha*
 3sgNOM cut-N-NOM tree-AOBL dugong-UTIL-AOBL

narra-nguni-nj
 shell-INSTR-AOBL

‘He is cutting the tree with a shell axe, to use for (spearing) dugong.’

Even NP arguments that do not receive modal case, such as the PROPriative “intentional object” exemplified in (3-29), receive “associating” case:

(3-41) *bi-l-da jani-n-da bartha-wuru-ntha kunawuna-wuru-nth*
 3-pl-NOM search-N-NOM track-PROP-AOBL child-PROP-AOBL
 ‘They are looking for the child’s footprints.’

Apart from subjects, the only arguments to escape are second predicates on the subject like ‘alone’ in (3-42), and “locus of effect on body part” NPs construed with the subject (9.4.2).

(3-42) *niya kiwali-n-da mala-ntha kantharrk*
 3sgNOM wade-N-NOM sea-AOBL aloneNOM
 ‘He is wading in the sea alone.’

The AOBL always follows modal case suffixes:

(3-43) *ngada balmbi-wu kurri-ju bilwan-ju*
 1sgNOM morrow-MPROP watch-POT 3pl-MPROP

barrki-n-ku kurda-wuu-nth
 chop-N-MPROP coolamon-MPROP-AOBL

‘Tomorrow I will watch them chopping (making) a coolamon.’

(3-44) *ngada kurri-jarra niwan-jina kurdama-n-kina nguku-naa-ntha*
 1sgNOM see-PST 3sg-MABL drink-N-MABL water-MABL-AOBL

wuruman-urru-naa-nth
billy-ASSOC-MABL-AOBL

'I saw him drinking the water in the billy.'

Since the modal case originates in a higher constituent (the matrix clause) than the associating case (the nominalized subordinate clause), the ordering of suffixes here is anti-iconic. To be iconically ordered, modal case would *follow* the Associating OBLique. In such sentences, we must conclude, the suffixes are extrinsically ordered by the rank ordering convention given in Figure 3-1, which requires that suffixes with modal function always precede those with associating function. The existence of this ordering mismatch is incompatible with the strong version of Sadock's "Linearity Constraint" (see 3.4.2.1), but compatible with the weak version.

This has the result that the expected sequence AOBL-MCASE does not arise. This sequence would violate the constraint against other suffixes following the OBLique (4.2.3). In Evans (1994b) I argue that this anti-iconic ordering results from a fixing of morphological order for the oblique suffix in Kayardild at a time when nominalizations were limited to derivational function and could not be used as participles or for continuous aspect. The morphosyntactic extension of the OBLique case to an associating function thus post-dated the establishment of morphological ordering.

Note that "subject-oriented" NPs which escape modal case in main clauses, e.g. PROPrietary locationals giving "intended direction", also escape it in subordinate clauses of this type, despite the fact that the modal case originates in a higher clause. Thus in (3-45) 'to the south' appears as *rarungkuuntha*, with no modal locative, rather than **rar-ung-kuru-rrka* [south-ALL-PROP-MLOC:AOBL].

(3-45) *ngada barruntha-ya kurri-ja dangka-yarrng-ki warra-n-ki*
1sgNOM yesterday-LOC see-ACT man-du-MLOC go-N-MLOC

rar-ung-kuu-nth
south-ALL-PROP-AOBL

'Yesterday I saw the two men going to the south.'

3.4.6 Complementizing function of case inflections

In one type of Kayardild subordinate clause, described in Chapter 12, finite verbal inflections are retained. These clauses are usually adjoined after the main clause, though they may be embedded under special conditions. They have a number of possible functions, distinguished by verbal tense/mood, by the matrix predicator, and by context: relative

clauses, jussives, perceptual complements, purpose clauses, complements of epistemic and attitudinal predicators, and so forth.

