KAYARDILD

The language of the Bentinck Islanders of North West Queensland

By
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A thesis submitted for the degree of
Doctor of Philosophy
at the Australian National University.

July 1985
Erratum: References to "Hale (1981)" should read "Hale et al (1981)".
DECLARATION

Except where otherwise indicated
this thesis is my own work.

Nicholas Evans

July 1985
ACKNOWLEDGEMENTS

First and foremost I thank the whole Bentinck Islander community for their friendship and tolerance, and for generously sharing with me their language, country, and way of life. As lucid, untiring and ingenious teachers I was fortunate to have the late Darwin Moodoonuthi, Pat Gabori, Roland Moodoonuthi, Dugal Goongarra, Pluto, Molly Rainbow, Roma Kelly, Roonga, Rhea, May Moodoonuthi, Arthur Paul, Frederick Binjari, Alison Dundaman, Billy Dundaman, Netta Loogatha, Geoffrey Loogatha, Roger Kelly and Daphne Escott. For help with other languages I thank Cora Peters (Yukulta, Yangkaal, Lardil and Kayardild), Lizzie Daylight, and Dick Brookdale (both Yukulta).

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On Mornington Island, Scotty Maxwell first got the project started, helped keep it going, and was a valued friend. The Mornington Shire Council, the
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This thesis is dedicated to the memory of the late Darwin Moodoonuthi, a great teacher and friend.
ABSTRACT

This is a reference grammar of Kayardild (K), an Australian language spoken in the south Wellesley Islands, Gulf of Carpentaria.

Chapter One sets the language in its broader cultural and linguistic perspective, including its genetic position in the Tangkic group and beyond, the linguistic evidence relating to its alleged long isolation, and the contemporary position of languages on Mornington Island. The phonology is briefly introduced.

Chapter Two introduces a number of descriptive concepts. Parts of speech, word order, the grammatical relations Subject and Object, and the potential for disjunction of subject and pivot are discussed. Case use in K is highly complicated, and five functions must be distinguished: relational (relating an NP to the verb or clause), adnominal (relating one NP to another), modal (signalling tense/mood), associating (linking NPs with nominalized verbs) and complementizing (relating one clause to another). I argue that constituent structure mediates case-assignment, and that K has a VP-constituent despite its free phrase order.

Chapter Three discusses the nominal case system: form, sequence restrictions and meaning. Besides the twelve regular cases there are seven 'verbal cases', with case-like syntax and meanings but verbal in form. Nominal-nominal derivation, compounding and reduplicating are also discussed.

Chapter Four examines the remaining nominal subclasses: pronouns, locationals, and manner, time and predicate nominals. The structure of the NP is discussed.

Chapter Five deals with verbals: the form and function of verb inflections, verb-verb and nominal-verb derivations, preverbal particles, nominal prefixation, and 'verb complexes' - syntagms comprising several verbal words with identical inflection.

Chapter Six discusses the syntax of the simple clause: nominal (verbless)
clauses: basic, alternate and derived verbal argument structures; secondary predication: questions; negation; and particles and clitics.

Chapter Seven focusses on the unusual ‘modal case’ system whereby tense/mood is signalled on nominals as well as verbals. I discuss different syntactic models, the semantics of modal case choice, the relation between modal and other case meanings, factors defining the domain of modal case, and the evolution of the modal case system (with comparative data from Yukulta, Yangkaal and Lardil).

Chapter Eight deals with non-finite subordinate clauses and lexical nominalizations.

Chapter Nine discusses finite subordinate clauses. Their functions and morphosyntax are examined in detail, especially the unusual ‘odd pivot’ system which signals pivot sequences such as (Matrix) Object: (Subordinate) Instrument, in which the pivot is not subject of both clauses. I also examine their independent or ‘insubordinated’ use to show ellipsed main clause predicates, or to track thematically marked discourse sequences: and the evolution of the ‘odd pivot’ system from an antecedent-agreement system of the type found in Yukulta.
CONVENTIONS AND ABBREVIATIONS

Language Names

K  Kayardild
L  Lardil
Y  Yukulta
Ya  Yangkaal
ME  Mornington Island English

Sources on other Tangkic languages (details in Bibliography)

DYL Keen (1972) 'A Description of the Yukulta Language'
HFN Hale (unpubl.) Field Notes on Yangkaal
TLG Klokeid (1976) 'Topics in Lardil Grammar'
Y Keen (1983) 'Yukulta'

Historical conventions

*  Reconstructed form
pA  proto Australian
pPN  proto Pama-Nyungan
pT  proto Tangkic

Morphological conventions

{ }  Canonical form of morpheme
TH  Laminal stop archimorpheme (-th- or -j-)
NH  Laminal nasal archimorpheme (-nh- or -ny-)
D  Apical stop homorganic with preceding sonorant
-  Morpheme boundary
=  Clitic boundary
:  Possible further segmentation
:  Separates elements of portmanteau, also used
where segmentation is irrelevant.

Some phonological conventions

C  Consonant
V  Vowel
N  Nasal
TH  Underlying lamino-dental stop
J  Underlying lamino-palatal stop

/ /  Phonemic representation (Practical orthography)
[ ]  Phonetic representation (IPA)
# #  Word boundary
## ##  Breath group boundary
Grammatical functions

<table>
<thead>
<tr>
<th>SUBJ</th>
<th>OBJ</th>
<th>IOBJ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subject</td>
<td>Object</td>
<td>Indirect Object</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>A</th>
<th>S</th>
<th>O</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transitive subject</td>
<td>Intransitive subject</td>
<td>Object of ergative languages</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SPRED</th>
<th>SSPRED</th>
<th>OSPRED</th>
</tr>
</thead>
<tbody>
<tr>
<td>Second predicate</td>
<td>Second predicate on subject</td>
<td>Second predicate on object</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SCOMP</th>
<th>OCOMP</th>
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<tbody>
<tr>
<td>Subject complement</td>
<td>Object complement</td>
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</table>

<table>
<thead>
<tr>
<th>SCON</th>
<th>OCON</th>
</tr>
</thead>
<tbody>
<tr>
<td>NP construed with subject (e.g. body part)</td>
<td>NP construed with object</td>
</tr>
</tbody>
</table>

Pronouns are glossed as:

1  First person
2  Second person
3  Third person
INC  Inclusive (speaker and hearer)
DU  Dual
PLU  Plural
NSG  Non-singular
POSS  Possessive pronoun (also non-nominative stem)

Cases:

<table>
<thead>
<tr>
<th>ABL</th>
<th>ALL</th>
<th>ASSOC</th>
<th>CONS</th>
<th>ERG</th>
<th>FOBJ</th>
<th>GEN</th>
<th>INSTR</th>
<th>LOC</th>
<th>MNOBJ</th>
<th>OBJ</th>
<th>ORIG</th>
<th>PRIV</th>
<th>PROP</th>
<th>UTIL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ablative</td>
<td>Allative</td>
<td>Associative</td>
<td>Consequential</td>
<td>Ergative (Yukulta, other Pama Nyungan)</td>
<td>Future Objective (Lardil)</td>
<td>Genitive</td>
<td>Instrumental</td>
<td>Locative</td>
<td>Marked Non-Future Objective (Lardil)</td>
<td>Objective (Lardil)</td>
<td>Origin</td>
<td>Privative</td>
<td>Proprietary</td>
<td>Utilitive</td>
</tr>
</tbody>
</table>

Case functions are distinguished by the following abbreviations preceding the case name (e.g. MABL 'Ablative used modally, modal ablative). Adnominal and relational functions are usually clear from context and not marked.

<table>
<thead>
<tr>
<th>A</th>
<th>ADN</th>
<th>C</th>
<th>M</th>
<th>R</th>
<th>MOD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Associating</td>
<td>Adnominal</td>
<td>Complementizing</td>
<td>Modal</td>
<td>Relational</td>
<td>Variable representing appropriate modal case</td>
</tr>
</tbody>
</table>
Verbal cases

V. ABL  Verbal Ablative
V. D    Verbal Dative
V. EVIT Verbal Evitative
V. GIFT Verbal Gift
V. I. ALL Verbal Intransitive Allative
V. PURP Verbal Purposive
V. TRANSL Verbal Translative

Nominal and Locational Derivational Suffixes

BOUND  Geographical Boundary
CONT   Continuous Direction
INDIV  Individualizer
INTENS Intensifier
REM    Remote
XS     Excessive

Verbal Inflections

ACT    Actual
APPR   Apprehensive
DES    Desiderative
DIREC  Directed
FUT    Future
HORT   Hortative
IMMED  Immediate
IMP    Imperative
INDIC  Indicative (Yukulta)
MNF    Marked Non Future (Lardil)
N      Nominalization
NEG    Negative (e.g. NEGFUT 'Negative Future')
NEGNMZ Negative Nominalization
PSTNMZN Past Nominalization
PST    Past
PRECON Precondition
RES    Resultative
SUPP   Suppositional
THEMAT Thematic

Verbal derivational suffixes

CAUS   Causative
DO     'do like a'
DT     Detransitivized (Passive/Reflexive)
FAC    Factive
INCH   Inchoative
RECIP  Reciprocal

Particles and clitics

CTRFCT Counterfactual
FOC    Focus
FRUST  Frustrated
INTERROG Interrogative
NEGAT  Negator

Abbreviations for kin terms follow the usual anthropological
conventions, viz.

B Brother  Z Sister
E Elder    Y Younger
F Father   M Mother
S Son      D Daughter
H Husband  W Wife

A note on translations:

English translations are my own unless in inverted commas. Readers should note that (a) definiteness and gender are not straightforwardly marked in Kayardild, and I have translated these according to context; (b) the unmarked 'ACTual' tense may be past or present, according to context (c) Kayardild terms that are highly specific semantically, such as pronouns, kin terms, and zoological-botanical terms have usually received a less specific English translation.
The material for this thesis was gathered during field trips to Mornington and Bentinck Islands in June 1982–January 1983, August 1983 and May–July 1984. Before my first trip I was able to do some preliminary analysis of Wurm’s 1960 recordings and fieldnotes on Kayardild, and examine the insightful works on the related languages Yukulta (Keen 1972, 1983) and Lardil (Hale 1973, 1981; Klokeld 1976).

The project was initiated following a request to Bob Dixon by the Bentinck Island community, who were concerned about the fate of their language and wanted a linguist to work on it. The grammar contained in this thesis is part of a broader project which will include publication of a comprehensive dictionary and a substantial collection of texts, hopefully by 1986; meanwhile a short word list and six texts are given in the Appendices.

Community support for the project was overwhelming, and virtually every Bentinck Islander helped me in some way. Thanks to this, my fieldwork procedure could be quite eclectic. It combined participant observation while hunting, fishing, drinking, ‘seeing the country’ in the South Wellesleys, reminiscing and gossiping, arguing, attending community meetings, farewelling people at the airport, and working with the ‘culture teachers’ at the Mornington School, with more structured sessions ‘working on language’: gathering and transcribing texts and stories, plodding through paradigms, building up comprehensive word lists, and discussing the meaning and appropriateness of particular constructions heard in spontaneous conversation. In this latter, more difficult task, several people stood out as teachers and fellow linguists, especially Darwin Moodoonuthi, Roland Moodoonuthi, Pat Gabori and Cora Peters. Without their patient and ingenious explanations, this work would not have been possible. My intellectual debts to the Kaiadilt people are given in full in the Acknowledgments.

This thesis is, unashamedly, a reference grammar. My many frustrating
experiences trying to extract generalizations about a particular language from a grammar, or 'fragment' of a grammar, written in the ephemeral formalisms of a once-fashionable theory, have convinced me that grammars should be presented in straightforward language, and furnished with a generous set of naturally occurring example sentences. Only in this way can readers glean enough to reach their own conclusions about the internal consistency and empirical accuracy of the description. And only when a relatively full informal account of a language’s structure, and of the ways it encodes meaning, becomes available, can the next step – of more formal modelling – be taken. The present work does no more than indicate the rough direction this might take.

In analysing this highly unusual language I have drawn freely on whatever grammatical tools seemed appropriate, without worrying whether they all came from the same toolkit. A few key terms understood differently by different linguistic schools are discussed in Chapter Two, and pegged to language-specific definitions. Certain new terms necessitated by the novel structure of Kayardild are also introduced there.

Although the analysis I give is self-sufficient synchronically, I have included comparative/historical material in several places. Experience has shown me that the more bizarre features of Kayardild grammar were only accepted by otherwise broad-minded linguists once their less eccentric forebears had been established.

Three particularly interesting areas I have neglected in this thesis are intonation, pragmatics and discourse (although the last is briefly discussed in Chapter 9). I have also had to relegate most of the phonology to an Appendix, to comply with university regulations on word length.
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CHAPTER 1

THE LANGUAGE, ITS SPEAKERS, AND ITS CULTURAL SETTING

1.1 Language names: the Tangkic subgroup

Previous investigators have written the tribe and language name as Kaiadilt (Tindale 1962 et seq), Gayardilt (O’Grady, Voegelin and Voegelin 1966) and even Guyadilt (Uniting Church mission cassette). Phonetically it is \[\text{k-ej'drlt}\] or \[\text{g-rjedrlt}\] (the voicing of initial stops is in free variation). In the practical phonemic orthography used here it is Kayardild. In this thesis I will reserve this spelling for the language name, but will use the spelling Kaiadilt in referring to the people, as they do themselves (as in the name ‘Kaiadilt Aboriginal Association’).

The term Kayardild is, etymologically, a compound of the words ka(ng)- ‘language’ and yardild(a) ‘strong’. Although Kayardild speakers no longer recognize this etymology themselves, it is clearly preserved by one Yukulta term for their language: the uncompounded yardilda kangka ‘strong talk’. Kayardild speakers also refer to their language as ngarrkuwa kangk ‘strong language’, rarumbanda kangk ‘southern language’ (Bentinck Island lies to the south of Mornington Island, where they now live) or, incorporating the English word ‘Bentinck’, bandingkawanda kangk ‘language from Bentinck’. In Mornington English it is simply called ‘the Bentinck language’. The Kaiadilt themselves are often known as ‘Bentincks’ or ‘B.I.s’.

The Kaiadilt’s traditional lands comprised the South Wellesley Islands (Fig. 1–1): Bentinck Island, Sweers Island, several smaller islands, and sometimes Allen Island. In pre-contact times they were almost totally cut off from the rest of Australia, and had no regular contact with other tribes. The delineation of tribal and language boundaries is therefore quite unproblematic, in contrast to many other parts of Australia (cf Rigsby & Sutton 1982, Merlan, 1982).

Dialect differences, if they existed at all, were very slight. At most they were...
limited to the pronunciation of the phoneme /r/ and sporadic vowel harmony in a few words (e.g. *rilungk* or *rulungk* ‘to the east’) (Appendix C), and the oblique bases of a few nouns (3.2). But it is hard to untangle these from the more important systematic differences due to age and sex. Apart from these few variations, the Kaiadilt speech community appears to have been homogeneous. There were no terms for regional speech variants.

In the North Wellesley islands and the adjoining mainland were spoken three
other languages. Lardil (L), Yangkaal (Ya) and Yukulta (Y), which O'Grady, Voegelin and Voegelin (1966) classified together with Kayardild in the 'Tangkic' group (tangka means 'person' in all four languages).¹ Their locations are shown in Fig. 1-1.

Keen (1983) further suggests that 'Yukulta, Gayardild and Yanggal, together with Nguburindi², belong as dialects of one language while Lardil is a different but closely related language.' Comparison of a 220-word basic vocabulary list would seem to support this (1-2): the three 'dialects' have cognacy rates of 70% or more, while all have between 45% and 60% cognacy with Lardil.

<table>
<thead>
<tr>
<th>Yukulta</th>
<th>69 77 71</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kyardild</td>
<td>75 92 85 89</td>
</tr>
<tr>
<td>Yangkaal</td>
<td>39 64 45 63 55 74</td>
</tr>
<tr>
<td>Lardil</td>
<td>45 49 60 60</td>
</tr>
</tbody>
</table>

**Figure 1-2:** Percentage shared vocabulary within the Tangkic subgroup

Moreover, there is closer phonological resemblance between cognates of the three 'dialects' than with L. Y appears to have been most conservative, preserving the reconstructable proto Tangkic forms. Ya and K share the same minor phonological change involving prosodic truncation of breath-group final short /a/. L has suffered the most drastic changes: radical final truncation of up to one syllable, development of a fourth vowel /e/, neutralization of the /d/ vs /rr/ contrast word-finally and preconsonantally, and a number of other morphonological changes (see Hale 1973 and Kikoeid 1976). Like K it has neutralized the /r/ vs /rl/ distinction, but where K has generalized the rhotic realization, Lardil preserves both in free variation. The effect of these changes on a number of Tangkic words is shown in 1-3.

¹This has been misspelt by a number of writers as Tangic.
²Known only through a word list by Roth (1897), which shows 90% cognacy with modern Yukulta. See Keen, ibid.
Figure 1-3: Phonological change in some Tangkic words

The combined lexicostatistical and phonological data thus suggest the following subgrouping:

![Phonological change tree diagram]

Although I believe this classification to be correct, dramatic 'drift' in the grammars of all the insular Tangkic languages (Yangkaal, Kayardild and Lardil) obscures the picture somewhat.

Yukulta is alone in having retained ergative morphology, and is the only Tangkic language to have developed an 'auxiliary' clitic complex cross-referencing core participants and coding tense, realisness, and transitivity. L, K and Ya have all developed systems of 'modal case', while Y has not, although it bears the germs of this development in its various semantically triggered 'antipassive' constructions (7.4). Finally, Y makes but occasional use of two 'verbal cases' (3.4) whereas K, Ya and L have expanded the number of verbal cases to seven, four and six respectively, with a commensurate increase in their functional load. On typological grounds, then, Yukulta is the odd one out. The scant information available on Yangkaal (see Text 7 and 7.4) suggests that its grammar was basically the same as Kayardild's. For this reason, it seems best to classify Kayardild and Yangkaal as dialects of one language, and Yukulta as a separate (but closely related) language.

The historical explanation for this is complex. An attempt at reconstructing the most important changes is made in 7.4 and 9.6: there I argue that proto Tangkic resembled Yukulta in most respects (except that it lacked an auxiliary), that this proto system was highly unstable, and evolved into the unusual systems
found in the other Tangkic languages. Contact with neighbouring languages, and the development of an auxiliary (possibly under areal pressure) restrained Yukulta from these developments.3

To explain why Lardil should diverge most, lexically and phonologically, we must assume that it was separated first. Later on, Yangkaal and Kayardild separated from Yukulta: the drift away from ergativity was strong enough, as it were, to carry them in the same typological direction as Lardil. In support of the hypothesis that the Lardil and Kayardild/Yangkaal modal case systems developed separately, in Lardil the unmarked case for the object is an old dative, while in Kayardild / Yangkaal it is an old locative (7.4.2.2).

In 1.3 I look at the culture and hypothesized prehistory of the Kaiadilt, on the basis of which Tindale (1977) advanced his well-known hypothesis that they have long been isolated from the mainland populations. The failure of the linguistic evidence to support this is discussed in 1.3.5.

1.2 Possible wider affiliations

The Tangkic languages are classified by O'Grady, Voegelin and Voegelin (1966), on the basis of purely lexicostatistical evidence, as an isolated 'group' within the Pama–Nyungan 'family'. Hale (1973:421) reiterates this: 'Lardil is rather distantly related to the other Pama–Nyungan languages, apparently, but is tentatively classified with them, under the group name "Tangkic".4

Where O'Grady, Hale, Heath (1982) and others see 'Pama–Nyungan' as a more or less established 'family' whose relation to the non Pama–Nyungan languages remains hypothetical5. Dixon (1980) has argued that Pama–Nyungan is a purely typological grouping, and that all Australian languages, both Pama Nyungan and non Pama Nyungan (with the possible exception of Tiwi and Djingili),

3Milroy (1980) discusses the role of social networks in maintaining conservative forms. Heath (1981) has noted the accelerated rate of linguistic change on islands, presumably due to the lack of conservative areal pressure. He gives the interesting example of the Groote Eylandt language Anindilyaugwa, which "has retained archaic independent pronominal forms, while innovating very extensively in its verbal and nominal inflection".

4More recently, O'Grady (1979) suggests that Lardil (and the other Tangkic languages) were, after the Gunwinygu group, one of the first groups to be separated from the rest of the Pama–Nyungan family. Capell (1979) is more cautious, arguing that Yukulta (and presumably the other Tangkic languages), Garawa, and Kalkatungu are three isolate groups within the Gulf district.

5And note that both Hale and O'Grady suggest that certain prefixing languages, such as Gunwinygu, are part of the Pama–Nyungan family.
are descendants of a hypothetical 'proto Australian'. I disagree with Dixon's view, for two main reasons. Firstly, the evidence Dixon adduces in reconstructing 'proto Australian' is drawn almost exclusively from Pama Nyungan languages (cf O'Grady 1981): a less misleading term for his reconstructions is therefore 'proto Pama Nyungan'. Secondly, the level of shared vocabulary among Pama Nyungan languages exceeds by an order of magnitude that shared with most non Pama Nyungan languages: Dixon gives no explanation for this. Diffusion seems unlikely, and the most likely cause is shared inheritance (cf Hale 1982b). This is of course a very complex question, and it would lead us too far afield to go into it further here, but in what follows I assume the genetic unity of the Pama Nyungan languages, and I also assume that Dixon's reconstructions of 'proto Australian' are better labelled 'proto Pama Nyungan (pPN)'.