Under two conditions these Finite Subordinate Clauses receive an outer “complementizing case” on all constituents. One condition was mentioned briefly in 3.3.2: when the pivot of the construction is not subject of both clauses, the subordinate clause receives complementizing case on all its constituents. The other condition requiring “complementizing case” on all words of the subordinate clause is when the subordinate clause is an argument of the matrix predicator, as in (3-46). Fuller discussion of both these conditions is in Chapter 12.

- (3-46) *ngada murnmurdawa-th,*
 1sgNOM rejoice-ACT

*[ngijin-inja thabuju-ntha thaa-thuu-nth]*COBL
 my-COBL E.Br-COBL return-POT-COBL

 ‘I am glad that my big brother is coming back.’

Either the OBLique or LOCative case may function as complementizers, depending on the *person* of the subordinate subject: first and third person subjects require the OBLique, inclusive (first plus second) the LOCative, and second person subjects allow either. See 12.1.4.

Clauses marked with complementizing case also appear “insubordinated”, i.e. as independent main clauses. This signals either the ellipsis of a matrix predicator of knowledge, command, or utterance, or the presence of an “odd topic” sequence. This is discussed and exemplified in 12.4 and 12.5.

3.4.7 Multiple case marking

All of the case functions just outlined may be utilized in the same clause (except that complementizing and associating case are incompatible—see below). This means that nominal words are attested with up to four case inflections. Although the existence of limited recursion for adnominal, relational and modal functions theoretically means that more than four case inflections could occur, I have no naturally occurring examples, nor have I been able to elicit any or have such made-up examples accepted. This is probably due to processing limitations rather than a strict grammatical constraint.

We have already seen that adnominal NPs modifying a NP itself inflected for relational case have two case suffixes, an adnominal and a relational, ordered according to their scope:

- (3-47) ...*dangka-karra-nguni* *mijil-nguni*
 man-GEN-INSTR net-INSTR
 ‘...with the man’s net.’

Such complex NPs may then receive modal case:

- (3-48) *maku yalawu-jarra yakuri-na dangka-karra-nguni-na*
 woman catch-PST fish-MABL man-GEN-INSTR-MABL

mijil-nguni-na
 net-INSTR-MABL
 ‘The woman caught some fish with the man’s net.’

Note in passing that certain affixes may appear twice in different functions. The ABLative in (3-49), for example, appears first as an adnominal, marking possession, and then as a modal marking “prior” modality (the allomorph *naba* of the inner ablative is phonologically conditioned, being the protected form arising when the suffix is not word-final).

- (3-49) *nyingka karna-jarra ngamathu-naba-na wunkurr-ina ?*
 2sgNOM light-PST mother-ABL-MABL grass-MABL
 ‘Did you set fire to mother’s grass windbreak?’

Finally, a complementizing suffix may appear on every word of the clause, as in¹⁷ :

- (3-50) *maku-ntha yalawu-jarra-ntha yakuri-naa-ntha*
 woman-COBL catch-PST-COBL fish-MABL-COBL

dangka-karra-nguni-naa-ntha mijil-nguni-naa-nth
 man-GEN-INSTR-MABL-COBL net-INSTR-MABL-COBL
 ‘The woman must have caught fish with the man’s net.’

(The semantic effect of the independent complementized construction here is to present the proposition as an inference—see 12.4.3.2.)

¹⁷ It is theoretically possible to obtain sequences of four case suffixes in another way, by nominalizing a clause with marked modality. (3-50), for example, could be made the complement of ‘I saw’, giving *ngada kurrijarra makuna yalawunkina yakurinaantha dangkakarranguninaantha mijilnguninaanth*. I have not heard spontaneous examples of such constructions, but there seems to be no reason why they should not occur. One can then ask whether five levels of case suffixes can occur, by complementizing a nominalized clause? The answer is no, due to a morphological constraint: OBLique suffixes may not be followed by another case suffix (4.2.3).

(3-50) illustrates the fundamental peculiarity of K morphosyntax: that nominal words carry an enormous amount of information, not only about their immediate syntactic environment (i.e. their mother NP) but also about the verb (is it nominalized?), the modality of the clause, about evidential categories, and even about the coreference relations between the immediately dominating clause and its matrix (as in 3-12).

In addition to cases like the above, where each case suffix has a different functional domain, one occasionally finds instances of recursion within a particular domain. This is attested for adnominal, relational and modal functions. An example of recursion of adnominal case function¹⁸, here represented by the associative (here encoding “having”) and ablative (here encoding “belonging to”) is:

- (3-51) ... *maku-yarr-nurru-naba-walad*
 woman-two-ASSOC-ABL-many
 ‘... the many belonging to (those) having two wives’

An example of recursion of case suffixes in relational function is:

- (3-52) (*Darira mardala-a-ja*) *mutha-wu ngunymurr-u,*
 newborn rub-M-ACT much-PROP grease-PROP

mutha-wu ngunymurr-u wuran-ku,
 much-PROP grease-PROP food-PROP

mak-un-maan-ju wuran-ku, ngimi-waan-ju wuran-ku,
 torch-VDON-ORIG-PROP food-PROP dark-ORIG-PROP food-PROP

kurdala-thirrin-ju ngimi-wan-jinaba-wu kanthathu-naba-wu.
 spear-RES-PROP night-ORIG-ABL-PROP father-ABL-PROP

‘(The newborn was rubbed) with lots of grease, lots of greasy food, with food (speared) by (the light of) a bark torch, with food (speared) at night-time, speared by (the baby’s) father at night-time.’

[The ellipsed material was not present when I recorded this, but was supplied later when I asked about the meaning of this sentence.]

Here the relational ABLative case, assigned to ‘father’ as demoted subject of the resultative nominalization *kurdalathirrin-*, is followed by the relational PROPrietary case, assigned to the head noun *wuran-* in the main clause. Both relational cases are then percolated down to the adnominal NP *ngimiwan-* ‘(hunting) at night’. Such stacking of relational cases is only possible when the nominalized nature of the subordinate clause allows the matrix relational case to be inherited.

¹⁸ For examples of adnominal recursion in another Australian language, Martuthunira, see Dench—Evans (1988: 7).

Recursion of modal cases does not normally occur, since clauses assigning their own modal case are finite and do not normally inherit modal case from higher clauses. However, DIRECTED clauses, which assign the modal ALLative, are an exception: when used as subordinate clauses giving “movement with a purpose” (11.6), they inherit the matrix clause’s modal case, resulting in two modal case suffixes on subordinate NPs, as in (3-53). Again, case ordering is iconic here.

(3-53) *balmb-u* *ngada* *warra-ju*
 morrow-MPROP 1sgNOM go-POT

[*bijarrba-ring-ku* *raa-jiring-ku*]MPROP
 dugong-MALL-MPROP spear-DIR-MPROP

‘Tomorrow I will go to spear dugong.’

In general, then, Kayardild grammar displays “unbounded concord” whereby all cases percolate downwards, not just to immediate constituents, but on to their subconstituents, until the unit “word” is reached. The multiple case suffixes that result are ordered iconically, except in the case of nominalized subordinate clauses where the Associating OBLique is extrinsically ordered outside the inherited modal case.

3.4.8 Multiple function or homophony?

A central theoretical question is whether these really should be treated as different functions of the same suffix (as assumed this far), or as distinct suffixes that happen to be homophonous? Related to this is the question of whether their distribution across constituents and their positioning within words should be taken as primary defining characteristics, or as regular consequences of their function, combined with rules of semantic and syntactic scope.

First let me defend the extension of the term “case” to all the functional domains defined above. The rigorous definition of “case” in Mel’cuk (1986) takes two characteristics as criterial for calling an inflectional category “case”: first, it displays agreement, and secondly, it is used to distinguish types of syntactic dependency.