Both typologically and lexically, the Tangkic languages are less similar to their Non Pama Nyungan neighbours than they are to Pama Nyungan languages further afield. Like the better known (and less aberrant) Yolngu group, the Tangkic languages are an apparently Pama Nyungan enclave hedged in by various non Pama Nyungan languages: Yanyuwa to the north west, Garawa to the west, Waanyi to the south west, and Mingin to the south6. Only to the south east are there other Pama Nyungan languages - the Mayi group (Breen 1981) - but these too have little in common with Tangkic, having affinities to the east (Hale 1982b) whereas the Tangkic languages have them to the south west (see below). The resemblances between the Tangkic subgroup and more distant Pama Nyungan languages are evident both in grammar and in vocabulary. They are summarized here without substantial justification, which is given in comparative asides to the relevant sections of the grammar.

Although the grammar of all modern Tangkic languages is extremely unusual, the most plausible proto system (7.4) was not atypical for a Pama Nyungan language: suffixing, agglutinating, basically ergative, with free word order and a rich array of case inflections. Its main peculiarity was a system of tense- and mood- linked non-ergative constructions: in irrealis desideratives, for example, transitive clauses had an ABSolutive:DATive case frame rather than the usual ERGative:ABSolutive frame.

6Virtually nothing is known about Mingin, but O'Grady et al. classify it as a separate non Pama Nyungan family.
A handful of characteristically Pama Nyungan inflections can be reconstructed: proto Tangkic (pT) Ergative / Locative (*ngki) probably results from the neutralization of the Pama Nyungan ergative allomorph -ngku and locative allomorph -ngka, perhaps after vowel harmony had altered their final vowels. The first person singular pronoun in Tangkic is *ngada, reflecting pPN *ngaDHu. The second and third non-singular pronouns, however, are totally unlike Pama Nyungan but have cognates throughout the non Pama Nyungan languages — see discussion below.

Virtually all trace of Dixon’s ‘proto Australian’ verb conjugation system is lacking from the Tangkic languages: most verb inflections derive from nominalizations suffixed for case (5.3). Two new conjugation classes have evolved, with membership mostly determined phonologically (5.2.4). However, three morphological links with Pama Nyungan languages can be salvaged. The pT imperative is *-ka with transitive verbs: Dixon reconstructs imperative *-ka for the predominantly transitive -rr- conjugation. The pT nominalizer *-TH-, which has become the affirmative verb thematic, almost certainly reflects an original form -NHTHa-, with widespread cognates in central and southwestern Pama-Nyungan languages (5.3). Finally, the pT reflexive *(-yi-) can be related to proto Pama Nyungan *-yi.

The typological resemblances between Tangkic and two other Pama-Nyungan subgroups are also worth mentioning.

The Ngayarda subgroup (Pilbara district, W.A.), like Kayardild/Yangkaal and Lardil, has become morphologically accusative from an ergative ancestor (Dench, 1982). This is undoubtedly a recent and completely independent development.

Closer at hand, Kalkatungu (Blake 1979b) and Pitta Pitta (Blake 1979a), spoken to the south of the Tangkic subgroup, both have non-ergative constructions triggered by tense/mood, a feature they share with Yukulta and pT7. This raises

7 In fact there is a corridor of languages with tense-dependent nominal forms running south from the Tangkic group through Kalkatungu and Pitta Pitta to the closely related dialects Gurnu and Bagandji (Hercus, 1982) on the Darling River. In these last two languages, however, special pronominal forms are involved, rather than the alternative case frames found in Pitta Pitta and Kalkatungu; a Gurnu example is wadhuy ‘1-past’, gadhuy ‘1-future’ (Wurm and Hercus 1976). A third variation on the same functional theme is found in Garawa (Furby & Furby 1977:51-2), a non Paman Nyungan neighbour of the Tangkic group. Here past tense is signalled by a morpheme {yi} which may follow the verb stem or replace the final vowel of one pronoun in the clause; future tense is marked by a clitic -dja, optionally attached as either a suffix or a prefix to one word (of virtually any type). Both past and future marking, it seems, are half-frozen tense clitics.
the question of whether the common presence of tense-triggered non-ergative constructions in Tangkic, Kalkatungu and Pitta Pitta is due to some genetic affiliation, especially since all are aberrant in a number of ways (pronouns, lexicon and case forms). But there are no other similarities between Tangkic and these languages (note the very low cognacy rates in 1-4), which makes this hypothesis unlikely. More probable is a previous period of contact and ‘indirect functional diffusion’ of the relevant constructions.

In summary, the ancestral language, though Pama Nyungan-like in some respects, was nevertheless rather aberrant.

1.2.1 Vocabulary

Comparison of cognacy rates between Kayardild and various Pama Nyungan and non Pama Nyungan languages confirms this picture (1-4).

<table>
<thead>
<tr>
<th>Language</th>
<th>%age shared vocabulary</th>
<th>Number of items compared</th>
<th>Source</th>
</tr>
</thead>
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<tr>
<td><strong>Pama Nyungan</strong></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Aranda (East)</td>
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<td>158</td>
<td>Menning &amp; Nash 1981</td>
</tr>
<tr>
<td>Diyari</td>
<td>1.8</td>
<td>166</td>
<td></td>
</tr>
<tr>
<td>Dyirbal</td>
<td>8.4</td>
<td>201</td>
<td>Dixon MSa</td>
</tr>
<tr>
<td>Guugu Yimidhirr</td>
<td>7.2</td>
<td>180</td>
<td>Haviland 1979</td>
</tr>
<tr>
<td>Jarildekald (Yaralde)</td>
<td>1.3</td>
<td>440</td>
<td>McDonald 1977</td>
</tr>
<tr>
<td>Kalkatungu</td>
<td>1.6</td>
<td>190</td>
<td>Blake 1979b</td>
</tr>
<tr>
<td>Mayi-Kutuna</td>
<td>4.5</td>
<td>220</td>
<td>Breen 1981</td>
</tr>
<tr>
<td>Mudbura</td>
<td>1.9</td>
<td>155</td>
<td>Menning &amp; Nash 1981</td>
</tr>
<tr>
<td>Pitjantjatjara</td>
<td>6.1</td>
<td>165</td>
<td>&quot;</td>
</tr>
<tr>
<td>Pitta Pitta</td>
<td>3.1</td>
<td>160</td>
<td>&quot;</td>
</tr>
<tr>
<td>Wakaya (East)</td>
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<td>162</td>
<td>&quot;</td>
</tr>
<tr>
<td>Walmatjari</td>
<td>4.8</td>
<td>166</td>
<td>&quot;</td>
</tr>
<tr>
<td>Warlipiri</td>
<td>9.0</td>
<td>167</td>
<td>&quot;</td>
</tr>
<tr>
<td>Warlimpana</td>
<td>6.0</td>
<td>166</td>
<td>&quot;</td>
</tr>
<tr>
<td>Warluwarra</td>
<td>4.9</td>
<td>162</td>
<td>&quot;</td>
</tr>
<tr>
<td>Yankunytjatara</td>
<td>6.0</td>
<td>166</td>
<td>&quot;</td>
</tr>
<tr>
<td>Yidiny</td>
<td>4.1</td>
<td>316</td>
<td>Dixon MSb</td>
</tr>
<tr>
<td>Yuulngu</td>
<td>2.7</td>
<td>182</td>
<td>Morphy 1983</td>
</tr>
<tr>
<td><strong>Non Pama Nyungan</strong></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Alawa</td>
<td>2.4</td>
<td>165</td>
<td>Menning &amp; Nash 1981</td>
</tr>
<tr>
<td>Djingili</td>
<td>1.8</td>
<td>167</td>
<td>&quot;</td>
</tr>
<tr>
<td>Garawa</td>
<td>2.4</td>
<td>166</td>
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<tr>
<td>Waanyi</td>
<td>2.4</td>
<td>168</td>
<td>&quot;</td>
</tr>
<tr>
<td>Yanyuwa</td>
<td>3.0</td>
<td>166</td>
<td>&quot;</td>
</tr>
</tbody>
</table>

**Figure 1-4:** Percentage Shared Vocabulary between Kayardild and various Pama Nyungan and Non Pama Nyungan languages

The first point to notice is the low level of cognacy with all languages: shared vocabulary never exceeds 9%, confirming the basic ‘isolation’ of the
Tangkic group. (By the criteria used in O'Grady et al (1966) and subsequent publications, this would place the Tangkic group in a different 'family', but it seems the criterion of structural similarity (Wurm 1972) was invoked to keep them in the Pama Nyungan family.)

Still, the Tangkic languages retain a reasonable number of Capell's (1956) 'Common Australian' (CA) vocabulary (written here with voiceless symbols): pT *kunpuk 'urine' (CA *kumpu), pT *marlta 'hand' (CA *mara, mala). pT mipurlta 'eye' (CA *mil, miil), pT *ngama 'mother' (CA *ngama 'breast'), pT *nganki 'side of face' (CA *nganka 'chin'). pT jal-da 'tongue' (CA *THalany). Although jal-da preserves a CA laminal, it is more common for CA words with an initial laminal appear in Tangkic with an initial apical: compare CA *THaa-n 'copulate' and pT *taa-ja (same meaning), CA *THarra 'thigh' and pT *tarra 'thigh', and CA THaa-l 'eat' and pT *tiya-ja 'eat'.

Other noun stems are incremented in Tangkic by a final -ng-. This may result from reassignment to the stem of the initial /ng/ of pPN ergative -ngku and pPN LOCative -ngka. Compare pT *kiyarrng-ka 'two' with CA *kuTHarra. pT *wumpurung-ka 'fish spear'. Warlpiri and Western Desert wurrumpuru '(ceremonial) lance', and Yangkaal kumpung-ka 'urine' (CA kumpu).

Tangkic verbs with common Australian or 'proto Australian' (Dixon 1980, Chapter 12) reflexes are *paa-ja 'bite' (CA *paTHa-rr): *wuu-ja 'give' (pA *ngu-/wu-/yu-ng 'give'); pT *thalti-ja 'stand' (pA *THaa-n), the pT locational *walmu 'up high' (pA wal-ng/m 'rise') and possibly pT *parlii-ja 'fall' (pA *pa-). Capell's CA verb pu- 'blow' also finds a possible reflex in pT *punya-tha 'blow'.

Since the publication of Capell's 'Common Australian' vocabulary, O'Grady has been developing a fuller 'Proto Pama Nyungan' (pPN) stem list. Whereas 'Common Australian' words are found right across the continent. 'Proto Pama Nyungan' stems are mostly restricted to the Pama Nyungan languages. It is here, therefore, that one would look for evidence that the Tangkic group is specifically Pama Nyungan. Tangkic words with reflexes on this list are *thapu(ju)9 'elder

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8 I use -TH- to stand for a laminal stop which may in the proto language have been either dental or palatal (cf Dixon 1970).

9 Kayardild, Yangkaal and Yukulta, but not Lardil, have a suffix -THu on most kin terms (possibly once a first person possessive suffix). It is difficult to know whether this suffix was present in pT, and eroded in Lardil by truncation, or whether it is a shared innovation of Yukulta, Yangkaal and Kayardild.
brother’ (pPN *THapu). *pungkalla ‘knee’ (pPN *pungku). *papi(ju) ‘father’s mother’ (pPN *papi). *puka- ‘rotten’ (pPN *puka). *yakuka(thu) ‘older sister’ (pPN *yaku) and kajakaja ‘son (female ego); (also ‘daddy’ with a male ego)’ (pPN *kaTHa ‘son’). The verb yii-ja ‘put’ reflects pPN *yiiTHa (Hale 1982b)10 . The presence in Tangkic of these distinctively Pama Nyungan reflexes, which suggest that Tangkic is a subgroup of the Pama Nyungan family, is corroborated by the contrast between Pama Nyungan and non Pama Nyungan cognacy rates (1–4): even the immediately neighbouring non Pama Nyungan languages have less common vocabulary with Tangkic than other Pama Nyungan languages further afield: compare the non PN neighbours Garawa (2.4 %), Waanyi (2.4 %), Yanyuwa (3%) and Alawa (2.4 %) with such PN languages as Warlpiri (9 %), Dyirrbal (8.9 %) Guugu Yimidhirr (7.2%) and Yankunytjatjara (6%) (of course there are other PN languages, such as Kalkatungu, Diyari, and Yoingu, with very little shared vocabulary)11.

The higher cognacy rates with Centralian languages are particularly interesting, for they correlate with other linguistic and non-linguistic factors suggesting links with the centre. The PROPerative suffix, for example, can be reconstructed as *(-kurlu} for proto Tangkic: this is identical with the Warlpiri proprieteive12. The diminutive kin suffix, -(part in Kayardild, likewise has a Warlpiri reflex: the ‘diminutive of affection’ suffix -(pardo (Hale 1974).

10There are also a few more narrowly regional words shared with languages of North Eastern Queensland, such as wangalika ‘boomerang’ corresponding to Dyirrbal and Yidiny wangal and Guugu Yimidhirr wangi, and kathirra ‘digging stick’ corresponding to proto Paman kathin. But their number is small: a check through Black’s (1980) list of reconstructed ‘Norman Pama’ words (covering the languages of the eastern Gulf and south western Cape York) revealed only three specifically regional cognates with the Tangic group: pNP *kaanya ‘yamstick’ (pT *kathirra), pNP *kungulV ‘mosquito’ (pT *kungulda), and pNP ingal ‘boomerang’ (pT *wangalka). Six other cognates were general Pama Nyungan or Australian words from the list given above.

11The following claim by Tindale (1977) must be placed in this perspective: ‘the language of the Kaiadilt seems to be of a type found chiefly in the southern parts of the continent, possibly indicating relative antiquity in a separation between people who drifted to the south and the ancestors of the Kaiadilt who remained in the area near the Sahul shelf. Some clues appear in the vocabulary, although the study of such is sometimes considered unfashionable.’ He goes on to cite the many southern languages whose word for water is cognate with the Kayardild (and proto Tangkic) nguku: Tangankald [perangko], Jarldekalk [gake], Ngaiawang [gak:], and comparable examples from several other languages spoken along the Murray river. Valid as this one cognate may be, i was only able to find six cognates of Tangic words in the 440 word Yaralde (=Jarildekald) words listed in McDonald (1977). This level of cognacy could be found between Kayardild and almost any Australian language, and provides no evidence for Tindale’s claim, especially since cognates of nguku appear in other widely separated languages, such as Mabuiag nguk. Unfortunately I have been unable to examine word lists from the other languages mentioned by Tindale.

12And with the Nyangumarda PRIVative, which O’Grady (1979) claims is cognate by the principle of ‘unity of opposites.’ He postulates *-kurlu as a suffix for ‘proto Nyungie’, the vast western group subsuming Warlpiri, the Western desert languages, the Ngumbin languages Gurindji and Mudburra, Nyangumarda and others.
There is thus weak lexicostatistical evidence, plus the two grammatical morphemes shared with some Nyungic languages but no others, to suggest a link with the centre. This is corroborated by various pieces of non-linguistic evidence: Lardil myths say their ancestors came from the south west. Kayardild and Lardil, like the Centralians, have infantile blondness, and Lardil and Yukulta song styles 'suggest a closer musical affinity with desert songs further south than with songs on Cape York Peninsula' (Moyle, n.d.). This hypothesis must not be overstated: it is not enough to subgroup Tangkic with the Western languages, but does point to significant affinities.

1.2.2 Pronouns

These are the one aspect of the Tangkic languages where non Pama Nyungan features appear. Although the first and second singular pronouns, as we saw, may be related to pan Australian cognates, the remainder are aberrant. Basically, the third singular root is \( ni \), the second non singular root is \( ki \) (though the segment \( -ku- \) in inclusive pronouns suggests the form may once have been \( ku- \)), the third non singular is \( pi \): the dual marker is \( -rr- \) and the plural marker is \( -i- \).

These are typically non Pama Nyungan\(^{13}\), recurring in non Pama Nyungan languages from the Kimberleys to East Arnhem land, but rarely if ever in Pama Nyungan languages\(^{14}\). 1-5 includes some of the more striking examples\(^{15}\). All examples are written in voiceless orthography (except where phonemic voicing is indicated), with initial retroflexes included: non-cognate forms are in parentheses.

The full distribution and reconstruction of these forms needs a detailed study. Many lie buried in oblique, portmanteau or prefixed forms. The exciting question is

\(^{13}\)Capell (1979:481), discussing the Yukulta pronoun system, noted that 'the singular pronouns are of EA ('Early Australian' - N.E.) origin, .. and the third person links with the Northern Kimberleys', citing Ngarinyin.

\(^{14}\)The sole case known to me is the 2nd non singular form \( wurru \) in Warluwarra (Menning & Nash 1981), which is a possible reflex of pT second dual \( kurra \) \( \sim \) kirra. Blake (1979a) points out the resemblance between the pronoun systems of Warluwarra and Yanyuwa, despite their geographical separation and vast typological differences. \( Pa- \) is often found as a third person root in Pama Nyungan languages, probably from a demonstrative root \( pala \) (as in Western Desert); but \( pi- \), probably unrelated, is unknown.

<table>
<thead>
<tr>
<th>Language</th>
<th>Pronominal category</th>
<th>2 Du</th>
<th>2 Plu</th>
<th>3 Sg</th>
<th>3 Du</th>
<th>3 Plu</th>
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<td></td>
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<tr>
<td>Kayardild (also Yukulta and Yangkaal)</td>
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<td>ki-rr-a</td>
<td>ki-l-ta</td>
<td>rni-ya</td>
<td>pi-rr-a</td>
<td>pi-l-ta</td>
</tr>
<tr>
<td>Lardil</td>
<td></td>
<td>ki-rr-i</td>
<td>ki-l-i</td>
<td>rni-ya</td>
<td>pi-rr-i</td>
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<tr>
<td>Alawa (free stems)</td>
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<td>wu-rr-u</td>
<td>wu-l-</td>
<td>rnu-rla (yi)-rr-</td>
<td>(yi)-l- (m)</td>
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<tr>
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<td>nani (masc)</td>
<td>p-(ana)</td>
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<td>nawu (m)</td>
<td>ba-rr-u</td>
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</tr>
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</table>

**Figure 1-5**: Some Non Pama Nyungan Cognates of Aberrant Tangkic Pronouns
whether, as the few languages cited here suggest, these pronoun forms are coextensive with the non Pama Nyungan languages. If we accept the generalization that pronouns are particularly immune to borrowing\textsuperscript{16}, the presence of these peculiar forms in the Tangkic languages may be seen as evidence (and possibly the only evidence) for a genetic link with non Pama Nyungan. Certainly it is unlikely that only these pronouns would be borrowed into Tangkic: if widespread borrowing were responsible we would expect other less basic lexemes to be borrowed first. Yet these pronouns are virtually the only words the Tangkic languages have in common with the non Pama Nyungan languages given above.

The alternation between dual \(-rr-\) and plural \(-/-\), which is shared with the Maran family and found nowhere else in Australia, is particularly impressive. This is exactly the sort of grammatical evidence that would justify a joint subgrouping, here subsuming the Tangkic and Maran languages.

1.2.3 Wider relationships: summary

The special features of the Tangkic languages appear to be the result of a number of influences. The basic lexicon and the form of a few inflections suggest affinities with the Pama-Nyungan family, particularly with the Nyungic group which lies to the southwest, separated by a number of non Pama Nyungan languages.

But there is also evidence for grouping Tangkic with non Pama Nyungan languages. The second and third person non singular pronoun forms have cognates in a large number of non Pama Nyungan languages, from Alawa and Ngandi in East Arnhem land to Iwaidja on the Arafura Sea to Ngarinyin, Wunambal, Kuniyanti and Bardi in the Kimberleys. And the alternation between dual \(-rr-\) and plural \(-/-\) appears to be a shared innovation of the Maran and Tangkic languages. This suggests that the Tangkic group are originally non Pama Nyungan languages, with closest affinities with the Maran family, and that they later underwent substantial Pama-Nyungan influence.

Finally, the tense-linked non-ergative constructions that we reconstruct for proto Tangkic may well have been an areal feature of languages south of the Gulf, as similar constructions are found in Kalkatungu and Pitta Pitta. But these

\textsuperscript{16}Heath's (1981) classic article on 'intense lexical diffusion' in Arnhem land mentions diffusion of nouns (including kin terms) and verbs, but not pronouns, although he makes no specific reference to this.
languages are otherwise so different from the Tangkic group that any genetic link is unlikely.

Needless to say, this picture is extremely tentative. Before it can be accepted as more than an interesting scenario it will require testing by more detailed lexical and grammatical comparisons with specific languages and with reconstructed proto languages, particularly proto Maran.