Now all functional domains of Kayardild case display agreement par excellence. As for the second part of the definition, with each domain the signalling of some sort of syntactic dependency is an important part of its function. The use of relational case choices to signal subject and indirect object (though not object) is quite clear, as is the use of adnominal case choices to signal the possessive relation and others. Modal case, apart from its primary use to signal mood, tense, and polarity, marks the object

relation as well as linking some kinds of secondary predicates to their objects. Associating case is the main marker of objecthood in the main clause, continuative use of nominalizations. And complementizing case, though its main function is to signal interclausal relations, distinguishes objects and instruments (by its absence) in particular types of topicalizations (12.5.2.1). All five functions of case in Kayardild thus fall within the scope of Mel'cuk's definition.

I now turn to the question of whether we are dealing with homophonous forms, or polysemous forms whose meanings are to be regarded as contextual variants in different syntactic environments. A number of factors are important here:

(A) FORM. Suffixes have the same form and range of allomorphy regardless of their function, except for variations resulting from exposed vs internal position, which are clearly derivative. (The only exception is with pronouns taking the complementizing OBLique—5.2.2.) It would clearly be inefficient to multiply statements of form by setting up five orders of homophonous suffixes.

(B) MEANING. The transparency of the semantic relation between “modal” and “relational” or “adnominal” meanings varies with the case considered. The relationship between ablative and “past”, and allative and “inceptive”, is one of straightforward transfer from the spatial to the temporal or aspectual planes. But the relationship between proprietive or “having” and potential modality requires more subtle analysis of the relational and adnominal meanings of the Kayardild proprietive, which include “intentional object” and “potential ability” (4.3.5). In the case of the OBLique, whose modal value is “emotive”, it has virtually been leached of a clear semantic value in its relational use. I consider the nature of these semantic relationships in more detail in 10.2.

This range, from semantically transparent polysemy to functional ranges with a less clear semantic basis, is typical of case systems in many languages—just consider the genitive with objects of negated verbs in Polish or Russian, and the effects of discourse factors on case-marking (Hopper—Thompson 1980) in a large number of languages. Cases that include information about tense are found in other Australian languages (e.g. Kalkatungu, Pitta-Pitta and of course Yukulta and Lardil) and also in the Caucasus (e.g. Georgian—see Vogt 1971 and Harris 1981). Although some semantic link may be uncovered by careful analysis (e.g. Wierzbicka's (1980) study of the Russian instrumental), the case systems of most languages abound in such problematic polysemy.

The radical difference between Kayardild and these other languages is that in Kayardild each semantic or syntactic component is factored out, as it were, and represented in a separate level of case-marking, whereas in most languages a number of factors combine to select a single case (see

Austin 1981b for some Australian examples). To consider a single example: in many languages, objects of nominalized verbs receive an oblique case instead of the regular object case (cf. Silverstein 1981). That is, two syntactic factors—object relation, and nominalized verb—combine to select a single case (usually the dative or genitive). In Kayardild, on the other hand, each is represented by a distinct case inflection: the object relation by the appropriate modal case, and the fact that the verb is nominalized by the associating OBLique.

(C) SEQUENCE RESTRICTIONS. Certain sequences of case-suffixes are not permitted in K (4.2.3): the OBLique may not be followed by another case, and the LOCative may only be “followed” by the OBLique, in which case the suppletive portmanteau *-(k)urrka* is used. A number of strategies may be used when such restrictions are encountered. For example, the inner suffix may be replaced by a near synonym that does not violate the restriction, or it may disappear entirely. What is relevant here is that these sequence constraints apply regardless of suffix function (although the choice of a synonymous substitute does depend on their function, as one would expect). Our morphological statements are therefore simplified if we assume that the same suffix is involved.

In this grammar I adopt a polysemy analysis, treating the various case functions as functional or contextual variants of single cases. This has the advantage of emphasising the strikingly case-like syntactic properties (in particular, concord) found with all functions of these suffixes, of drawing attention to the semantic connections between case and modality, of accounting for the identical sequence restrictions that these suffixes obey regardless of their function, and of being faithful to their historical origins: as I will show in 10.4 and 12.6, all these morphemes originated as case suffixes *sensu strictu*, regardless of their synchronic status.