1.3 Traditional life

1.3.1 Physical setting

Within mythological memory the Kaiadilt have been isolated on their own group of small, low-lying islands in the southern Gulf of Carpentaria. Bentinck Island, the largest, is a mere 16 km across at its widest, and the total land area, including outlying reefs and sandbanks, is only 180 km². Mangrove flats, huge sand dunes and crumbly low cliffs enclose an interior of claypans, tidal estuaries and low-lying savanna woodlands. The highest point on Bentinck is 33’ above sea level. Sweers Island, four kilometres to the east, is smaller but higher, rising to 102’.

Contrasting with the barren landscape is a sea whose intricate topography of reefs and sandbanks supports a rich diversity of fish, turtle and dugong, and it is this abundance which sustained a population known to have reached 123 in 1942 (Tindale, 1962b). Tindale (1977) claims that the population density was ‘one of the highest known for a living stone tool using people dependent on foraging for their subsistence.’

Lying at the semi-arid margin of the monsoonal tropics, Bentinck Island receives some 33” annual rainfall, almost all between December and April. A fresh water lagoon at Nyinyilki and a few other waterholes hold out till September, after which water must be sought in soaks behind the sandhills. Water rather than food seems to have limited population growth, and many myths stress its importance. In one, thirsty men dig long and hard until finally Naikardarrawuru (‘the one with water lilies on his head’) emerges from the dry sand. He consents to give humans water, but only in exchange for their wives and daughters. In another, Rock Cod’s liver is cut to pieces and thrown onto rocks at the foot of a cliff on Sweers Island, where it becomes a perpetual spring.
Winds follow a regular seasonal pattern. In winter are cold dry south-easterlies, which often wash up dead but perfectly edible fish, known as *balkand*. In summer, monsoon bearing winds blow from the north-west; cyclones and ‘waterspouts’ are frequent.

During the monsoon the enormous volume of water discharged from the Gulf rivers sometimes turns the sea fresh\(^\text{17}\). In other years the north west monsoons driving into the Gulf may stack up the sea: in conjunction with *long* tides this can produce rises of nearly four metres. The disastrous results of this for the Kaiadilt are recounted in 1.4.

1.3.2 Food and hunting

Stretching around the rocky shores are ‘dozens of semi circular dams ... built of rocks of varying shapes and sizes, the whole naturally cemented together with the oysters that exist here in profusion. As the tide rises over the dam so the fish come in, to be left behind when it falls. By this simple yet very effective method of capture the natives secure all the fish they require’ (Roth 1908b). The original construction of these fish traps (*ngurruwarr*) is attributed to the mythical black crane Bujuku and Kaarrku the seagull. But older Kaiadilt recall building and maintaining them.

In the shallow estuaries fish were frightened, by clapping the water, into folding nets (*mijild*) woven from grass twine (*maibaa*). Creeks were blocked with grass dams and the fish poisoned by swishing mangrove bark (*jurrrkaa*) in the water. The women dug quantities of mussels from the exposed shoreline, and hammered oysters open with rock fist axes (*jilangand*) , flicking the flesh into a baler shell dish with timber oyster picks (*thawurr*).

The men spent long silent hours on reefs and sandbanks, waiting to spear the larger fish, the marine turtle, or the dugong. Wounded dugong were ‘wrestled’ - held under water until they drowned. Both dugong and turtle - grouped together by the superordinate term *kunbulk* (‘big game’)\(^\text{18}\) - yielded huge quantities of meat and if several were caught, messengers (*marrjinda dangkaa*) were sent to all

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\(^{17}\)So pronounced is this effect that the Macassans called the sea south and east of the Wellesleys *air tawar* ‘fresh water’ (Earle 1842).

\(^{18}\)Of course there are also many specific terms: at least fourteen for types of dugong, and eleven for types of turtle, as well as numerous words for special body parts.
corners of the island inviting everyone to share the feast. Such big animals were cooked in ground ovens (walk) dug in the sand, instead of on the coals like small fish.

The quest for 'big game’, turtle eggs and birds often led men across to the waterless outlying islands on walbu. rafts made from white mangrove or driftwood poles lashed together with bark rope (Roth 1908a). Sitting on a cushion of seaweed, with a baler shell or two of fresh water and a couple of spears propped beside them, they propelled themselves along with a mangrove root paddle or bilirr.

These rafts were used to transport families across estuaries, to nearby Sweers Island, and even to Allen Island twelve kilometres away. But they were not reliable enough to allow regular deliberate contact with the mainland which, although only eighteen kilometres distant, could not be seen from low-lying Bentinck Island. Harney (1946:124) reported meeting a Bentinck Islander on the mainland, who had been washed there by a storm, and Roughsey (1971) tells of two Bentinck men washed up on Mornington Island, where they were promptly killed. Memmott (MS) claims that Kaiadilt occasionally met mainlanders on Allen Island and heard about innovations like the dugong net. But whatever contacts there were, that did not end in death or exile, must have been separated by decades of isolation.

Although most food came from the sea and estuaries, and people spent most of their time there, the hinterland was far from neglected. Goannas and snakes were hunted all year round, and during the wet season birds and flying foxes were brought down with returning boomerangs. Wild figs (kirrik), mangrove fruit (thaminyrri), wild tomatoes (birrbari), pandanus fruit (kambud) prepared in a number of ways, water lily roots (barrngkaa) pounded into flour, bull rush heads (nardaa), wild yams (thawald), creeper roots, and swamp rush corms (damuru, ‘panja’ in Mornington English) were all gathered19. Ground nut and water lily sites belonged to women, as did their stories.

As on Mornington Island, a powerful taboo prohibited the cooking of land

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19 Nevertheless the relative unimportance of vegetable food is reflected in the lack of a word for it: wurand 'food' includes fish, shellfish, fruit, vegetables and can also be used for meat, although the term wurdalij 'muscle, meat' is more common with the flesh of turtle and dugong. This is unusual by Australian standards, but so is the low proportion of plant food in the diet.
foods, especially yams, on the same fire as sea foods, or the mixing of sea and land foods in one meal. A special verb, *markuriij*, describes the potentially fatal stomach illness (*mulgri* in Mornington Island English) which ensues. The fat of all land animals must also be washed from the body before entering the sea.

Land and sea each yielded important raw materials for artefacts. With incredible resourcefulness the Kaiadilt obtained everything from these few small islands: nothing was gotten by trade.

From the land came the hard woods used for spear heads, boomerangs, food pounders, digging sticks (*kathirr*), prong-ended throwing sticks (*iardiyali*) and sharpened clubs (*karwaa*). In the swamps grew the corkwood (*murdu*) used for spear shafts, and the hibiscus, whose bark was made into rope (*kurndulk*). Firesticks (*wijirri*) were cut from shrubs at the mangrove fringe (*biyald*): mud cockles (*thubald*) from the estuaries served as fish scrapers or wood planes. Baler shells (*rawaland*) were used as food and water carriers, and as scoops for well-digging; their shards were nibbled into serrated knives (*narraa*) or axeheads. Fish-bone hooks were not used — instead, bait tied to a line was gradually drawn in, enticing the fish to within spearing distance.

During the day the Kaiadilt sheltered under the casuarina trees growing just behind the beach. Night camp was usually pitched just above the next high tide mark. In the dry season they slept behind low circular windbreaks (*bankirri*) rolled from beach vines, warming their bellies with small fires. 'On normal cool nights when they felt the chill of heavy dews, and on occasions when mosquitoes were about, they tended to sleep sitting up, with legs folded, under a small grass tuft tied at the top to form a cone. They used a small smoky fire at the entrance for mosquito deterrence, or a somewhat warmer fire against the chill' (Tindale 1977).

However, the cool southerly trades of July and August and the monsoonal cyclones sometimes drove them back to the higher vegetated sandhills, where they dug pits which they covered with timber, bark and grass: 'we discovered in one instance a large hole, containing two apartments (so to call them), in each of which a man might lie down' (Flinders 1814:145).

The only clothing worn was the grass-string belt (*birrk*), used for carrying objects of fish, and also presented ceremonially to young girls on betrothal. A pubic tassel of leaves (*wirrild*) could be suspended from this during ceremonies. As elsewhere in Australia, red and white ochres were used in body decoration.
1.3.3 Social organization

The South Wellesley group was divided into eight territories, each claimed by a *dulmarra dangkaa* (‘land-having man’), whose permission was required before hunting or fishing on his land. Upon the death of the *dulmarra dangkaa* ownership passed to a brother or son by a sort of verbal deathbed will.

The Kaiadilt lacked named moieties, sections and subsections: in this they differed from their mainland neighbours and also from the Lardil (Sharpe 1935). They did, however, have patrilineal totems or ‘signs’ passed from father to children: these together with the birth-place name (3.6.1.3) and conception name constituted the principal means of personal identification. Among these totems were *bijarrb* ‘dugong’, *thuwathu* ‘rainbow’, *dibidibi* ‘rock cod’, *kulki* ‘shark’, *ngarrawurn* ‘bluefish’, *thandamand* ‘water spout’, *rukuthi* ‘casuarina’ and *walbu* ‘raft’.

Although their social organization was thus different from their neighbours, their kinship system was virtually identical. It is essentially an Aranda type system (Fox 1967), with the favoured marriage being between children of cross cousins. (Eligible partners were *bulmirr* [hair-good] ‘straight head’ and ineligible ones *bulbirdi* [hair-bad] ‘wrong head’). Once an appropriate marriage was arranged, the baby girl would be placed upon the bridegroom’s lap ‘in a ritual gesture of coitus’ (Tindale 1977), and thereafter be known as *wajiyangu* ‘promised one’ or *darrwaanda maku* ‘woman from the thigh’. Food and other gifts were due to her parents until she reached puberty when, if she had not been seduced or fought for by another man, she would go and live with her betrothed. Classificatory cross-cousins who were *warrawaand* ‘from a long way (by lineage) or even *nguthunguthu marrwawaand* ‘from a bit close’ could be married if no *wajiyangu* was available. Marriage of cross cousins was not allowed. The Kayardild kinship system is discussed in detail in Appendix B.

Despite the social ideals embodied in the kinship system, the more powerful elder men, who were already in a position to accumulate wives through widow inheritance, often took ‘wrong head’ wives (such as nieces) as well. Tindale

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20 So far I have been unable to determine the precise number of patrilineal totems, or their exact membership. The alert reader will notice that I have listed eight totems, equalling the number of territories, and it is possible that there was a one to one correspondence, but I have yet to establish this.
reports one man having twelve wives (10% of the total Kaiadilt population)! The more astute men won their younger brothers' support by 'lending' them a wife, but dissatisfaction was widespread and led to many fights and ambushes. On one occasion this caused two men to flee for Allen Island with two raftloads of wives and children (Tindale 1962b).

1.3.4 Ceremony, song and dance

Circumcision was carried out on young men as an admission to manhood (the Yukulta and Mingin of the adjoining mainland lay at the easternmost boundary of the circumcision and subincision rites - Tindale 1974). Kaiadilt stories depict circumcision as part rite of passage, part punishment for a misdemeanour known to be irresistible to young men: the spearing and cooking of young stingrays, reserved for the elders. Another story concerns a young man who ran away in fright from the circumcision ground (bundal). He was pursued, caught and speared to death, along with his mother. Ever since, boys have been more scared to flee than to stay. Despite his cowardice, his memory is venerated because his death ensured the smooth running of the 'law' (birrijilk).

As day dawned after all-night dancing, initiates were circumcized with a stingray barb, whilst lying on a 'table' (rulurulu) formed by the backs of two old women. (The Kaiadilt were very unusual, for Australia, in allowing women, usually older, to take part in this ritual.) Initiates could not speak until the excised prepuces (binthu), carried about by the old women in paperbark coolamons, withered 'like a dried apricot' and were buried. During this period they could communicate terse requests for food, drink, etc., to their guardians, using different numbers of pinches (baliyad), but there was no auxiliary language comparable to Damin on Mornington Island.

Most singing was not ceremonial but personal, delivered pianissimo while reclining on one elbow, in a style quite different from that found anywhere in Australia: 'sung in a constricted vocal manner, and ... quite unique in effect' (Moyle n.d.:3). Each individual had their own signature melody, to which new words were fitted as occasion demanded, often composed during the long silent

21 I have been unable to verify Tindale's (1977) claims that the Kaiadilt also practiced 'a form of subincision'.
vigils while waiting to spear fish, or 'dreamed' at night. Grammatically complex constructions are prized in these songs, which tell of the day's hunting, of omens, or recall dead relatives who passed on their craft skills or other knowledge.

Kaiadilt dance is equally distinctive. There is a single style, a stomp unaccompanied by any music but the stomping of feet and the exclamation (ht) uttered in time with the dance steps. Sometimes individuals, sometimes groups participate: although each dance is supposed to have a story this is difficult to discern. Lardil dance, by contrast, is highly imitative, and their varied repertoire of some 80 dances includes such scenes as wallabies being stalked, waterspouts, brolgas dancing, and waves washing against the rocks. The vast differences in song and dance are the most obvious cultural distinction between the Kaiadilt and the other Wellesley tribes.

As elsewhere in Australia, a name taboo applied after death (cf Nash & Simpson 1981): the name of the deceased was replaced by the term _murdinyi_. Interestingly, this term is shared with Garawa, but not with the other Tangkic languages.

Funeral ceremonies were simple. 'Bad people' were left unburied, others were laid in a grave (_kirribir_ or _rundurr_). For a few days after death, their spirits (_ngabay_) returned to slake their thirst from a bailer shell left beside their grave; soon after, they travelled to a lonely bay on Sweers Island called _kanduwa dangkaa_ 'blood person' (spirits were supposed to be red like blood). There they would importune people for a last meal of dugong or turtle before travelling on across the sea to _mawurru_ the spirit home in the east.

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22. But cf Memmott MS, page 66 'one dance did have a very simple format - the bush fire dance. Two men danced around supposedly causing a fire to start. They retreated and a line of women advanced representing the burning front of the fire. This two part sequence constituted the entire dance.'

23. Cf Meggitt (1962:322) on the Walbiri: 'the body of a man who had a reputation as an adulterer, thief or homicide may also be denied the dignity of a platform burial.'
1.3.5 Dating the alleged isolation of the Kaiadilt

Impressed by the apparent cultural and physical differences between the Kaiadilt, the Lardil and the mainlanders, Norman Tindale has suggested that 'the Kaiadilt have long been removed from the main currents of culture change in the rest of Australia' and that 'the ancestors of the Kaiadilt represent a type that has stood apart from the general flow of people who, over the last 50,000 years or more, have entered into Australia ...' (Tindale 1977).

A series of earlier studies had shown wide divergences in blood group (Simmons, Tindale and Birdsell. 1962; Simmons, Graydon and Tindale 1964; Curtain, Tindale and Simmons 1966) and in immunoglobin markers (Curtain et al. 1972) between the Kaiadilt, the Lardil and the Aborigines of the nearby mainland. The unusual features were not of the kind one would expect from European or Macassan admixture; rather, they were interpreted as 'presumably brought into the area by migrants from the early Southeast Asian Neolithic complex' in New Guinea (Curtain et al. 1972:152). As well as unusual blood group characteristics, most Kaiadilt infants have blond hair, which often persists into late puberty; 'in this respect the Kaiadilt resemble the innermost Western Desert people' (Tindale 1977:255).

If these considerable genetic differences could be used to date the isolation of the Kaiadilt, this would be highly significant for comparative Australian linguistics, which has been able to group and subgroup the languages of Australia and make quite detailed reconstructions of 'proto Australian' (Dixon 1980) or perhaps only 'proto Pama Nyungan' (1.2) without ever knowing whether these proto languages were spoken 4,000 years ago or 40,000 years ago. But if, say, the isolation of the Kaiadilt were set at 3,000 years (as implied by Tindale and his colleagues), comparison of their language with Lardil and Yukulta, which evolved almost completely independently, would allow us to calibrate a rate of lexical change suitable for Australian languages, to estimate the antiquity of proto Tangkic, and thence, more approximately, of proto Australian.

24 The main differences lie in the 40% frequency among the Kaiadilt of B group blood, which is virtually absent from the mainland, with the exception of a pocket in the Barkly tablelands, and in northern Cape York, where New Guinea admixture is evident. In addition, the A group blood type is absent in Kaiadilt, but occurs with high frequency in all mainland tribes, and in low proportion amongst the Lardil and Yangkaal.
Unfortunately, the genetic differences discussed above can plausibly establish a maximum, but not a minimum time depth, since it was the skewed nature of the original population, rather than any subsequent changes, that are largely responsible: ‘their gene frequencies, unique for Australian aborigines, have largely been produced by random genetic drift. This evolutionary force is considered to have had its largest impact in the initial migrant generation but to have continued on a later intergenerational basis’ (Simmons, Tindale and Birdsell, 1962; italics mine).

The maximum time depth, they argue, is set by the presence of the B group gene, which gradually diffused down from New Guinea from 4000 B.P. when the first dugouts crossed the Torres Strait. Allowing 500 years for this gene to reach the mainland opposite the Wellesleys, and hence the founding population, sets a maximum time depth of 3,500 years. This agrees with climatic evidence that the sea level in the Gulf of Carpentaria did not fall sufficiently to permit the colonization of the South Wellesleys until some 3500 BP.

But no minimum time depth follows from these facts, since the Kaiadilt could have migrated to Bentinck Island at any time after 3500 BP. So in the absence of genetic or climatic evidence, Tindale and his colleagues (1962, 1977) propose other arguments suggesting a long period of isolation.

The lack of a subsection system, for example, is taken as evidence for long isolation, since the Yukulta and Lardil have one. But other writers have argued (e.g. Meggitt 1962) that the subsection system has only diffused out from Central or Northwestern Australia in the last 100 years or so. The basic structure of the Kaiadilt kinship system is of the Aranda type, and virtually identical to that of Yukulta and Lardil (the latter is described in Hale 1982b). To me, the retention of this inherited Aranda system, despite the pressures for simplification that the small size of the population would have exerted, suggests a relatively short period of isolation.

Tindale also claims dramatic differences between the toolkits of the Kaiadilt and mainland tribes, but this has been disputed by Robbins (MS): in any case it could be due (as Tindale himself admits) to the unavailability of materials in the rather impoverished and totally isolated environment of the Southern Wellesleys.

The most significant cultural differences between the Kaiadilt and nearby
populations lie in their highly unusual song and dance styles. But there is no way of knowing how long these took to develop: it is likely that frequent killing off of the older people by famine and flood had removed the arbiters of cultural and linguistic tradition and accelerated the development of new styles. More than in literate communities, older people in traditional aboriginal societies are a repository of linguistic and artistic diversity, and of mythological memory. I believe that the precariousness of their survival in the South Wellesleys accelerated the process of cultural change, and led to the loss of a mythic record of how the Kaiadilt came to Bentinck.

The mainland people, on the other hand, do retain such myths: 'one hears stories of how the Wa:nji tribe caused some of the Yukulta people to flee to Bentinck Island and many informants say the Bentinck Islanders were originally Yukulta people. It is hard to know what time in history these stories refer to or if there is any truth in them' (Keen, 1972). It is also possible that the mysterious 'Nyangga' tribe, the coastal neighbours of the Garawa who the latter claim died out quite recently, were the ancestors of the Kaiadilt and Yangkaal: this is supported by certain Garawa/Waanyi loans in Kayardild (see below).

My own belief is that the Kaiadilt migrated to the South Wellesleys quite recently, probably in the last 500 to 1000 years. This is what traditional glottochronology would predict from the vocabulary differences: despite certain unusual developments, the language is essentially a co-dialect with Yangkaal and Yukulta, suggesting quite a short separation. The peculiar linguistic features of the Tangkic languages must therefore predate the physical differences between the Wellesley populations: the Kaiadilt and Yangkaal differ widely in their blood groups and immunoglobulin markers, but are very similar in grammar.

A final piece of evidence comes from the presence in Kayardild of two loans from Garawa and Waanyi which are not found in the other Tangkic languages: the 'no-name' term murdinyi and the 'actual' kin suffix -nganjii. The fact that these found their way into Kayardild but not Yukulta or Lardil (we cannot be sure about

25The Garawa say that originally the Nyanga tribe occupied the coastal region of this area, and the Yanyula tribe occupied the country west of Garawa and Nyanga land. After the Nyanga tribe died out, the Garawa occupied their coastal area and the Garawa and Yanyula tribes continued to live in harmony with each other. The acquisition of coastal areas brought new pursuits (such as dugong hunting) to the Garawa people, and as their language did not have a vocabulary appropriate to these new activities Yanyula words were taken into the Garawa language to make good this deficiency.' (Furby & Furby 1977:1)
Yangkaal) suggests that Kayardild was formerly the Tangkic language in closest proximity to Garawa and Waanyi. while the extremely low cognacy rate between all languages of the Tangkic group and Garawa/Waanyi implies that contact was only recent (and in fact the two etymons just mentioned are the sorts of items that would be borrowed first). If we infer that the Kayardild migrated to the South Wellesleys after this contact, this too implies a quite recent date of isolation.