At the same time, I will make the determining role of syntactic context explicit by treating case suffixes as bipartite entities, identified by a case label (e.g. ABLative) and a function (e.g. Modal). This makes it possible to formulate generalizations either in terms of function, or in terms of “case”.

3.4.9 Case, concord and constituency

In K, case concord is a valuable tool for diagnosing constituent structure. We have already seen how the domain of adnominal and relational cases clearly reflects the constituency of embedded NPs in a phrase like:

(3-54) [[*dan-karra-nguni* *maku-karra-nguni*]_{GEN} *mirra-nguni*
 this-GEN-INSTR woman-GEN-INSTR good-INSTR

mijil-nguni]INSTR
net-INSTR

‘with [[this woman’s] good net] ...’

All four words of the complex phrase bear the relational instrumental, while the adnominal genitive is limited to the words of the embedded possessive phrase.

Similarly, certain types of embedded clause carry a “complementizing case” inflection on every subconstituent, down to word level (3-55); the presence of complementizing case clearly delimits the clausal constituent.

(3-55) *ngada murnmurdawa-th,*
1sgNOM be.glad-ACT
*[ngijin-inja thabuju-ntha thaa-thuu-nth]*COBL
my-COBL brother-COBL return-POT-COBL

‘I am glad that my brother will be coming back.’

Although the constituents identified in this way are typically contiguous, they need not be (Chapter 6). In this grammar I will assume that constituency is independent of contiguity or linear order, but diagnosed by the distribution and ordering of case inflections at various levels. Of course many examples are less straightforward than those just given, since there exist a number of specific rules blocking the occurrence of inherited case in certain situations, such as the rule preventing the complementizing locative appearing on pronominal subjects (12.1.6), or the rule preventing modal case from appearing on indirect objects (10.3.2), but this does not mar the general usefulness of case inflection as a test for constituency. Throughout this grammar the term “constituent” will be used in this special sense, implying immediate domination but not order; the same applies to c-structure representations.

While the use of case inflection as a diagnostic clearly distinguishes NP and S constituents, the existence of a VP constituent is more problematic, although the domain of both modal case and associating case approximates the VP.

Modal case appears on what could be defined as a VP minus certain grammatically specifiable NPs (such as indirect objects and a few “subject-oriented” NPs with a semantic connection with the subject). Historically it appeared on the verb as well, and most verb inflections comprise a thematic element plus what is etymologically an old case marker (7.3.3). However, this analysis is of limited value synchronically, as I will argue in 10.1. Most importantly, the verbal inflection is independent of modal case to a certain extent, so that it cannot be assigned by the same inflectional category. The best we could

say synchronically, then, is that modal case appears on all but a syntactically defined subset of NPs within the VP.

Associating case is a better candidate for diagnosing the VP: it appears on all NPs within the VP, but not on the verb itself. The only NPs to escape it are the subject and certain secondary predicates clearly associated with the subject (9.4.1.1).

With both associating and modal case it would be possible to state the conditions on their distribution without reference to the VP: that is, as all NPs in a clause, minus the subject, secondary predicates on the subject, and (in the case of modal case) indirect objects and some NPs semantically associated with the subject.

Stating the distribution of these items in this way would capture the semantic fact that modality and tense are semantic operators with clausal scope, and that nominalization takes clauses, not VPs as input. It seems likely that the historical explanation for the failure of modal case to appear on subjects has to do with the original distribution of modal case over all overt constituents of subordinate clauses, which typically lacked an overt subject (10.4).

What is more, our grounds for postulating a VP in Kayardild are weakened by the lack of any other syntactic evidence that could corroborate the criterion of case distribution—I have been unable to find any test that could be used as an equivalent to tests for VP-membership in other languages, such as the scope of “so did” conjunction in English.

Despite these arguments against the usefulness of postulating a VP constituent in Kayardild, I will continue to use the term VP in places where I discuss the distribution of modal or associating case marking, simply because it is more convenient than the long list of conditions that I would otherwise need to use.