1.4 Recent history

1.4.1 The early explorers

Although the Kaiadilt were the last group of coastal aborigines to come into full contact with Europeans (in 1948), they were afforded their first glimpses relatively early. In 1802 Mathew Flinders anchored off Sweers Island for lengthy repairs, and soon afterwards encountered a group of ‘Indians’ near Allen Island. Tindale (1962a) assumes these were Kaiadilt, but their possession of a wide-meshed net, probably a dugong net (which the Kaiadilt lacked), suggests they were not Kaiadilt but mainlanders or Forsyth Islanders (cf Memmott MS). Over the next few months Kaiadilt were seen on both Sweers and Bentinck Island, but they eluded further contact.

Before Flinders, it is likely that Macassans occasionally landed in the South Wellesley Islands, when the north-westerlies blew them beyond their usual destination in Arnhem Land. But the lack of Macassan influence on the Kaiadilt’s material and ceremonial culture, the lack of Macassan or Malay loan words, their unfamiliarity with the food, tobacco and pipes offered to them by later visitors like Roth (1901), and with the eating and preparation of beche-de-mer, plus the general unreceptiveness of the Kaiadilt to strangers, all...

26 These few pages cannot do justice to the colourful history of the South Wellesleys. Other accounts are in Tindale (1962a), Cawte (1973) and Dymock (1973) but the most thorough is Memmott (MS).

27 On Fowler Island Flinders saw a squared piece of teak and several skulls, and on Bentinck Island he saw stumps of at least twenty trees which had been felled with an axe, and the remains of an earthenware jar. 'He inferred that a ship from the East Indies had been wrecked within the previous two or three years, part of the crew had been killed and others might have gone elsewhere upon rafts constructed after the manner of the natives.' (Tindale 1962a). Tamarind trees seen on Fowler Island in 1866 (Landsborough, 1866) also suggest that Macassans camped there. Campbell MacKnight (1972) cites various accounts by Macassans, showing knowledge of the Wellesley Islands, called Pulona Tallumbatua (or, in Malay, Pulau Tiga) 'the three islands', Pulona I Salasa (‘Disappointment Island’ or 'Tuesday Island') or Je'ne Tattunggenga (‘Upside down water’).

28 None of the Macassan loans listed in Walker and Zorc (1981) have Kayardild cognates.
suggest minimal contact. This contrasts with the well-documented interactions of Aborigines and Macassans in Arnhem Land.

Following Flinders' visit, a number of other European vessels landed on Sweers Island, and a township, Carnarvon, was temporarily established there, soon growing to a place of some importance, with a hotel, store, Customs House, gardens, a steamer service to Burketown — and some 35 residents. Although there were some contacts, the Kaiadilt mainly kept to Bentinck Island. In 1870 Normanton was established on the Norman River, attracting away most of the population of Carnarvon, and within a few years the Kaiadilt were able to resume their traditional occupation of Sweers Island, now stocked with large herds of cattle, sheep and goats.

Around 1916, a certain McKenzie arrived on Bentinck Island, built a hut near the mouth of the Kurumbali estuary, and tried grazing sheep. He is still remembered by older Kaiadilt, who tell of him riding across the island with dogs, shooting any Aborigines he saw and causing at least 11 deaths. They also remember him abducting and raping young girls, who later gave birth to light skinned babies (Text 3). Later he moved to Sweers Island, where he ran sheep and goats and built a kiln for lime, which he sold around the southern gulf. When he eventually left, the Kaiadilt returned to Sweers Island, once more a rich hunting ground with its sheep and goats. One boy received the conception name thungalngumuru 'black goat' (Tindale 1962b).

1.4.2 The Mornington Mission attempts contact

For over 120 years the Kaiadilt had periodically lived within a few miles of Europeans, but had managed to escape substantial contact, and to live a completely traditional life. But in the 1920s the Mornington Island Presbyterian Mission began attempts at systematic and friendly contact.

Young Lardil couples were dropped off on Bentinck Island to spend their honeymoons making friends with the Kaiadilt (a vivid account is in Lardil man Dick Roughsey's autobiography 'Moon and Rainbow'). Several of the young Lardil, particularly Gully Peters and his wife Cora, were talented linguists, and already knew Yangkaal; they soon picked up some Kayardild. Various kin relationships were established at this time. This was done directly, without the mediation of the subsection system, which as we have seen does not exist among the Kaiadilt. For
example, Cora Peters was adopted as Willy Rujurujungathi's daughter, and hence as the sister of his son Darwin.

But by late 1927 the missionary, Rev. Wilson, decided to suspend these overtures, as the Kaiadilt had been stealing from the Lardil's camp. Once again the Bentinck Islanders resumed their traditional life, over their whole territory. During the 1920s their population, which had been badly reduced by McKenzie's murdering sprees, rose to about 120 (Tindale, 1962b). Whether or not this record population was the cause, conflict between groups intensified, with many men killed in ambushes as they came ashore at night. In 1940 Minakuringathi escaped from a fight by rafting to Allen Island with seventeen companions, three of whom drowned en route.

Between 1942 and 1945 the southern Gulf experienced severe drought, vegetable foods ran scarce, fishing was poor, and famine and fighting reduced the remaining population to 87. In 1945 Gully Peters, bringing gifts of dugong and water, persuaded a small party to visit Mornington Island for a month, and they returned impressed. Food problems continued, and in 1947 Mission Superintendent McCarthy found 42 more people camped on Sweers, near two large perennial wells, and evacuated them to Mornington.

In February 1948 those still on Bentinck were beset by another catastrophe, when a cyclone reached the Southern Wellesleys, causing widespread damage and stacking up the sea level. Low Bentinck Island was flooded, the sand wells were ruined, and the Kaiadilt were finally persuaded to move to Mornington Island.

1.4.3 On Mornington

At the Mornington Mission the Kaiadilt found themselves a despised minority, and for many years lived as a small closed community, dwelling in flimsy shelters on a beach facing towards Bentinck Island, begrudged the use of Lardil fishing grounds. The effects of stress and famine persisted for nearly a decade, and many died soon after reaching Mornington. At first all children were stillborn, or perished within weeks because their mothers could not give milk. Children and even teenagers were put straight into 'dormitories' where they were forbidden to speak their language — although it was used for preaching and converting. Departures from the expected European code of behaviour were rigorously punished— boys would be ridiculed by being forced to wear girls' clothing. Despite
attempts to match the Lardil and Kaiadilt kinship systems. Few married outside the small Kaiadilt community.

Tremendous psychological strains were produced by the combined effect of the crises on Bentinck Island, their unprepared contact with the outside world, the denial of their culture by the missionaries and by the Lardil, the stress of living on another group's land, and perhaps worst, the consistent insinuation that their beloved Bentinck was 'no good country', compared to 'rich' Mornington Island. Dr John Cawte, a psychiatrist who briefly visited Mornington in 1967 and wrote a book, 'Cruel, Poor and Brutal Nations', purporting to analyse the psychological problems there, labelled the Kaiadilt 'the sickest society' and speculated about possible genetic, constitutional and culture--internal causes. Cawte's claims are too complex and established$^{29}$ to be refuted satisfactorily here - I intend to do that elsewhere - but the factors mentioned above would seem sufficient to explain the depression he noticed among the Kaiadilt.

By the 1960s things began to improve. Bentinck Islanders had built new fishtraps near the mission, and their skill as hunters and fishermen was openly acknowledged. The young Kaiadilt proved themselves steady workers, and the children began doing well at school. By the time of my first visit in 1982 a disproportionately high number of teacher aides, high school students and school prizewinners were Bentinck Islanders, because 'never mind the B.I.s all come from myall country. all the parent bin bossem for go to school'.

However, the Kaiadilt remain much poorer than the other groups on Mornington Island, and until recently have lacked the means to return to their home country when they wish. In 1984 a community boat was at last obtained: an outstation has been proposed as a solution to the widespread fighting and alcoholism, and first steps in this direction have now been taken. But whereas all the Lardil's country lies in the 'self managing' shire of Mornington, only part of the South Wellesleys does, and the Queensland Government recently proposed (1982) that part of Sweers Island should be developed as a tourist resort. No

$^{29}$Cawte's study would not be worth mentioning, had it not spawned a series of increasingly sensational and inaccurate secondary articles. The title of one (Calhoun 1981) speaks for itself - 'Plight of the Ik and Kaiadilt seen as a chilling possible end for man'. It is full of such giddy leaps of inference as 'I could find no mention (in Cawte's book - N.E.) of laughter, normal or pathological. Perhaps the Kaiadilt don't laugh.'
tenders were received, but there is evidence that Sweers Island may yet be developed as a deep water port for phosphate brought by slurry line from Lady Anne mine 200 km south of Burketown. Needless to say, a large port on Sweers Island would completely undermine the purpose of outstations on Bentinck, as well as despoiling some of the Kaiadilt’s most sacred sites. A land claim has been filed.

1.5 The Kayardild language today

1.5.1 The linguistic milieu

The Kayardild language is being abandoned in favour of English with frightening rapidity, so that within less than forty years of substantial European contact there are no fully fluent speakers under forty five. Before we can understand this phenomenon, we must understand the overall linguistic and social position on Mornington Island. There are basically four groups of people on Mornington:

(a) The Lardil, who are the traditional owners and residents, and number about 500. Mission contact since 1919, and in particular the infamous ‘dormitory system’ that operated till the early 1950s, has severely reduced the number of speakers of Lardil. A full profile of the varieties of Lardil spoken by different age groups is impossible here, but the following oversimplified picture will give the reader some idea. Perhaps ten old people still speak Lardil fluently, but even they mostly use English. Those from forty to sixty-five know quite a bit of Lardil, often including a number of traditional songs, but their grammar is simplified, their vocabulary restricted, and language mixing is frequent: a typical utterance, combining Lardil, English and Kriol elements is *Hey thabu, I never savvy your binngen bin waa!* ‘hey brother, I didn’t know your wife had gone’. For those below thirty knowledge of Lardil is restricted to a few formulaic expressions like *kunaatha* ‘see you, goodbye’ and *nyingki waa* ‘hello’, basic lexicon (some kin and body part terms, taboo words like *dulda* ‘shit’, and some plant, animal and fish names), plus swear words like *ngamadaan* ‘mother fucker’. The types of English spoken by these various groups are summarized in 1–6.

(The table is of course very oversimplified. Most speakers use several of these in different registers; in general speakers use a form
close to SAE with Europeans, and a form close to 'Mornington English' with other Aborigines. Aboriginal speakers regard all four as varieties of 'English'; I do not want to tackle the question of their exact status as Pidgin, Kriol or Aboriginal English in this thesis.)

(b) About 100 'mainlanders' - Aborigines who have come to Mornington from a number of places, especially Ganggalida (Yukulta), Garawa and Waanyi people from the adjoining mainland, and Wik Munkan from Aurukun. Although some of these people still know traditional Aboriginal languages (particularly the Aurukun people), the internal fragmentation of this group, the small number of speakers of each language, their relative Europeanization (most paid jobs not held by Europeans are held by 'mainlanders') and perhaps their remoteness from their traditional territory, mean that the traditional languages of this group are peripheral to the linguistic network of Mornington Island. Most speak a form of Aboriginal English relatively close to Standard Australian English; with Mornington Aborigines they use 'Mornington English'.

(c) About 100 Europeans, who hold most of the paid jobs, wealth and power. All speak Standard Australian English; none speaks any Aboriginal language fluently, although most know a few of the Lardil words that have become part of Mornington English.

(d) The 150 Kaiadilt. Those over 55 speak fluent Kayardild; with non Kaiadilt they may use some English or Pidgin words. Those between 30 and 55 speak Kayardild with varying degrees of fluency, but are more at home in English, if younger, and a mixture of Kayardild and Pidgin, if older. The main activity domains where Kayardild is used are hunting, navigation, foodgathering and joking.

In general, young females have a much better command of Kayardild than young males (and an equal command of English), so that several women in their twenties can speak Kayardild quite well, while men commanding that degree of fluency are typically over 35. This reflects the differing social affiliations between sexes: males spend most of their time in peer group gangs, while females spend considerable time each day with the older women, and usually camp with the widows while menstruating\(^{30}\).

\(^{30}\) I am indebted to Penny Johnson for this insight.
**Language Variety** | **Speakers** | **Main Characteristics**
---|---|---
Standard Australian English (SAE) | Europeans, some mainlanders. | Most irregular English forms retained (e.g. 'I went'). Slow, careful delivery. Main phonological difference: devoicing of English /z/ e.g. [bisi] for [bizi]

'Mission English' – Aboriginal English close to SAE. | Mission educated Lardil (35-65) and Kaiadilt (35-45); some mainlanders | Kriol markers *bin* 'past', *-im* 'transitivity marker'; Kriol pronouns e.g. *minyu* 'we inclusive'. Segmental phonology like SAE, but distinctive intonation pattern. More rapid delivery than in 'Mission English'.

'Mornington English' (MIE): Aboriginal English with increasing Kriol influence. | Younger speakers, all Aboriginal groups. | Many lexemes from Lardil sets Kriol tense and transitivity markers, pronouns. Idiosyncratic calques into Pidgin of traditional words, e.g. *nose-woman* 'effeminate' from *K kirrmaku*.

'Pidgin' | Very old Lardil; Kaiadilt over 45-50 | Kayardild/Lardil phonology retained, e.g. *mawurndaji* for 'Mount Isa', *thistha* for 'sister, nurse'.

**Figure 1-6:** Varieties of English spoken on Mornington Island
Those below thirty all know some language (considerably more than their Lardil counterparts), and can carry on brief, joking conversations, with simplified grammar. Interestingly, very young children (under four) still learn Kayardild, but seem to abandon it once they become aware of their low social status as a ‘myall’ or ‘Bentinck dog’.

This milieu has created a peculiar sociolinguistic situation.

English of one form or another is the lingua franca, the primary prestige language, and the dominant language of all groups but the Kaiadilt.

Lardil, despite its dearth of fluent speakers, is the most prestigious and locally appropriate aboriginal language, and is the source of nearly all Aboriginal words in Mornington English. Speakers from all four groups will know at least some Lardil terms and use them in situations where Mornington English is suitable.

Kayardild is the numerically dominant aboriginal language, and heard daily by everyone on Mornington Island, but has a very low prestige. Although the Kaiadilt are often praised by other groups for ‘keeping their language strong’, there is virtually no one outside the Kaiadilt community who can speak it, and it has not contributed any words to Mornington English. Even young Kaiadilt, when speaking English, will use Lardil rather than Kayardild terms—when fishing, for example, they will use the Lardil term *libarn* ‘queenfish’ rather than the Kayardild *karwarrk*. Kayardild words are reserved for ‘Kayardild speaking’ language situations.

Besides the general low status of the Kaiadilt, the main social factor disfavouring the use of Kayardild is what might be called ‘local inappropriateness’. On my second expedition to Bentinck Island in July 1984, I was struck by a dramatic change in speakers’ abilities: the whole age profile of apparent fluency shifted downwards by about ten years, so that forty year olds, who on Mornington always ‘mix in’ English, suddenly began speaking Kayardild ‘straight through’, with exuberant fluency. It seems that, as elsewhere in Australia, language and land are

---

31 The remainder come from Kriol, e.g. *banji* ‘brother in law, distant kinsman’ (ultimately from English ‘fancy man’) or, in the case of a few seafaring terms, from the Torres Strait languages (e.g. *wap* ‘harpoon’).

32 Only one Lardil, Cora Peters, speaks good Kayardild, although a number know a few basic expressions. Her deceased husband, Gully, is said to have known the language ‘straight through’, preached in it every week, and seems to have introduced in this way several Christian religious terms into Kayardild, as extensions of existing phrases: *ngakinmaand* ‘our father, God’ (literally ‘begetter of us’); *mirraa ngunguk* ‘good news, the Gospels’ (literally ‘good story’).
inextricably interlinked: the appropriate locale allowed people to speak their language without the inhibition they feel on Mornington. If this is true, the establishment of an outstation on Bentinck Island would be the most effective step towards language maintenance.

1.5.2 Lardil and English influence on Kayardild

Despite the prestige of Lardil, its effect on Kayardild has been limited to the lexicon: particularly flora and fauna terms, implements, and some kin terms like yurrwardin ‘cross-cousin’ and nginngin ‘daughter’s daughter’. There is no evidence of grammatical influence, or even of borrowing of particles. Words that are borrowed typically have the ‘Mornington English’ rather than the traditional Lardil pronunciation — for example, Lardil dulnhu ‘month fish’, though phonologically quite compatible with Kayardild, has been borrowed as durnyu or even dunyu, which are the Mornington English pronunciations. Combined with the lack of grammatical influence, this suggests that borrowing has been indirect, through Mornington English, rather than directly from Lardil. This is quite understandable given the virtual absence of Kayardild-Lardil bilinguals from both communities, and the lack of opportunities to hear Lardil spoken.

Mornington English, with its many Kriol-like properties, has had more influence. The particles namu (< Eng no more) ‘negative’, baymbay (< Eng. bye and bye) ‘lest, might (unpleasant)’, marrbi (< Eng. might be) ‘perhaps, might (hypothetical)’, biniji (< Eng. ‘finished’) ‘do to completion’ and na (< Eng. ‘now’) are all used in most types of spoken Kayardild. Garra (< Eng. ‘gotta’) ‘got to, have to’ and bin (< Eng. ‘been’) ‘past’ are also common, though more characteristic of younger speakers. These particles are beginning to displace much of the modal case system and special verb inflections (6.7.3).

Word order, relatively free in traditional Kayardild, is in younger speakers predominantly SVO, and case marking of objects is being abandoned, although ‘semantic’ case suffixes are retained. These trends are all typical of Australian Aboriginal languages under English influence (see, for example, Schmidt (1985) on Dyirbal and Bavin and Shopen (to appear) on Warlpiri).

The adoption of English lexemes is also widespread, both with new entities like mani ‘money’, duug ‘dog’, jikuul ‘school’, bija ‘photo, film, camera’, and mijinari ‘missionary, priest’, and with entities for which Kayardild terms already
exist, like baya ‘fire’ (traditional Kayardild kaburrb). Often English loans and their Kayardild doublets will be juxtaposed for added force or humorous effect, and there are short-lived fads in which the two are compounded: for about a week in 1982, ‘fire’ was only referred to as kaburrba-baya or baya-kaburrb, always provoking great mirth.

1.5.3 New coinages in Kayardild

Some speakers consciously resist these influences, and display great ingenuity in coining Kayardild terms like dul-jawind [ground-runner] ‘car’, miburkurriind ‘mirror’ (literally ‘that by which the eye sees itself ’), and wadubayiind ‘tobacco’ (‘that by which the smoke is bitten’). Most new formations of this type are nominalizations: see 8.2.


1.5.4 Language variety described in this grammar

The variety of Kayardild described in this grammar is conservative, largely lacking in English influence. In Kayardild terms it is yulkaand ‘eternal, as it should be’, junku ‘straight’ and juldajuld [bone-bone] ‘strong, fluent’. Although the more Anglicized variety is interesting in its own right, the traditional variety is disappearing rapidly, is what the Kayardild themselves value most highly and wanted me to study, and is a necessary prerequisite to understanding the processes which are forming the modern variety. However, I have included scattered comments on more modern varieties.

1.6 Previous Investigations

The first European to record anything of a language in the South Wellesleys was Mathew Flinders in 1802, who describes the following ‘interview’ with a group of ‘Indians’ on Allen Island: (Flinders’ party and the islanders) ‘proceeded together, hand in hand’ towards Flinders’ boat, but ‘they stopped halfway, and retreating a little, the oldest made a short harangue which concluded with the word jahree, pronounced with emphasis; they then returned to the rafts, and
dragged them towards their three companions, who were sitting on the furthest rocks ' (Flinders 1814). The word Flinders noted was probably *jariija* 'run away'.

Roth (1901), on a visit to Bentinck and Sweers Islands, made fleeting contact with the Kaiadilt, and also noted two words spoken by an old woman: 'the subject of abject terror, she talked, yelled and gesticulated, every now and then pointing in a direction where we subsequently found the preceding night's camp, with the words "parra huli, parra huli." rapidly repeated, the aspirate (unusual in the North Queensland vocabularies known to me) being distinctly articulated' (Roth 1901:505-6). None of my informants recognize these words, and there is no aspirate in Kayardild: the most likely utterance is *bada yullij* 'try in the west' as she warned her countrymen. The initial *y-* in this environment is often reduced to a hiatus and could have been heard as an aspirate.

The most important work on the Kaiadilt has been the series of studies by Norman Tindale. Although they primarily focus on ethnography and population genetics, they contain a large number of Kayardild words, transcribed reasonably accurately: place names, personal names (he gives a complete genealogy of the Kaiadilt from early this century to 1960), various social terms, and names for a number of implements. He has also collected a number of texts and songs, including the only extant text in Yangkaal (Appendix F). Tindale is continuing to work on Kayardild ethnography and myth.

Others who have investigated aspects of Kaiadilt culture are Paul Memmott, who has compiled a detailed material culture checklist, Alice Moyle who has recorded a number of songs, and Frank Woolston who has published some Lardil and Kayardild botanical terms (Woolston 1973).

Stephen Wurm spent two months working on Kayardild in 1960, and made a comprehensive series of tapes exemplifying most aspects of Kayardild grammar. Both Wurm (1972) and other investigators (O'Grady, Voegelin and Voegelin 1966) make occasional references to this data, but no detailed analysis was ever undertaken.

Hale, although primarily interested in Lardil, also made field notes on Kayardild and Yangkaal, providing the only grammatical information we have on that dialect. Keen, in her grammars of Yukulta (1972, 1983), points out the mutual intelligibility between Yukulta and Kayardild, but gives no examples of the latter.
Wurm, Tindale, Memmott and Hale generously made their field notes and tapes available to me: without their help many half-forgotten areas of grammar and vocabulary would certainly have passed me by.

1.7 Overview of phonology

This section introduces those features of the phonology essential to understanding the morphology and syntax. A fuller treatment is in Appendix C.

1.7.1 Phoneme Inventory

Kayardild's phoneme inventory, comprising 17 consonant and six vowel phonemes, is displayed in 1-7 where they are classified by place and manner of articulation. Typically for an Australian language, there are parallel series of stops and nasals, each with six points of articulation. Following the usual Australianist conventions (e.g. Dixon 1980) these series are called bilabial, apico-alveolar, apico-postalveolar (retroflex), lamino-dental, lamino-palatal and (dorso)-velar. Stops are generally voiceless after sonorants and voiced elsewhere, except that /th/ and /k/ tend to a voiceless realization in all positions.

For typographic convenience, and to make this material more accessible to non-linguists, a practical orthography using only roman symbols is adopted throughout this thesis, except for those parts where strictly phonetic differences are being discussed. This practical orthography is essentially that advocated in Dixon (1980), with voiced symbols, save that:

(i) The velar stop is represented by k, to avoid confusion between the velar nasal (ng in this orthography), the velar nasal plus stop cluster (written ngk) and the apical nasal plus velar stop cluster, written nk.

(ii) The dental stop is written th, at the suggestion of Kayardild speakers literate in English.

(iii) To avoid cumbersome strings of digraphs in homorganic nasal plus stop clusters, the symbol /n/ is used before /th/ and /j/ as well as before /d/: phonemic /nth/, /nj/ and /nd/ thus give orthographic nth, nj and nd. As the contrast between the above nasal phonemes is neutralized in these positions, no phonemic distinctions are lost by this convention.

(iv) Vowel length is represented by double letters, e.g. phonemic /a:/ is orthographic /aa/.
(v) retroflexion is not contrastive initially and is not marked.

(vi) the phonemic sequence /4d/ is written /rd/ to distinguish it from phonemic /d/, written /rd/ non-initially.

Following the phonological feature analysis proposed by Dixon (1980), the points of articulation may be grouped into three pairs: *peripherals* (bilabials and velars), *laminals* (interdentals and palatals) and *apicals* (apico-alveolar and apico-retroflex). A number of phonotactic and morphophonemic generalizations make use of these natural classes.

In addition to the stop and nasal series, there is an apico-alveolar lateral, two rhotics (a trill /rr/ and a retroflex approximant /r/) and two semi-vowels.

There is a simple triangular vowel system with a length distinction.

The exact phonetic values of these segments are discussed in Appendix C.

**CONSONANTS**

<table>
<thead>
<tr>
<th>bilabial</th>
<th>apico-alveolar</th>
<th>apico-postalveolar</th>
<th>lamino-dental</th>
<th>lamino-palatal</th>
<th>dorso-velar</th>
</tr>
</thead>
<tbody>
<tr>
<td>stop</td>
<td>b</td>
<td>d</td>
<td>rd</td>
<td>th</td>
<td>j</td>
</tr>
<tr>
<td>nasal</td>
<td>m</td>
<td>n</td>
<td>rn</td>
<td>nh</td>
<td>ny</td>
</tr>
<tr>
<td>lateral</td>
<td></td>
<td>l</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>rhotic</td>
<td>l</td>
<td>rr</td>
<td>r</td>
<td></td>
<td></td>
</tr>
<tr>
<td>semi-vowel</td>
<td>w</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**VOWELS**

<table>
<thead>
<tr>
<th>front</th>
<th>back</th>
</tr>
</thead>
<tbody>
<tr>
<td>high</td>
<td></td>
</tr>
<tr>
<td></td>
<td>i , ii</td>
</tr>
<tr>
<td>low</td>
<td></td>
</tr>
<tr>
<td></td>
<td>a , aa</td>
</tr>
</tbody>
</table>

**Figure 1-7:** Kayardild phonemic inventory
1.7.2 Prosodic truncation of final /a/

Word-final short /a/, phonetically schwa, disappears before planned pauses at the end of a breath group. In the following example two words, each ending in phonemic /a/, are repeated in different orders with a pause after each two-word group. The final /a/ of each pause group is dropped, indicated here by "_":

1-1 jirrkur-ung-ka thaa-th_, thaa-tha jirrkur-ung-k_
   north-ALL-NOM return-ACT return-ACT north-ALL-ACT
   (They) came back to the north, to the north (they) came back.

The appearance or disappearance of /a/ depends entirely on the placement of pause. The above phrase may be expanded to include a final overt subject, which protects other words from truncation but suffers truncation itself:

1-2 jirrkur-ung-ka thaa-tha bithiin-d_
   north-ALL-NOM return-ACT man-NOM
   The man came back to the north.

Among voluble speakers the pause group may be quite extended, but only the final /a/ is dropped:

1-3 ngijin-da kajakaja dan-da ra-yin-da dali-j_
   my-NOM daddy(NOM) here-NOM south-FROM-NOM come-ACT
   Here comes my daddy from the south.

/a/ is likewise retained before unplanned pauses, notated here by "--", where the speaker halts unexpectedly through distraction or forgetting a word. Such interrupted pause groups also lack the characteristic raised 'suspense' or lowered 'definitive' intonation contour, and are often followed by a glottal stop as phonation abruptly ceases:

1-4 dan-da ra-yin-da  [drento\'\'z\'ind\'a?]  
   here-NOM south-FROM-NOM
   Here from the south --

Alternatively each word may be paused after (as when speaking to an uncomprehending linguist, or adding afterthoughts), and accordingly suffers truncation:
To the north, (he) came back, the man.

Because pause cannot be made before clitics, between the elements of compounds, or between affixes within a word, word- or morpheme-final shwas are always protected in these contexts:

<table>
<thead>
<tr>
<th>Form pronounced in isolation</th>
<th>Protected form</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>wirdi-j</strong> stay-ACT stays</td>
<td><strong>wirdi-ja=d</strong> stay-ACT=SAME still stays</td>
</tr>
<tr>
<td><strong>kirrk</strong> nose(NOM) 'nose'</td>
<td><strong>kirrka-miburl-d</strong> nose-eye-NOM 'face'</td>
</tr>
<tr>
<td><strong>bijarrb</strong> dugong(NOM)</td>
<td><strong>bijarrba-nth</strong> dugong-OBL</td>
</tr>
</tbody>
</table>

Morphological statements are thus greatly simplified if the protected form is taken as basic, especially since the choice of following allomorphs may be conditioned by the presence of stem-final /a/: in the last example the allomorph -ntha is selected after a non-front vowel; similarly the allomorph -da of the clitic (-ida) 'SAME' is selected by a preceding non-front vowel.

Because of this, and because schwa-drop depends on utterance-specific intonation, in turn partly determined by syntagmatic properties of phrase structure, I treat it as a prosodic boundary marker. For the rest of this grammar I will write lexemes and morphemes with final /a/, but write as heard individual utterances and forms illustrating phonetic points. (Up till now I have not written in final /a/, to make comparison with existing sources easier for non-linguist readers.) Along with conventional punctuation this provides some of the prosodic information so badly under-represented in segmental notation.

This analysis is suitable for traditional Kayardild, but there are signs that for younger speakers schwa-drop is being reinterpreted from prosody to morphophonemic process. As the truncation prosody affects words pronounced in isolation, citation forms lack final /a/. Probably because of this, younger speakers (the only ones literate in English) prefer dictionary entries to be made without final schwa, e.g. **wirdij 'stay'** rather than **wirdija**. A few words have been re-segmented on the pattern of the citation form, so that the OBLique form of kunawuna 'child' is **kunawun-inj** among younger speakers instead of the older speakers' **kunawuna-nth** (3.2).
1.7.2.1 Phonemic lengthening of preceding vowel after truncation

The (underlyingly) penultimate vowel of some suffixes is lengthened when prosodic truncation leaves them as the final syllable of a breath-group.

An example is the ORIGin suffix (-w(a)n-). *dulwanda yarbud(a)* [earth-ORIG-NOM snake-NOM] ‘earthworm’ is phonetically *[dɔlwe ntajvd paʊ]*, with no lengthening. but inversion of the word order gives *yarbuda dulwaand* [jaŋpɔda ɻlwaː ntl]. with lengthening of the final syllable. As far as I can tell these length alternations are lexically conditioned: they are therefore discussed under the appropriate suffix.

1.7.3 Morphophonemics

Morphophonemic changes in Kayardild are very limited, and do not obscure the basically agglutinative structure of the language. There are five basic types of morphophonemic change, summarized in 1-8. The only ordering restrictions are that Nasal Assimilation must precede all other changes (1.7.3.1) and that lateralization must precede cluster simplification.

1. Nasal assimilation (a) Progressive, of laminal stops
   (b) Regressive, of /w/

2. Lateralization

3. Delaminalization

4. Feature blend

5. Cluster simplification (a) Loss of nasal segment
   (b) Loss of other segment

Figure 1-8: Morphophonemic changes in Kayardild

Apart from laminalization, the above morphophonemic changes only take place when a phonotactically unacceptable consonant sequence (Appendix C) would otherwise arise. In other words, phonotactic constraints double as conditions on morphophonemic rules: they should be borne in mind throughout this section.

Because all verbal roots and derivational suffixes are vowel final, and vowel-final suffixes neither cause the violation of phonotactic constraints nor trigger laminalization, morphophonemic changes in Kayardild are confined to nominals (although these may then be verbalized in a number of ways). Within the nominal class, inflection, derivation, compounding and reduplication all trigger identical morphophonemic changes, and examples will be drawn freely from all four types.
1.7.3.1 Nasal assimilation

This may be progressive or regressive, depending on the position of the nasal segment and the type of non-nasal segment.

1.7.3.2 Progressive glide to nasal assimilation

Suffix initial /w/ assimilates the nasality of preceding apical nasals, becoming /m/:

- Xinyin- 'body' + -warri 'PRIV' —> Xinyinmarri 'non-existent'
- dan- 'here' + -waalu-th 'VEVIT-ACT' —> danmaaluth 'here-VEVIT-ACT'
- ngijin- 'my' + -warra-a-n-ngarrb 'go-DT-N-CONS' —> ngijinnarraannngarrb 'gone to by me'
- ngarn- 'beach' + -waand 'ORIG' —> ngarmmaand 'from the beach'

Where the preceding nasal is a velar, cluster simplification takes place (1.7.3.8).

Sequences arising from reduplication do not assimilate: wakirin-wakirinda 'carrying coolamons under their arms'. This is an exception to the generalization that derivations, inflections, compounds and reduplications all trigger the same morphophonemic changes.

1.7.3.3 Regressive assimilation of nasality of final stops

Morpheme-final stops (which must be laminal by phonotactic constraints) assimilate in nasality before stem-initial /m/ or /ng/ (i.e. the peripheral nasals). Regardless of whether the underlying stop is palatal or dental, the palatal nasal /ny/ results:

- yarbunTH- 'snake' + -ngarrba 'CONS' —> yarbunynyangarrba
- ngij- 'wood' + -marutha 'Verbal Dative' —> ngingmarutha

An optional subrule simplifies the cluster /nyng/, generated by this rule, to -ny-. Thus we may have yarbunynyangarrba or yarbunyarrba, and ngingyangarrba or ngingyarrba.

Before other nasals the relevant segment is lost by 'cluster simplification' (1.7.3.8).

---

33This rule is not found in Yukulta or Lardil, where glides may follow nasals across a morpheme boundary: Yukulta kinyin-warri 'having a bad shape', Lardil maarn-werr (spear-PRIV) 'spearless'.
34In fact, stem-final /k/ is also possible; this disappears before all nasals, through 'cluster simplification'.
1.7.3.4 Regressive assimilation of place of articulation of stem-final /ng-/.

Apical nasals may be followed by a stop at any point of articulation (1.7.3.8). But /ng/, the only other nasal that can occur morpheme-finally, may only precede /k/. Where it would precede a heterorganic stop, it assimilates to the relevant point or articulation. Examples are:

kujurrung- 'exposed sandbank' + -balada 'LOTS' —> kujurrumbalada 'lots of exposed sandbanks'
nang- 'language' + juldajulda 'correct' —> kanyjuldajulda 'correct speech'

The same applies to reduplications, e.g. burrumburrungka (place name).

I have no examples of what happens when velar /ng/ would precede an apical or interdental.

1.7.3.5 Lateralization

The sequence $n-r$ becomes $l$:

nganikin- 'yon' + rilungka 'east-ALL' —> nganikililungka
'syonder to the west'
birgin- 'do badly' + raa-ja 'spear' —> birdlalaaja 'spear'
kabin- 'low tide' + ru-tha 'FACTitive' —> kabirutha 'wait for low tide'.

Historically the morpheme-initial /r/ in these examples was once /l/; the preceding /n/ was lost by cluster-simplification. Yukulta preserves initial /l/ in all these morphemes.

1.7.3.6 Delaminalization

There exists in Kayardild (and in all languages of the Tangkic subgroup) a regular alternation between stem-final apico-alveolar /d/ and lamino-dental /th/ or lamino-palatal /j/. The apical is found before the NOMinative suffix -a; the laminal elsewhere.

Examples of /d/ alternating with /th/ are:

<table>
<thead>
<tr>
<th>Stem</th>
<th>Label</th>
<th>Stem</th>
<th>Label</th>
</tr>
</thead>
<tbody>
<tr>
<td>bad-a</td>
<td>[west-NOM]</td>
<td>bath-in-da</td>
<td>[west-FROM-NOM]</td>
</tr>
<tr>
<td>ngirrngud-a</td>
<td>[fly-NOM]</td>
<td>ngirrnguth-inja</td>
<td>[fly-OBL]</td>
</tr>
<tr>
<td>yarbud-a</td>
<td>[snake-NOM]</td>
<td>yarbuth-u</td>
<td>[snake-PROP]</td>
</tr>
<tr>
<td>nith-i</td>
<td>[name-LOC]</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Examples where /d/ alternates with /j/\(^35\) are:

- ngid-a [wood-NOM] ngij-inja [wood-OBL]
- warngid-a [one-NOM] wargiij-u [one-PROP]
- miid-a [lobster-NOM] miiij-u [lobster-PROP]

Preceding /i/ or /ii/ is a necessary but not a sufficient condition for palatalization — cf nid- ‘name’ which does not palatalize but dentalizes. I therefore assume that the choice between dentalization and palatalization is (at least partly) morphologically conditioned.

There are two reasons for taking the laminal forms as basic:

(a) the apico-alveolar stems (e.g. nid-, ngid-) can be predicted from the laminal forms (nith-, ngij-) but not vice versa.

(b) The laminal forms occur in a wider range of phonological environments that the apicals: in addition to appearing before high vowels, the laminal forms are found before stops and nasals (with the difference that the palatal form is always used here). Progressive assimilation of nasality (1.7.3.1) is fed by the laminal forms, as in the last three examples below:

- yarrad- 'another' + -balad 'LOTS' yarraj-balad 'many more'
- biriid- 'father' + -balad biriiij-balad 'many fathers'
- marrkad- 'soft' + REDUPLICATION marrkanymarrkad 'swamp weed sp.'
- yarbud- 'snake' + ngarrba 'CONSequential' yarbunyngarrba 'because of a snake'
- miid- 'louse' + muthanda 'XS' miinymuthanda 'lousy / lice-ridden person'

In Yukulta, underlying lamino-dentals retain the dental articulation when nasalized. For example the 1st singular nominative pronoun ngada 'I' (underlyingly ngath-) may be followed by the 'stative' clitic -ma-, giving the sequence nganh-ma (Keen 1983:228).

When discussing morphology, underlyingly laminal segments will be written with capitals, e.g. ngij- 'wood', nith- 'name'.

---

\(^35\) A full list is in Figure 3-2.
1.7.3.7 Feature blends

Banned clusters involving a laminal stop plus a bilabial glide, give rise to the following feature blend:

\[
\text{Stop}\langle +\text{Laminal}\rangle + \text{Glide}\langle +\text{Peripheral}\rangle \rightarrow \text{Glide}\langle +\text{Laminal}\rangle
\]

(i.e. /th/+/w/ or /j/+/w/ \rightarrow /y/)

Examples are:

yarbuTH- 'snake' + -warri 'PRIV' \rightarrow yarbuyarri 'without snakes'

warngiiJ- 'one' + -warri 'PRIV' \rightarrow warngiiyarri 'without one'

1.7.3.8 Cluster simplification

Any banned clusters that have been bypassed by the above rules are subject to a global rule of cluster simplification, which deletes the penultimate segment in the cluster. (This is always the last segment before the morpheme boundary).

Some examples are:

lkng \rightarrow lng

wangalk- 'boomerang' + -nguni 'INSTR' \rightarrow w angular

lkw \rightarrow lw

wangalk- + -warri 'PRIV' \rightarrow w angularwarri

rrkw \rightarrow rrw

rirrk- 'grease' + -waand 'ORIG' \rightarrow rirrwanand

rrl \rightarrow l

minbarr- 'wound' + -lu-tha 'FACT-ACT' \rightarrow minbalutha

Jn \rightarrow n

ngiJ- 'wood' + -nurru 'ASSOC' \rightarrow n ginurru

kn \rightarrow N

kirrk- 'nose' + -maru-tha 'Verbal Dative' \rightarrow kirm arutha

bik- 'side of body' + -ngarrba 'CONS' \rightarrow bingarrba

ngr \rightarrow r

thathung- 'together' + -ru-tha 'FACT-ACT' \rightarrow thathurutha

ngw \rightarrow w

wumburung- 'spear' + -warri 'PRIV' \rightarrow wumburuwarri

There is a single exception involving /ngw/. kang- 'language' plus -wuia 'give' may be compounded, giving the meaning '(be permitted by one's kin relationship to) converse with'. The resultant compound may be kanguia or Kawuja; i.e. either segment may be retained, but not both.

CC \rightarrow C (Degemination)

wumburung- 'spear' + -ngarrba 'CONS' \rightarrow wumburungarrba
The sequence /rn-n/ is also exceptional, in that the second segment is lost: e.g. ngarn- 'beach' plus nurru 'ASSOC' gives ngarnurrurru, not nganurrurru.

Cluster simplification does not occur with English loans. Adding the PRIVative inflection -warri to the loan tomahawk, for example, gives tomahawkwarri, with the banned cluster kw.

1.7.3.9 Note on rule ordering

This rule must be ordered after the assimilation rules, as it is far more powerful than them. If applied before progressive glide to nasal assimilation, for example, it would eliminate the nasal before this could affect the following /w/, giving *kinyiwarri rather than kinyinmarri (cf 1.7.3.2). If applied before progressive nasal assimilation, it would eliminate the underlying laminal before this could be nasalized, so that in place of nгинy charms, for example, (see 1.7.3.3) we would get ngimarutha.
2.1 Word classes and phrasal categories

2.1.1 Parts of speech

For Kayardild five major ‘word classes’ or ‘parts of speech’ may be set up, based on the suffixing possibilities of each word. These are mutually exclusive; each root belongs to just one class.¹ A number of derivational processes produce stems of one class from roots of another; those deriving nominals from verbals are discussed in 8.2, and those deriving verbals from nominals in 5.5. 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

¹There is one exception to this, discussed below.
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 (6.7).

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.

2.1.1.1 The nominal class

Several subclasses must be distinguished within the nominal class.

As in 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 4.4.2. Noun/adjectives may also function as 'nominal predicates' in verbless clauses (6.1.7) and as 'second predicates' (6.4), 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 4.1.

*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 *duklalarri* '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 4.3.2.

*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 6.5.

2.1.1.2 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 (5.10). A few verbal lexemes only permit the modifier function: thus bakilia 'all S do: do to all O' can only function as a modifier within the VC, never as a head.
2.1.1.3 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 6.7. They may have phrasal or sentential scope.

2.1.1.4 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.

2.1.1.5 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.

2.1.2 Lexical and phrasal classes

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)².

Verb complexes (VCs) comprise one or more verbal words, agreeing in ‘final inflections’ (5.2).³

Their internal composition apart, a word and its corresponding phrase type are in most cases syntactically equivalent: in the vocabulary of Jackendoff’s (1977)
X-bar theory. phrase types are 'projections' of 'lexical categories'. Accordingly, I deal with nominals and noun phrases together (Chaps 3 and 4), and verbals and verb complexes together in Chapter 5. Phrase structure is discussed at the end of Chapters 4 and 5.

However, two important differences between words and phrases must be emphasized: the restriction of 'derivational' morphology to words, and the existence in Kayardild of certain phrasal inflections that change the word-class membership of their constituents.

2.1.2.1 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.'

Regardless of its usefulness with other Australian languages, the followability test is not suitable for Kayardild, which allows extensive multiple inflection, with sequences of up to four case-like inflections - see 2.4.

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-FUT hit-FUT].

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 (6.1.8). 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 scope will be taken as the crucial test distinguishing inflection from derivation. This allows us to handle the multiple inflection discussed in 2.4. 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 inflections may be used derivationally, in which case their scope is limited to the word.

2.1.2.2 Inflections changing word class

Two types of inflection change word class without changing phrasal class.

*Verbal cases* are morphologically verbal 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'.

2-1 ngada waa-ju wangarr-u ngijin-maru-thu thabuju-maru-thu
I:NOM sing-FUT song-MPROP my-V.D-FUT elder brother-V.D-FUT
I will sing a song for my elder brother.

The range and use of verbal cases is discussed in 3.4.

Nominalizer suffixes have a range of uses. One is to mark ongoing uncompleted actions. Although nominalized verbs in this function have the same syntactic possibilities as other finite verbs, 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.).

2-2 nyingka kurri-n-da warra-n-da wirdi-n-d
you:NOM see-N-NOM go-N-NOM stay-N-NOM
You're going around to see (people) a lot.

(See 2.4.5 for examples of nominalized verbs bearing non-nominative case inflections.)

Although the changing of word-class membership is considered by most linguists to be limited to derivational morphology (e.g. Anderson 1982), both 'verbal case' and 'present tense nominalization' display the criterial inflectional characteristic of applying to whole phrases: to the NP ngijinda thabuju 'my big brother' in (2-1) and to the VC kurrija warraja wirdija 'keep going to see' in (2-2). In this grammar they are therefore treated as inflections, although they have the peculiarity that they change the 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 3.4 and 8.5.3.

2.1.2.3 Lack of exact fit between word class, phrasal category, and logical function

The existence of inflections that change word class produces a lack of exact fit between phrasal category and word class: even though the unmarked case is for NPs to be made up of nominals, and VCs to be made up of verbals, we can have NPs made up of verbals and VCs made up of nominals:
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 other Australian languages (e.g. Yolngu (Morphy 1983) and Warlpiri (Hale 1982)) the possibility of using nominals as predicates in 'nominal sentences'. There is even a small set of nominals, mostly referring to states, that may be described as 'transitive' or 'middle': the noun/adjectives mungurru 'know, knowing' and burdumbanyi 'ignorant', for example, take quasi direct objects, and mulurra 'jealous' takes a quasi indirect object (6.1.7). However, it is not possible for verbals to act as arguments (without undergoing some derivational process). This gives us the following picture:

<table>
<thead>
<tr>
<th>Logical function</th>
<th>Word class / phrasal category</th>
</tr>
</thead>
<tbody>
<tr>
<td>argument</td>
<td>nominal (NP)</td>
</tr>
<tr>
<td>predicator</td>
<td>verbal (VC)</td>
</tr>
</tbody>
</table>

How these inexact correspondences between word class, phrasal type and logical function would be handled by a formal theory of grammar need not concern us here, although it seems likely they would pose considerable difficulties. What is important is that a terminological distinction be maintained between logical function (argument, predicator), phrasal category (NP, VC) and word class (nominal, verbal).

2.2 Word order and ellipsis
2.2.1 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.

2-1 presents word order counts taken from seven narrative texts (including the six in Appendix F): repetitions and subordinate clauses were ignored in the count. Ellipsed arguments are given in brackets, arbitrarily placed before non-ellipsed ones.

<table>
<thead>
<tr>
<th>Transitive sentences (N=68)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>SVO 4 (5.8%)</td>
<td>(S)V 14 (20.6%)</td>
</tr>
<tr>
<td>SOV 4 (5.8%)</td>
<td>(S)OV 17 (25%)</td>
</tr>
<tr>
<td>OSV 1 (1.4%)</td>
<td>(O)SV 7 (10.3%)</td>
</tr>
<tr>
<td>OVS 5 (7.3%)</td>
<td>VOS 1 (1.4%)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Intransitive sentences (N=67)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>SV 34 (50.7%)</td>
<td>(S)V 27 (40.3%)</td>
</tr>
<tr>
<td>VS 6 (8.9%)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Middle sentences (N=5)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>(S) IO V 3 (60%)</td>
<td></td>
</tr>
<tr>
<td>(S) V IO 1 (20%)</td>
<td></td>
</tr>
<tr>
<td>VS IO 1 (20%)</td>
<td></td>
</tr>
</tbody>
</table>

Figure 2-1: Word order counts for Kayardild texts

2-1 illustrates the high incidence of 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

---

4 This is a common feature of 'non-configurational' languages. See Hale (1983).
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')\textsuperscript{5}. It also illustrates the 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 in 2-1), 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. This is discussed and exemplified in 9.5.

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:

2-3 barrbiru-tha manharr-iy, kiyarrng-ki kamarr-i wuu-j, bala-tha ngad I:NOM
raise-ACT torch-MLOC two-LOC stone-LOC put-ACT hit-ACT

(1) 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 postverbal position.

2-4 rabi-ja niya warngiid-a barrngka-a niwan-ji nal-i, get up-ACT he(NOM) one-NOM lily-NOM him-LOC head-LOC wanjii-ja ni , kamburi-ja ni go up-ACT he(NOM) say-ACT he(NOM)

He stood up, with a water lily on his head, he went up, and said:

Within both NPs (4.4) and 'Verb complexes' (5.10) word order is relatively fixed. This is discussed in the relevant sections.

Finite subordinate clauses are normally adjoined, preceding or following the main clause (Ch. 9). But they are occasionally embedded, particularly when coding purpose or parenthetical clauses. In such cases all words of the adjoined

\textsuperscript{5}When I was first working on the language and failed to understand a sentence, certain speakers would systematically permute the word order for me.
clause are contiguous, and are easily identifiable from the presence of ‘complementizing case-marking’.

2.2.2 Ellipsis

Despite its lack of cross-referencing, Kayardild is characterized by frequent ellipsis. Any participant whose identity has already been established can be anaphorically ellipsed.

The identity 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 c. 120 people). This opening sentence from Dugal Goonjarra’s telling of the Rock Cod story at least contains a pronoun, albeit one whose reference is never made explicit:

2-5 mildala-tha ni
cut out-ACT he
He (Rock Cod) cut it out ...

But in (2-6), again an opening line of a myth (this time the Kajurku story, also told by Dugal Goonjarra), no such concession is made:

2-6 rayin-da thula-tha tharda-a manharr-u, from south-NOM go down-ACT shoulder-NOM torch-PROP
From the south (he) went down with a torch on his shoulder
wuu-ja kamarr-i, manharr-iy put-ACT rock-LOC torch-LOC (ee)
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 (2-7) the subject ‘they/someone’, whose identity is not important, is omitted; and in (2-8) the object is omitted, with context showing it to be fish whose species is irrelevant.

2-7 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.

2-8 ri-lung-ka kada thaa-th, mar-maru-tha mijil-i yalawu-j east-ALL-NOM again return-ACT hand-PUT-ACT net-MLOC catch-ACT
barrbiru-th, bilarrri-ja thaa-tha xa-xung-k, wuu-j raise-ACT empty-ACT return-ACT south-ALL-NOM 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, rather less frequently, either because they are clear from context, as in 2-9, because a directional case is present (7.1.3), or because the type of action has been established in a preceding sentence (2-10).

2-9  
jinamulu-na bijarrba-na bi-l-d? warnglij-iya bi-l-da
how many-MABL dugong-MABL 3-PLU-NOM one-MLOC 3-PLU-NOM
bijarrba-y
dugong-MLOC

How many dugong did they (catch)? They (caught) one dugong.

(Discussing who is an appropriate circumcizer:)

2-10  
PG: wirrka-a-n-ngarrba dangka-a kala-th
circumcize-DT-N-CONS man-NOM cut-ACT
NE: niwan-da ngaak? kakuju?
his-NOM who(NOM) uncle(NOM)
PG: kardu. kardu ___ kakuju-y
father-in-law(NOM) 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 obvious pedagogical reasons.

2.3 Grammatical and discourse relations: subject, object, pivot and topic

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 topic of a complex construction': an alternative definition is 'the most salient coreferential NP'.

Dixon (1979) defines 'pivot' as a 'coreferential NP'. Foley and 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'.

6In his description of Dyirbal (1972) the term 'topic' was used roughly in the sense of 'pivot'.
In general I will use the term *pivot* for topics in complex constructions, e.g. 'where is the dugong, which you speared'. Pivots, that is, are syntactized topics. 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 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 (9.2).

2.3.1 Grammatical functions

2.3.1.1 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 \(^7\) 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 Six which deals with the syntax of the simple clause.

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\(^7\) This typology of functions is essentially that given in Bresnan (1982:287).
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’ etc.8

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 proprietive 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 3 and 4, 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 object9. 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. 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 6-1.

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8 In fact this is not quite true - locatives are infelicitous with stative predications: ‘He knew/knows Kayardild on the sandbank’. Although such limitations should not be underplayed, they are ignored here.
9 In other words, they are second predicates subcategorized by particular verbs.
2.3.1.2 Language-internal evidence for subject, object and indirect object

Although the grammatical relations of subject and object are taken as universal and syntactically primitive by some theories, most notably Lexical Functional Grammar (e.g. Bresnan 1982b) and some varieties of Relational Grammar, this claim is too strong. There are languages, for example, that arguably lack subjects (e.g. Tagalog (Schachter 1976) and Lakhota (Foley & Van Valin 1977)), or where they must be defined very differently if they exist (e.g. Dyirbal). A more empirical approach has been adopted by Keenan (1976), who provides a long list of properties characterizing subjects in a wide variety of languages. Comrie (1981a) and Mel’cuk (1983) identify subjects by language internal tests in the Australian language Saibai and the Caucasian language Lezghian respectively. In this grammar I emulate their methods and search for a cluster of properties that define these grammatical relations and show their equivalence to grammatical relations identified in other languages. The relevant 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 clausal 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.

(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' (7.3).
(ix) Their person and number conditions the choice between oblique and locative complementizing case (9.1.4).

Properties (i) to (viii) are typical of subjects in most languages; property (ix) is peculiar to Kayardild.\(^{10}\)

**Objects:**

(i) take no 'relational' case, but may take modal or associating oblique cases (2.4).

(ii) feed the passive and reciprocal (though not all objects passivize easily). (6.3).

(iii) obligatorily take the nominative in imperatives if non-pronominal, and optionally if pronominal. (2.4.3).

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 (6.3.2.3) but is not attested with certain apparently transitive verbs, such as yulaaja 'fear' (6.2.4.1).

**Indirect objects:**

The best candidates for indirect objects in Kayardild are arguments in the PROPrietive case, denoting the 'intentional objects' (Quine 1960:219-22) of verbs like ngakatha 'wait for' and janija 'look for', and those arguments of ditransitive verbs that denote the thing transferred. 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 PROPrietive '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 PROPrietive arguments, a possibility otherwise restricted to direct objects.

The set of indirect objects so defined, however, does not include such prototypical indirect objects as the communicatees of communication verbs, or the recipients of transfer verbs. These take a verbal case

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\(^{10}\)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. This contrasts with such Australian languages as Warlpiri, Walmatjarri and Yukulta, where cross-referencing on the auxiliary allows us to identify subjects of a normal accusative type, uniting A and S, despite the presence of ergative morphology.
(3.4) and are poor candidates for being considered core grammatical relations: they cannot be relativized upon (3.4.3.3) and do not feed reciprocal formations. They do, however, display a productive alternation with direct objects in ditransitive constructions (6.2.5).

In this grammar I will term the abovementioned PROPrieteive 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.

2.3.1.3 Alternate argument structures

Derived verb forms with different numbers or arrangements of arguments are found in the passive, reflexive, causative and reciprocal constructions (6.3). Identical verb forms may also govern different numbers of arguments or set them in different case frames (6.2.6). 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.

2.3.2 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 (2-11), but it may equally well be, say, a subordinate object, as in (2-12).

2-11 jina-a maku-wa warra-j, dan-kina muri-na
where-NOM woman-NOM go-ACT this-MABL baler shell-MABL
nguku-na kurrrka-tharr
water-MABL take-PST

Where did the woman go, (who) took this baler shell of water.

11Keenan (1976:318) takes natural topicality as one of the important properties of subjects.
Where is the dugong, (which) the man speared?

(Elipsis of the downstairs NP is normal but not obligatory).

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 9.2.

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 (2-13), 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.

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 (2-12) and (2-13) 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 9).

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

2.4 Functions of case inflection

Kayardild is unusual in the number of functions it allows case (or perhaps 'case-like') suffixes. These are introduced in this section.

Five types of case function must be distinguished. 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 tense/mood 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. The question of whether these should all be considered 'case' functions is broached in 2.4.8.

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

Nominal stem + Adnominal + Relational + Modal + Associating / Complementizing

All five case functions draw on the same set of case suffixes (although a given function may only use a subset of these). 2-2 summarizes the range of functions discharged by each suffix, its word position (or 'rank') and its distribution across words (or 'domain'). 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 verb. The distribution of modal and associating case is basically the VP (2.4.9), though there are complications (7.1.1, 7.3).

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

2.4.1 Relational functions 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 case inflections may mark LOCATION (2-14), INSTRument (2-15), and direction of motion, glossed ALLative (2-16):

12 I use the term 'rank', in preference to alternatives like 'order', 'level' or 'slot', because of its syntactic connotations (especially in systemic linguistics). As Figure 2-2 indicates, there is a close connection between a suffix's word-position and the 'rank' of its source constituent.

13 Particles and conjunctions, and pronominal subjects under certain conditions, are excepted - see 9.1.6.
Not every entry can be justified here; the reader is referred to Chapter 3 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', appearing only where no relational, modal, associating or complementizing case is assigned.

Figure 2-2: Range of functions of Kayardild cases
2-14 dathin-a yarbud  barri-ja  nal-iya kamarr-i
that-NOM snake(NOM) crawl-ACT head-LOC stone-LOC
That snake is crawling round on top of the stone.

2-15 dangka-a mardala-a-ja rirr-nguni
man-NOM rub-DT-ACT fat-INSTR
The man rubs himself with fat.

2-16 warra-ja nga-ku-l-da  natha-r nga-ku-lu-wan-jir
go-IMP we-INC-PLU-NOM camp-ALL we-INC-PLU-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 (PROPrietive). (As we shall see, the marking of direct objects is complex).

This is by no means an exhaustive list of relational cases in K: the full set is discussed in 3.3. Note that some primarily adnominal cases, such as the ABLative, may also be used relationally (2.4.2.2). Furthermore, many case relations can be marked by 'verbal cases' (3.4).

2.4.2 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'. They may also be used as second predicates - see 6.4.1.1.

The GENitive or ABLative cases, for example, may mark possessors (2-17): 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 PROPrietive case codes a similar relationship, but takes the possessor as head (2-18: see 3.3 for fuller discussion).
2-17 *dangka-na wangalk / dangka-karra wangalk*
*man-ABL boomerang(NOM) man-GEN boomerang(NOM)*

The man's boomerang.

2-18 *wangalk-uru dangka-a*
*boomerang-PROP man-NOM*

The man with / possessed of the/a boomerang.

It could be argued that the ABLative and PROPrietive here are 'deriving' adjectives (cf Dixon 1972, Blake 1977). 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. - 4.4.3), 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 PROPrietive, for example, is a productive derivational suffix - see 3.3.5 for discussion and examples. But other adnominal suffixes, such as the GENitive and ABLative, do not function derivationally.

2.4.2.1 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:

2-19 *...dangka-naba-nguni wangal-nguni*
*man-ABL-INSTR boomerang-INSTR*

...with the man's boomerang.

Double marking, and the inner position of the adnominal suffix, follow from two general principles of K morphosyntax: concord and 'concentric scoping'.

Concord distributes inflections over all subconstituents (e.g. 2-19). consequently adnominal modifiers take the case of their head.

Concentric scoping orders suffixes in such a way that they have logical scope over the entire preceding stem, including preceding suffixes. This nicely iconic principle is illustrated by the following minimal pairs: only two of many comparable examples: 14

14 Besides the literal translations given for 2-21, 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').
Double case-marking of adnominals, and the fact that adnominal suffixes precede relational ones, thus follow from general principles needed elsewhere in the grammar (indeed, 'concentric scoping' may be a universal principle). There is no need, therefore, to set up special rules to account for them.

In 3.1 I argue that the first rank of inflectional suffixes in K includes both adnominal and number suffixes, and that this is the only level that 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.

It is less clear, however, that it can be used where suffixes (e.g. the ASSOCIating OBLique) have a purely syntactic function; this rules out the use of semantic scope to determine ordering. Here the concentric scoping principle needs to be supplemented by a 'syntactic remoteness' principle: the more remote the source of a suffix in constituent structure, the higher (i.e. further out) is its rank. I will return to this in 2.4.9.

2.4.2.2 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 (3-36), and the PROPrieteive may mark Instruments (7.3.2.1) or the 'intentional objects' of verbs like 'wait for' or 'search for' (2-33). 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\textsuperscript{15}. 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 7.2.

2.4.3 Modal case

Consider the following sentences:

2-22 \textit{ngada warra-ja ngarn-kir}
I:NOM go-ACT beach-ALL
\textit{I am going/have gone to the beach.}

2-23 \textit{ngada warra-ju ngarn-kiring-ku}
I:NOM go-FUT beach-ALL-MPROP
\textit{I will go to the beach.}

2-24 \textit{ngada warra-jarra ngarn-kiring-kina}
I:NOM go-PST beach-ALL-MABL
\textit{I went to the beach.}

2-25 \textit{ngada warra-da ngarn-kiring-inj}
I:NOM go-DES beach-ALL-MOBL
\textit{I would like to go to the beach.}

The PROPrietive, ABLative and OBLique suffixes here are being used
'modally': together with the verb inflection, they are providing information about
the tense/mood of the clause\textsuperscript{16}. The PROPrietive shows futurity: the ABLative
'prior occurrence': the OBLique indicates a strong emotion (here, 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 5.2.3.12 for examples). Case suffixes being
used modally will be glossed with a preceding M, e.g. MABL 'ABLative being used
modally' or, more concisely. Modal ABLative. The exact modal meanings they
encode are discussed in 7.1.

\textsuperscript{15}Cf Wierzbicka (1982:789): 'this, I suggest, is how morphology works: a versatile grammatical
exponent can serve in a large number of different meanings - not on its own, but in collaboration with
other indicators, such as the semantic and syntactic category of nouns and verbs occurring in a given
construction. At the same time, the different meanings .... are not widely and unpredictably different
from one another; on the contrary they are usually very closely related and have a common core - i.e. a
partial semantic invariant.'

\textsuperscript{16}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.
Modal case appears on all NPs in the VP, except those semantically oriented towards the subject in some way, such as 'intentional objects' (2-33) which give the private intention of the subject – see 7.3 for discussion. Although modal case generally correlates with verb inflection, in certain circumstances it may be used independently – see Chapter 7.

'Semantic' cases are followed directly by the modal case suffix, as with the ALLative in 2-23, and the INSTR in 2-26. Objects, however, take modal case alone:

2-26 ngada yalawu-jarr yakuri-na mijil-nguni-na
I: NOM catch-PST fish-MABL net-INSTR-MABL
I caught fish with the net.

2-27 ngada yalawu-ju yakuri-wu mijil-nguni-wu
I: NOM catch-FUT 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:

2-28 dathin-a ngunguk-a balmbi-marra karrngi-j!
that-NOM story-NOM morrow-UTIL keep-IMP
Save that story for tomorrow!

2-29 birangkarra bi-l-da mardala-tha dangka-walath-i, ngimi-marra-y
long time 3-PLU-NOM paint-ACT man-LOT-MLOC night-UTIL-MLOC
They have been painting the men for a long time, getting ready for (the dance) tonight.

In (2-29) 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 unmarked modality in Kayardild.

In (2-28) the object is unmarked for modal case and appears in the NOMinative: 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:

17Recall that the NOMinative is an 'elsewhere case' appearing when no relational, modal, associating or complementizing case is assigned.
(a) unlike noun/adjectives, pronominal objects are only optionally unmarked with imperatives—they may instead take the LOCative:

2-30 *(nyingka) dana-tha dathin-a dangka-a / dathin-ki dangka-y*  
you:NOM leave-IMP that-NOM person-NOM that-LOC person-LOC  
Leave that person (behind, alone)!

2-31 *(nyingka) dana-tha ngad / ngijin-ji*  
you:NOM leave-IMP lsgNOM lsg-LOC  
Leave me (behind, alone)!

(b) some arguments that take other modal cases, such as ALLatives (3-51) 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 (9.5.2.1), and this could be confounded with a choice of modal case.

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.

A summary of the K modal case system is given in 2-3. The meaning of each modal case, the verb inflections they correlate with, and their exact domain, are discussed in detail in Chapter 7.

2.4.4 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:

2-32 (a) ngada raa-ju ngumban-ju (b) ngada raa-jarra ngumban-jina  
I:NOM spear-FUT you-PROP I:NOM spear-PST you-MABL  
I will spear you. I speared you.

2-33 (a) ngada jani-ju ngumban-ju (b) ngada jani-jarra ngumban-ju  
I:NOM search-FUT you-PROP I:NOM search-PST you-PROP  
I will search for you. 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
### Modal Case System

<table>
<thead>
<tr>
<th>Modality</th>
<th>Modal Case</th>
<th>Arguments taking modal case:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Object, Instrumental, Utilitive</td>
</tr>
<tr>
<td>'Present unrealized'</td>
<td>Zero</td>
<td>-</td>
</tr>
<tr>
<td>'Instantiated'</td>
<td>Locative</td>
<td>+</td>
</tr>
<tr>
<td>'Future'</td>
<td>Proprieteive</td>
<td>+</td>
</tr>
<tr>
<td>'Prior'</td>
<td>Ablative</td>
<td>+</td>
</tr>
<tr>
<td>'Emotive'</td>
<td>Oblique</td>
<td>+</td>
</tr>
<tr>
<td>'Directed'</td>
<td>Allative</td>
<td>+</td>
</tr>
</tbody>
</table>

*Figure 2-3: Summary of modal case system*

The suffix in (2-32) but not in (2-33), showing the former be a modal inflection, the latter a relational. Throughout this thesis all suffixes glossed with a preceding M (e.g. MABL in (2-32) 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.

2.4.5 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 (2-34), or as complements of matrix immediate perception predicates (2-35). In the latter function they agree in modal case with their antecedent.

2-34 dathin-a kunawuna rajurri-n-d
that-NOM child(NOM) walk about-N-NOM
That child is walking around.

2-35 ngada kurri-ja dathin-ki kunawuna-ya rajurri-n-ki
I-NOM 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, their other arguments, be they in core or peripheral functions, receive an 'associating' OBLique case, glossed AOBL.

2-36 niya kala-n-da thungal-inj a bljarrba-tnarra-ntha narra-nguni-nj
he:NOM cut-N-NOM tree-AOBL dugong-UTIL-AOBL 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 PROPrieteive 'intentional object' exemplified in 2-32(b), receive 'associating' case:

2-37 bi-1-da jani-n-da bartha-wuru-ntha kunawuna-wuru-nth
3-PLU-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 subject complements, second predicates on the subject like 'alone' in 2-38, and 'locus of effect on body part' NPs construed with the subject (6.4.2).

2-38 niya kiwali-n-da mala-ntha kantharrk
he:NOM wade-N-NOM sea-AOBL alone(NOM)
He is wading in the sea alone.

This makes eligibility for AOBL a reliable test for VP-membership (see 6.4.1.1).

The AOBL always follows modal case suffixes:

2-39 ngada balmbi-wu kurri-ju kilwan-ju barri-n-ku
I-NOM morrow-MPROP watch-FUT them-MPROP chop-N-MPROP
kurda-wuu-nth
coolamon-MPROP-AOBL
Tomorrow I will watch them chopping (making) a coolamon.
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 runs counter to the 'syntactic remoteness' principle, which would predict that the 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 2-2. which requires that suffixes with modal function always precede those with associating function.

This has the result, which may or may not be coincidental, that the expected sequence AOBL-MCASE does not arise. This sequence would violate the constraint against other suffixes following the OBLique - see 3.2.3.

Note that 'subject-oriented' NPs which escape modal case in main clauses, e.g. PROPrieteive 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 2-41 'to the south' appears as rarungkuuntha, with no modal locative, rather than *rar-ung-kuru-rrka [south-ALL-PROP-MLOC:AOBL].

2.4.6 Complementizing function of case inflections

In one type of K subordinate clause, described in Chapter 9, 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 sorts of condition these Finite Subordinate Clauses receive an outer 'complementizing case' on all constituents. One condition was mentioned
briefly in 2.3.2: 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 2-42. Fuller discussion of both these conditions is in Chapter 9.

2-42 *ngada murmurmdawa-th, [ngijin-inja thabuju-ntha thaa-thuu-th]COBL*
I:NOM rejoice-ACT my-COBL E.Br-COBL return-FUT-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 9.1.4.

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 9.4 and 9.5.

2.4.7 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 may accrete up to four case inflections.

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:

2-43 ...*dangka-karra-nguni mijil-nguni*
man-GEN-INSTR net-INSTR

...*with the man’s net.*

Such complex NPs may then receive modal case:

2-44 *maku yalawu-jarra yakuri-na dangka-karra-nguni-na mijil-nguni-na*
woman catch-PST fish-MABL man-GEN-INSTR-MABL net-INSTR-MABL

*The woman caught some fish with the man’s net.*

Note in passing that certain affixes may appear twice. The ABLative in (2-45), 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\(^{18}\).

2-45 nyingka karna-jarra ngamathu-naba-na wunkurr-inan?  
you:NOM light-PST mother-ABL-MAABL grass-ABL  
Did you set fire to mother's grass windbreak?

Finally, a complementizing suffix may appear on every word of the clause, as in:\(^{19}\)

2-46 maku-ntha yalawu-jarra-ntha yakuri-naa-ntha  
woman-COBL catch-PST-COBL fish-MAABL-COBL  
dangka-karra-nguni-naa-ntha mijil-nguni-naa-ntha  
man-GEN-INSTR-MAABL-COBL net-INSTR-MAABL-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 9.4.2.2.)

(2-46) 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 2-12).

It seems that K has a sort of 'total concord convention' whereby all cases percolate downwards, not just to immediate subconstituents, but indefinitely, until the unit 'word' is reached. What this shows about constituency in Kayardild is discussed in 2.4.9.

\(^{18}\)This possibility of recursive suffixation appears to violate Lieber's "multiple application constraint" (MAC): "no word formation process, e.g. insertion of a given morpheme into a lexical tree or string dependent rule, can apply recursively to its own output." (Lieber 1981). Although it could be argued in defence of the MAC that two homophonous suffixes are involved here, and in similar cases where a modal PROP follows a relational or adnominal PROP, there are also a few K words in which a suffix is applied twice with the same function, e.g. thungal-uru-uru (thing-PROP-PROP) 'European' (a perceptive comment on European materialism: the double application appears to imply 'having lots and lots of things') or wu-thu-nthu-tha (give-RECIP-RECIP-ACT) 'share around' (i.e. give 'multi-reciprocally'). Anna Wierzbicka (p.c.) has informed me of comparable double applications of derivational suffixes in Polish: syn 'son', syn-ek 'son-DIMINUTIVE', syn-ecz-ek 'son-DIMINUTIVE-DIMINUTIVE'.

\(^{19}\)It is theoretically possible to obtain sequences of four case suffixes in another way, by nominalizing a clause with marked modality. (2-44), for example, could be made the complement of 'I saw', giving ngada kurrijarra makuna yalunkina yakureinaanta dangkakarrungunaanta mijilungunaantha. 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 (3.2.3).
2.4.8 Multiple function or homophony?

Another central theoretical question is: should these really be treated as different functions of the same suffix (as assumed this far), or would it be better to analyse them as distinct but homophonous suffixes? 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.

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 – 4.1.) It would clearly be inefficient to multiply statements of form by setting up five orders of homophonous suffixes.

(b) Meaning. Although I attempt to relate the 'modal' and 'relational' or 'adnominal' meanings of certain cases, there is no doubt that between different functions of, say, the ABLative of possession and the ABLative of prior modality the semantic commonality is not obvious. However, the case systems of many languages are full of comparable examples – just consider the genitive with objects of negated verbs in Polish or Russian, and the effects of discourse factors on case-marking (Hopper and 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 (1980a) 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 factor, as it were, is 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 (3.2.3): 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 \((k)\)urr\(k\)a is used. A number of strategies may be used when such restrictions are encountered—see 3.2.3. 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.

It should be emphasized that there is no ‘right’ answer to the question of homophony versus multifunctionality, and that each analysis has its advantages. By choosing the ‘homophony’ analysis, we preserve the regular meaning of the metalinguistic term ‘case’, and impart to the set of suffixes thereby delimited a greater unity of meaning. By choosing the ‘multi-function’ analysis, on the other hand, we emphasize the strikingly case-like syntactic properties (in particular, concord) found with all functions of these suffixes. We draw attention to possible semantic connections between case and modality, at neatly account for the identical sequence restrictions, and we are faithful to the historic origins of these suffixes: as I will show in 7.4 and 9.6, all these morphemes originated as case suffixes \textit{sensu strictu}, regardless of their \textit{synchronous} status. In this thesis I adopt the ‘multi-function’ analysis, and treat 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’. It also makes it possible for a word to be assigned two cases without conflict, provided they differ in function.\(^{20}\)

\(^{20}\)This sidesteps the problem of ‘feature conflict’ in double case marking, discussed in Simpson (1983:284).
2.4.9 Case, concord and constituency

In K. case concord is a valuable tool for diagnosing constituent structure. We have already seen (2.4.2.1) how the domain of adnominal and relational cases clearly reflects the constituency of embedded NPs in a phrase like:

\[ \text{this-GEN-INST} \quad \text{woman-GEN-INST} \quad \text{good-INST} \quad \text{net-INST} \quad \text{with this woman's good net} \]

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 (2.4.6).

Although the constituents identified in this way are typically contiguous, they need not be (4.4), and it is useful to have a formalism that represents constituency without reference to word order. Such a formalism is provided by the 'Immediate Domination / Linear Precedence' (IDLP) model of phrase structure (Gazdar & Pullum (1981), Pullum (1982), Gazdar, Klein & Pullum (1983). As summarized by Falk (1983), this is used to 'factor out the two roles of PSRs (conventional Phrase Structure Rules - N.E.). stating immediate constituency relations and ordering relations', and to 'make each the job of a different kind of rule': constituency rules (c-rules) and ordering rules (o-rules).

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 trees given in this grammar.

Using this formalism, we could represent the constituent structure of a K clause as follows, with a c-rule incorporating functional annotations (the colon / angle brackets convention is used for immediate-domination rules):

\[ \langle S : \text{NP}_{\text{SUB}}, \text{VP}, (\text{NP}_{\text{SSPRED}}) \rangle \]

(Where SSPRED reads 'second predicate on the subject'.)

As it stands, this allows the three nominated subconstituents to occur in any order.

In a language with stricter ordering requirements, the c-rules are supplemented with categorial ordering rules: a V-final language, for example, would have the rule
But in K, with its free ordering of phrasal constituents, such rules would not in general be necessary, except with certain special constructions such as motion complexes (5.10.2).

Concord can be ensured by allowing c-rules to transmit feature bundles coding case (cf. Gazdar 1982):

\[
2-50 < A'[xf1] : B[xf1], A'[xf2, xf1] >
\]

Note that this formulation automatically captures the way ordering of case suffixes parallels nesting of constituents, by keeping transmitted feature bundles 'on the outside'. The only time it needs to be supplemented with explicit suffix-ordering rules is with nominalized clauses, where Associating and Modal cases do not follow the expected order. Here the relevant suffixes must be extrinsically ordered according to their function, with Modal suffixes preceding Associating suffixes.

C-rules of this type would be general 'constraining equations' ensuring merely that concord occurs; the choice of case would be decided elsewhere.

Various alternative formal mechanisms have been proposed to deal with case-agreement. In dependency-theory, for example, case marking is distributed down from a dominating node (e.g. Mel'cuk 1979:12); in Lexical Functional Grammar 'feature percolation' transfers case values from head nouns to the dominating NP node, which then determines the case of modifiers (Mohanan 1982b; Simpson 1983). Feature percolation, however, becomes unwieldy when multiple case-inflection is involved, and neither proposal can deal simply with case-agreement over VP constituents, which are not represented in dependency trees or in LFG-type functional structures.

This formulation, then, allows an elegant representation of concord, multiple inflection, and the relation between embedding and suffix order.

But its most interesting property is that it allows us to talk of a VP
constituent\textsuperscript{21} in a free phrase-order language\textsuperscript{22}. Such VP constituents neatly account for the distribution of associating and modal case. I argue in 6.4.1.1 that associating case is marked over all NP subconstituents of the VP; this can be summarized by the following feature-carrying PS-rule:

\[
2-51 \ < \ VP_{[+HOMZ]} : VC_{[+HOMZ]} : (NP_{[+AQL]})^N.
\]

The situation with modal case is more complex and is discussed in 7.1.1.

\textsuperscript{21}The exact content of the VP was never satisfactorily resolved within Transformational Grammar. Chomsky's proposal in Aspects (1965:102 et seq.) was:

(i) \( S \rightarrow NP \) Predicate-Phrase

(ii) Predicate Phrase \( \rightarrow \) Aux VP (Place) (Time)

This placed adjuncts of time and place outside the VP, but complements inside it: in 'John decided on the boat in the train' (i.e. chose the boat) 'on the boat' is inside the VP, while 'in the train' is outside the VP but inside the Predicate Phrase. This useful distinction was not maintained, however; Akmajian & Heny (1975), for example, place local adjuncts under the VP node.

For the language-internal reasons given above, in this grammar I use the term "VP" a'la Akmajian and Heny, corresponding to the 'Predicate Phrase' of Chomsky's Aspects (and the 'predicate' of traditional grammar).

\textsuperscript{22}Chung (1983) attempts to do this for Chamorro within the framework of Government and Binding theory. And Stucky (1983) argues for a VP constituent in Makua, a Bantu language with considerable freedom of phrase order. Stucky's argument rests on VP-Topicalization and verb agreement.
CHAPTER 3

NOMINALS I: CASE. THE NOUN/ADJECTIVE SUBCLASS.

The nominal word class includes a number of subclasses (2.1): noun/adjectives, pronouns, locationals, and manner and time nominals. In this chapter I discuss the case system, which is essentially identical for all nominal subclasses. I also discuss other inflectional, derivational, compounding and reduplicational processes in the noun/adjective subclass, which has the widest range of possibilities. Specific properties of the remaining subclasses, and the structure of the NP, are discussed in the next chapter.

3.1 Structure of the nominal word

Kayardild nominals consist of a root, with or without a number of derivational suffixes, all of which constitutes the stem. In general, derivational possibilities depend on the subclass. Following this are one or more inflections. Recall that in this grammar an inflection is defined as any suffix whose scope is phrasal or greater (2.1.2.1): this definition allows the possibility of multiple inflection after the stem. The inflectional possibilities of all subclasses are similar, except that for the manner, time and locational sub-classes the set of possible adnominal and relational inflections is restricted.

Leaving the internal structure of the stem to concentrate on its inflectional possibilities, we get the following picture:

3-1

RANK

STEM + (Suf\text{\textasciitilde}ADH/\text{\textasciitilde}NUM)\text{\textasciitilde} (a) + Suf\text{\textasciitilde}REL + (Suf\text{\textasciitilde}MOD)\text{\textasciitilde}2\text{\textasciitilde} + (Suf\text{\textasciitilde}COMP/\text{\textasciitilde}ASSOC)

(b) \text{---} + Suf\text{\textasciitilde}NC \text{---} + (Suf\text{\textasciitilde}COMP)
Where ADN is an adnominal case suffix, NUM is a number suffix, REL is a relational case suffix, VC is a verbal case suffix, MOD is a modal case suffix, ASSOC is an associating case suffix, and COMP is a complementizing case suffix, and \( n \geq 0 \). On one analysis of 'movement purpose' clauses double occurrences of modal case suffixes are possible — see 8.6. Complementizing and Associating case suffixes are mutually exclusive. Verbal case suffixes are in complementary distribution to Ranks 2 and 3 (relational and modal case suffixes).

Rank 1 inflections may give adnominal case or number. This is the only rank that is regularly recursive, to allow for theoretically possible words like *maku-yarr-nurru-naba-walad* [woman-DU-ASSOC-ABL-LOT] 'the many belonging to (those) having two wives'. The formulation allows alternative orderings of the same affixes (e.g. ASSOC + PLU vs PLU + ASSOC), as is required by pairs like *maku-wala-nurru* [woman-LOT-ASSOC] 'having many wives' vs *maku-nurru-walad* [woman-ASSOC-LOT] 'the many having wives'.

The data here are consistent with the generalization put forward by Mohanan (1982a) that successive affixations cannot loop back to a previous rank (or 'level'), although they can loop several times through the one rank.

\((3^{-1})\) correctly generates all permissible inflected nominals in K. It overgenerates slightly, and two restrictions are needed to prevent banned suffix sequences — see 3.2.3.

3.2 Nominal Inflections: forms

\(3^{-1}\) gives the forms of all K case inflections; some remarks on them are made on the following page. Unless otherwise noted, inflections have the same form regardless of the rank they are used at. \(3^{-3}\) gives illustrative inflected words, again with notes on the following page.

Note that

(a) suffix forms are selected by the immediately preceding morpheme, which is not necessarily the root: cf *mala-ya* [sea-LOC]. *mala-wan-ji* [sea-ORIG-LOC]. *mala-ring-ki* [sea-ALL-LOC].

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\(^1\) I have been unable to determine whether multiple occurrences of the same adnominal suffix are allowed — if they are not, a constraint would be needed of the type: \(x_{\text{Suf}} \neq x_{\text{Suf}}\).
<table>
<thead>
<tr>
<th>Declension</th>
<th>1</th>
<th>2</th>
<th>3a</th>
<th>3b</th>
<th>4a</th>
<th>4b</th>
<th>5a</th>
<th>5b</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Final segment of preceding morpheme</td>
<td>_</td>
<td>_</td>
<td>a</td>
<td>a</td>
<td>r, r</td>
<td>r, r</td>
<td>n</td>
<td>n</td>
<td>n²</td>
</tr>
<tr>
<td>(2 syllables)</td>
<td>(2 syllables)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Notes:**

(1) The two irregular nouns *jara* or *jaa* 'foot' and *rara* or *raa* 'south' could be treated as a seventh, minor, declension type, mixing characteristics of the 3a and 3b declensions.

(2) *n* represents morphemes in final -*n* that take a following palatal-initial suffix. The choice between velar- and palatal-initial suffixes is morphologically conditioned—see Figure 3.2.

(3) Suffixes or suffix segments in ( ) are optional; their appearance depends on stylistic or rhetorical reasons alone.

(4) [ ] encloses segments that may be lost in word-final position.

(5) Kin-terms in *-ju* belonging to this class change the final /j/ to /j/ before the ALLative, e.g. *thabujina* rather than *thabujuna*.

(6) Younger speakers form the OBLique of two nouns of this class on the prosodically truncated citation form; from *bijarriba* 'dugong' and *kunawun* 'child' they get the Declension 4b OBLiques *bijarribinja* and *kunawunina* rather than the traditional 3b forms *bijarribanha* and *kunawunia*.

---

**Form of Kayardild Case Inflections**

- **NOM** (ka) - (ya)\(^3\), -(wa)\(^5\) - a - da - a - ka - Da - da
- **LOC** (kiya) - ya - ya - i(ya) - ki(ya) - j(ya)
- **OBJ** (inja) - nja - ntha - ntha - inja

**ALL** (kiring) - [ring] - ir[ing] - kir[ing] - jir[ing]

**GEN** (karran) - karran -

**ASSOC** (nuru) - nuru -

**ORIG** (wan) - wan -

**PRIV** (warri) - warri -

**CONS** (ngarrba) - ngarrba -

**DESTR** (nguni) - nguni -

**UTIL** (warra) - warra -
Most declension classes have open membership, embracing all nominals with the phonologically appropriate ending. Classes with closed membership are:

**Class 4b.**

Roots in TH- are yarbuTH- 'snake, bird', ngirranguTH- 'fly', kambuTH- 'pandanus fruit', marrkaTH- 'soft', niTH- 'name', baTH- 'west', buTH- 'behind' and yuuTH- 'already'. A similar pattern is found with the derivational suffixes -walaTH- 'LOT' and -yarrathaTH- 'another'.

Roots in J- are warngiJ- 'one', ngiJ- 'wood, firewood', miiJ- 'lobster, louse', riiJ- 'intestine' and its derivatives jungarrbarrriiJ- 'large intestine' and waldarrriiJ- 'caecum of dugong', wanjariiJ- 'one-eyed man' and birriiJ- 'alive; father'. Before final /a/ both TH and J become /d/ by delaminalization (see 1.7.3.6), e.g. yarbuda 'snake-NOM', ngida 'wood-NOM'.

**Class 6.**

Stems in final /n/ may belong either to the regular 'apical nasal-final' declension 5b, or the 'palatalizing' declension 6. Here I list the members of 6 (stems in final /n/ not listed here belong to 5b):

(a) all possessive pronoun stems.

(b) the noun/adjectives duujin- 'younger brother', malungin- 'daughter's child', kuwan- 'firestick', ngawun- 'ashes, dust', bardangin- 'big toe, thumb', thalardin- 'old man, old man dugong', dirrkulin- 'male (tree)', bithiin- 'man', and kabin- 'low tide'.

(c) the origin suffix -wa(a)n-, the 'plenty' suffix -wuthin-, and time-nominals in -ban-: yuuban-da 'long ago' and yandaban-da 'soon'.

(d) resultative nominalizations in -THirrin-. 

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**Figure 3-2: Membership of closed declension classes**
<table>
<thead>
<tr>
<th>Decl.</th>
<th>1</th>
<th>2</th>
<th>3a</th>
<th>3b1</th>
<th>4a</th>
<th>4b1</th>
<th>5a</th>
<th>5b</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Word</td>
<td>yakuri</td>
<td>maku</td>
<td>mala</td>
<td>bardaka</td>
<td>nal-da</td>
<td>wangalk-a</td>
<td>kang-ka</td>
<td>daman-da</td>
<td>kwana-da</td>
</tr>
<tr>
<td>NOM</td>
<td>yakuri-ya</td>
<td>maku-wa</td>
<td>mala-a</td>
<td>bardaka</td>
<td>nal-da</td>
<td>wangalk-a</td>
<td>kang-ka</td>
<td>daman-da</td>
<td>kwana-da</td>
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<td>LOC</td>
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<td>maku-ya</td>
<td>mala-ya</td>
<td>bardaka-ya</td>
<td>nal-nya</td>
<td>wangalk-a</td>
<td>kang-ka</td>
<td>daman-ki</td>
<td>kwana-ji</td>
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<td>maku-na</td>
<td>mala-na</td>
<td>bardaka-na</td>
<td>nal-inna</td>
<td>wangalk-ina</td>
<td>kanga-kina</td>
<td>daman-kina</td>
<td>kwana-jina</td>
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<td>PROP</td>
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<td>maku-(u)ru</td>
<td>mala-wuru</td>
<td>bardaka-wuru</td>
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<td>OBL</td>
<td>yakuri-nja</td>
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<td>wangalk-ninjya</td>
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<td>maku-r</td>
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<td>bardaka-r</td>
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<td>wangalk-ir</td>
<td>kanga-kir</td>
<td>daman-kir</td>
<td>kwana-jir</td>
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### Notes:

1. As the words bardaka and wlangalka show, the stem form cannot always be deduced from the nominative form alone. We need other cases (e.g. the locative) to show us that in bardaka the final /a/ is part of the root (bardakas) and in wlangalka it is the nominative ending (wlangalk-). Words whose nominative ends in ra are particularly tricky, as they may belong either to declension 3b or to 4b: compare kamarr 'stone', whose locative is kamarr and which we therefore segment as kamarr- (4b), with waidarra 'moon', whose locative is waidarra and which we segment as waidarra- (3b).

2. The root-final /k/ of wlangalk- and /ng/ of kamarr disappear before the ASSOCIATIVE, ORIGIN, PRIVATIVE, CONSEQUENTIAL, INSTRUMENTAL and UTILITY cases by the regular morphophonemic rule of CLUSTER SIMPLIFICATION (1.7.7). This rule also degemmates the /ag/ that would otherwise arise in the ASSOCIATIVE forms of daman- and kwana-.

3. The origin case never appears without further inflection.
(b) forms are shaped both by regular morphophonemic rules (see 1.7.3) and by irregular morphological conditioning.

An example of a regular morphophonemic rule is the assimilation to /m/ of initial /w/ in PRIVative -warri and ORIGin -wa(a)n- after nasals, by the general morphophonemic rule REGRESSIVE GLIDE ASSIMILATION (1.7.3.2).

Morphophonemic rules may also affect the preceding final. For example, morpheme-final /ng/ will be lost before any consonant but /k/. (1.7.3.8): kang-ki [language-LOC] but ka-marra [language-UTIL]. ka-warri [language-PRIV] etc. Such regular changes in the preceding morpheme are not shown in Figure 3-1 (see note 2. 3-3).

An example of morphological conditioning involves the choice between velar-initial and palatal-initial suffixes after /n/: cf daman-ki [tooth-LOC]. kuwan-ji [firestick-LOC]. No conditioning phonetic environment can be found, and the choice must be specifically marked in the lexicon (see 3-2).

The varying initial segments of certain case suffixes likewise do not follow from regular morphophonemic rules.

The allomorphs of the NOMinative are totally idiosyncratic.

The LOCative. ABLative. and ALLAtive inflections (and also the DUal (-kiyarrng-)) share a common pattern. In fact, the ALLative and ABLative could be derived by augmenting the first syllable of the LOCative with -ring and -naba respectively: this may well be their diachronic source. Representing the fullest form of these as kVX, the conditioned allomorphy is:

- kVX / N_ (i.e. morpheme-final nasals / declension 5)
- jVX / N_ (‘palatalizing’ morpheme-final nasals / declension 6)
- VX / C_ (other morpheme-final consonants / declension 4)
- X / V_ (morpheme-final vowels / declensions 1-3)

The PROPrietive. and the LOCative + OBLique portmanteau (-kurrka) differ from this pattern only in having -wVX rather than -X after morpheme-final vowels.

Despite the regularity of this pattern, it is morphologically rather than phonetically motivated: the GENitive karran or compounded nouns in initial /k/ retain their full form in all these environments.

I have been unable to find any explanation for this strange form, totally unrelated to its components (-kiya) and (-inja). An identical portmanteau is found in Yukulta, and can be reconstructed for Lardil.
Finally, note the OBLique form, -injə after all consonants, -nja after /l/, and -nthə after /a/ or /u/. This is one of several instances in K of alternations between laminals being conditioned by the preceding vowel (cf Keen (1983:198-9) on Yukulta and Dixon (1970) on Australian languages in general).

3.2.1 Multiple inflection and morphological description

The multiple-inflecting nature of Kayardild nominals creates two special problems for morphological description.

Firstly, because inflections are not restricted to word-final position, they may act like a derived 'stem' selecting a following allomorph. This means that inflections as well as roots belong to a declension class: the PROPrietive (-kurə). For example, belongs to declension 2 (u-final) and selects the same following allomorphs as a u-final root like maku 'woman'.

Secondly, many inflections have a different, reduced form in exposed word-final position. The ALLative, for example, is always -kiri or -kir word finally (citing the forms with the fullest initials): but -kiring- word internally: similarly the ablative is -kina word-finally but -kinaba- or -kinaa- word internally.

It is the word-internal allomorph that determines the allomorph of following inflections: thus the ALLative -kiri(ng) behaves like an /ng/-final stem, not an /r/-final or /l/-final:

wumburung-kina 'spear-ABL'  mala-ring-kina 'sea-ALL-ABL'
mar-ina 'hand-ABL'
yakuri-na 'fish-ABL'

The neatest way to represent this is to take the maximal word-internal form as canonical (represented as (-kiring-), for example), and bracket off the portion lost word-finally (-kiring-). The canonical form determines the declension-class of the inflection, so the ALLative (-kiring-) belongs to declension 5a.

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3 Two points should be emphasized here: (a) this variation is not due to PROSODIC TRUNCATION (1.7.2) — reduction from -kiring- to -kir-, for example, occurs whether or not the relevant word is breath group final. And the addition of clitics does not protect the form, whereas it blocks prosodic truncation; (b) the appearance of 'word-internal' forms does not depend on the 'level' of the case inflection; merely on the fact that another inflection follows. The ALLative, for example, will be -kir word-finally, and -kiring- word-internally, regardless of whether it functions relationally or modally, and regardless of the function of the following suffix.
3.2.2 Comparative remarks

Unless otherwise noted, the Kayardild forms can be shown to preserve the pT original. I do not wish to go into all the details here.

Few of these inflections have recognizable cognates outside the Tangkic languages.

The existence of a non-zero NOMinative inflection in Yukulta, virtually identical to the Kayardild nominative4 was noted as unusual by Capell (1979): it may have originated as a discourse particle (-ka) (lenited intervocally to -wa, assimilated in place of articulation to preceding consonants etc), but evidence is lacking.

Instrumental -nguni has a possible cognate in Guugu-Yimidhirr ergative/instrumental -ngun (Haviland 1979) but the form is not widespread in Pama-Nyungan; moreover, comparison with Lardil suggests that the pT ancestor merely marked 'having'.

Privative -warri has possible cognates in the Warumungu negative particle warra (Evans 1982), in the Mangarrayi privative -wi (Merlan 1982b) and the Alawa privative -wada (Sharpe 1972). Against this, however, is language-internal evidence that the form -warri is lenited from -karri, preserved only in the K word wuran-karri 'hungry' (cf the regular wuran-marri 'without food').

The PROPrieteive (-kuru), deriving from pT (-kurlu) (preserved in Yukulta) by regular sound change, has cognates in Warlpiri PROPrieteive -kurlu and probably the Nyangumarda privative -kurlu (O'Grady 1964:62; see also O'Grady 1979 on antonymic semantic changes).

The most interesting form is the LOCative (-kiya), which in pT must have had an ergative function as well (as in Yukulta). Now the falling together of ergative and locative inflections is not uncommon in Pama-Nyungan languages: the pPN forms differed only in their final vowel (ERG -ngku -lu and LOC -ngka -la) and either apocope, as in Wik-Munkan, final vowel merger (e.g. Kaytej) or vowel harmony could eliminate this difference. In Warumungu, for example, the homophony of ergative and locative clearly results from vowel harmony applied to

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4 The only difference is with disyllabic roots in final /a/, which take a nominative suffix in /-ra/ in Y and in /-a/ in Kayardild.
the regular Pama-Nyungan forms. If we assume that vowel harmony merged the
Pama-Nyungan ergative and locative at an earlier stage (before proto-Tangkic),
and that for some reason the i-final allomorph was then generalized, we could
relate the pT ERG-LOC to the reconstructed PPN forms.

However, there remains one difference to be explained: the transition from
pre-pT *-ngki(_,) to Kayardild -ki(ya). It is likely that /ng/ was re-assigned from
the suffix to the stem through analogic resegmentation. This would also explain
the accretion of final /ng/ on several words whose non-Tangkic cognates are all
vowel final - see 1.2 for examples.

3.2.3 Sequence restrictions

Generally any inflection may follow any other inflection, provided both are
semantically and syntactically appropriate. However, there are two purely
morphological constraints on suffix sequences:

3-2  (a) the OBLique cannot be followed by any other inflection.
     (b) the LOCative cannot be followed by any inflection but
         the OBLique. LOCative-OBLique sequences are realized by the
         portmanteau (-kurrika).

These restrictions are indifferent to the rank of the inflections involved.
Relational, modal and associating OBLiques alike may not be followed by another
suffix; nor may adnominal or relational LOCatives. Similarly, a LOCative of any
rank, if directly followed by an OBLique of any (higher) rank, will give the
portmanteau (kurrika). e.g. an adnominal LOCative plus a modal OBLique (3-17),
a relational LOCative plus an associating OBLique (8-27) or a relational LOCative
plus a complementizing OBLique (9.1.5.1). There is a single exception to this:
the relational locative disappears entirely before the modal oblique, rather than
yielding the portmanteau (-kurrika) (see (ii) below).

As these examples show, the sequence restrictions just outlined do not
depend on a suffix's function. But the way the banned sequences are

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5See Hale (1973) for a description of how Warumungu has extended the more limited vowel harmony
rule found in Warlpiri.
6I assume the final, optional -ya segment has arisen in a similar way to the NOMinative, by absorbing a
following particle.
7Hale (1976b) mentions similar changes in Uradhi, Wik Me?nh and certain dialects of Anmatjera. He
terms the change 'velar prosthesis'.
circumvented does depend on the function of both suffixes. There are four alternative strategies: substitution of a synonymous alternative that obeys the sequence constraints (i.e., iva); omission of the inner case suffix (ii); use of a single suffix as the exponent of two ranks with the same case (iii, ivb); and the extrinsic ordering of suffixes into an acceptable sequence (v). I will now discuss these in more detail, organizing the presentation by case rather than strategy.

(i) Adnominal LOCative + case (except the OBLique). Here the synonymous ASSOCiative case replaces the LOCative (cf 3.3.3.2).

3-3 dangka-a yubuyubu-y / yubuyubu-nurru
person-NOM road-LOC road-ASSOC
The person (is) on the road.

3-4 ngada kurri-ju dangka-wu yubuyubu-nurru-uru (*yubuyubu-ya-wuru)
I:NOM see-FUT person-MPROP road-ASSOC-MPROP (*road-LOC-MPROP)
I will see the people on the road.

(ii) Relational LOCative + (Any modal) case. Here the relational LOCative disappears, leaving just the modal:

3-5 nyingka ngaka-tharra kabara-na
you:NOM wait-PST saltpan-MABL
You waited on the saltpan.

This happens even when the allowable suffix sequence LOC + OBL would occur: objects and locations in apprehensive clauses, for example, take the modal oblique alone, rather than the LOC + OBL portmanteau (-kurrka):

3-6 dathin-a yarbud-a baa-nyarra kunawuna-nth (*kunawuna-wurrk)
that-NOM snake-NOM bite-APPR child-MOBL child-LOC:MOBL
That snake might bite the child.

(iii) double ORlique or LOCative sequences. Double OBLique sequences arise where a demoted agent taking a relational OBLique is followed by a complementizing OBLique. Here a single OBLique suffix serves as the exponent of both relational and complementizing functions (glossed R:COBL).

8In Lardili, too, LOCatives are the only relational cases to be replaced, rather than followed, by modal case suffixes, but the situation is clearer, because LOCatives cannot function modally as well: ngada thaldi kela-a [I stand beach-LOC] 'I stand on the beach' vs ngada thaldi-thu kela-wu [I stand-FUT beach-FUT].
Double LOCative sequences would arise where a relational LOCative is followed by a modal LOCative, as in (3-12), or by a complementizing LOCative, as in 9-21. In both situations a single LOCative inflection appears. This could be analysed either as a single suffix with double exponence (as with the OBLique example just discussed), or as a special case of (ii) above, where relational locatives disappear before all following suffixes. I see no reason for preferring either analysis, and to avoid cluttered glosses I will simply label them LOC, with no indication of their functional status.

Note that with other cases repetition of the same suffix with different functions is allowed. An example of an ABLative + ABLative sequence is 2-45; a PROPrieteive + PROPrieteive sequence is (3-39). Another theoretically possible combination, (relational) ALLative plus (modal) ALLative, has not been attested; I suspect this gap is accidental rather than motivated, but have no proof of this.

On the evidence we have, therefore, it seems that the cases disallowing double sequences are just those cases that cannot be followed by any case (i.e. the LOCative and OBLique), so no special rule banning case-iteration is necessary.

(iv) Modal OBLique + Complementizing case. This possibility arises when APPRehensive, DESiderative, and HORTative clauses, which take the modal OBLique, are complementized with the OBLique case.

With APPRehensive clauses the 'emotive' modal OBLique is replaced by the 'future' modal PROPrieteive, also allowed with the APPRehensive (7.1.3).

A theoretically possible but unattested combination is modal OBLique
plus associating OBLique; to obtain this we would have to make an apprehensive or desiderative clause into a perceptual complement (8.4.1), which is odd semantically (? 'I saw him lest he hit the man').

(v) There are constructions in K where a nominalized clause modifies a matrix head inflected for modal case: here NPs of the nominalized clause bear a modal case identical to the matrix NP, followed by an associating OBLique. This runs counter to the expected suffix ordering in which the modal case, which originates in the higher clause, follows the associating OBLique, which originates in the lower clause. This apparent re-ordering is due to the extrinsic ordering of modal before associating suffixes, regardless of their syntactic source. As a result, the banned sequence AOBL-MOD does not arise. See 2.4.5 and 2.4.9 for discussion.

The body of data presented here on banned sequences, and the various ways of getting around them, provides strong justification for the bipartite analysis of Kayardild case proposed in 2.4.8. On the one hand, it allows constraints to be stated with the necessary generality, in terms of case alone (e.g. * OBL + Case), and without reference to function. On the other, it allows functions to be used in characterizing morphologically motivated case substitutions (e.g. M:OBL + Case ---> M:PROP + Case).

3.3 Nominal case: functions

Although all inflectional functions of nominals are mentioned at last briefly in this chapter, the main focus is on adjunct and complement functions, which can be characterized semantically without reference to larger grammatical units. The core functions of subject, object and indirect object, whose meaning depends on the argument structure of their governing verb, are discussed in Chapter Six.

3.3.1 The need for detailed discussion of case meanings

Cases, I believe, have meaning\. They are usually polysemous (although the meanings may be interrelated), and each distinct meaning is highly complex. Summary labels of the type found in Fillmore's (1968) 'deep cases' or the 'thematic relations' originally proposed by Gruber (1965) and incorporated into

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9See Wierzbicka (1980a) for a persuasive treatment of the Russian instrumental from this point of view.
Lexical Functional Grammar (Bresnan 1982) and Government and Binding theory (Chomsky 1981) may be useful summary labels, but they are inadequate for describing the meaning and the syntactic properties of Kayardild case. Taking the thematic relation of 'goal' or 'purpose' as an example, Kayardild distinguishes the following (needless to say, many situations can be described by more than one of these):

(a) the 'goal' or 'intentional object' of actions aimed at locating something, e.g. 'look for', 'listen for', 'walk around for'. This takes the PROProprietive.

(b) 'conventionally recognized goal' specifying what something is obtained for, e.g. 'get wood for (the fire)'. This takes the UTUTILitive case.

(c) something that can be found at a predictable place, e.g. 'go down to the pub for (beer)', go digging at place A for (cockles)'. This takes the Intransitive ALLative (verbal) case.

(d) something that must be waited for, whose appearance depends on someone else, e.g. 'go for (the pension cheques)'. This takes the (verbal) TRANSitive case.

(e) something that is actively pursued, as when one charters a plane to go to Burketown for beer. This takes the Verbal PURPositive case.

Similarly, there are at least three ways of expressing cause (prior cause with the CONSequential, ambient cause with the LOCative, and cause of fear with the verbal EVITative), two ways of expressing the 'having' relationship (ownership, with the PROProprietive, and temporary possession, with the ASSOCiative), three ways of expressing instruments (INSTRumental, stressing contact with the object: PROProprietive, stressing the choice of a particular instrument: and ASSOCiative, stressing temporary use), and so on.

The effect of these differences in meaning is not limited to selection of the correct relational or adnominal case. In Chapter 7 I show that modal case is blocked from appearing on certain NPs whose meaning orients them towards the subject in some way.

In the following two sections I therefore devote considerable attention to characterizing, in an informal way, the various meanings of the Kayardild cases. For reasons of space I have not been able to tackle systematically the question of the relationships between the various meanings of each case, but have tried to
bring these out through the order of presentation. Interestingly, this often
crosscuts the functional classification into adnominal, relational and modal uses.
The PROPriete, for example, can be used with its 'having' meaning adnominally,
relationally, and also in deriving nouns of 'characteristic possession'. And it can
be used with a 'potential' or 'future-oriented' meaning relationally (marking
intentional objects), modally, or in deriving 'potential nominalizations'.

It is quite possible that further investigation would show some
meanings to be contextually-determined variants of others. But at this
stage of investigation I would rather err on the side of
overdifferentiation.

3.3.2 NOMinative (-Ca)

Citation forms of words always take the nominative, which also marks the
subjects of intransitive (3-10), transitive (3-5) and passive (6.3.2) clauses, the
subjects of nominal clauses and their equational or ascriptive predicates (6.1.1,
6.1.2). Objects of imperatives (2-30), second predicates on the subject (6.4),
and topicalized objects in 'odd topic' constructions (9.5.2.1) are also nominative.

3-10 mutha-a dangka-a yuuma-th, buka-wa-th
many-NOM person-NOM drown-ACT rotten-INCH-ACT

Many people drowned and died.

The NOMinative in K is essentially an 'elsewhere case' (cf Mohanan
1982b:537 on Malayalam), appearing where no other relational, modal,
associating or complementizing case has been assigned. Thus if the
subject is assigned a 'complementizing OBLique' no nominative inflection
appears: 'man', when subject of an OBLique-complementized clause appears
Therefore the NOMinative does not belong to one of the ranks described in
2.4.8. Rather, it signals the absence of positive inflections at the
relational rank and beyond. (Nominals bearing only an adnominal
inflection may take a further nominative suffix, e.g. 3-92).

3.3.3 LOCative (-kiya)
3.3.3.1 Location

The basic function of the LOCative is to mark location, whether in adjuncts (3-11), complements of certain motion verbs (3-12), locational predicates of nominal clauses (3-3) or ‘locative topics’ of existential constructions (3-13):

3-11 ngaaka dangka-a waa-ja ngambirr-iy
who(NOM) person-NOM sing-ACT humpy-LOC
Who is singing in the humpy?

3-12 dulk-iya barji-ja wangalk
ground-LOC fall-ACT boomerang(NOM)
The boomerang fell to the ground.

3-13 dathin-ki mijil-i mutha-wuru malji-wuru
that-LOC net-LOC many-PROP hole-PROP
In that net there are many holes.

As in most Australian languages the LOCative merely indicates coincidence of figure and location, without specifying the nature of the spatial relationship (cf Hale (1982a) on the Warlpiri LOCative). Usually this spatial relationship can be inferred from the type of action and participants (as in the above examples – one usually stands on sandbanks, and holes are usually in nets). If more detail is required, this is given by a ‘locational specifier’ like yurda- ‘inside’ or walmu ‘high on: on top of’ in concert with the LOCative (4.2.2.3).

3.3.3.2 Block on adnominal use

The LOCative is normally used ‘adverbially’, as a clausal adjunct giving the location of the event described by the clause. As such, it has a relational function (2.4). It is not generally used to locate a particular participant: for this adnominal function the ASSOCIative case is used (3.3.10)\(^\text{10}\).

The Kayardild ban on the adnominal use of the LOCative appears to result

\(^\text{10}\)This contrasts with the situation found in, for example, Warlpiri, where the LOCative may function relationally, as in (3-14), or adnominally, as in (3-15), in which case it agrees in case with its head (here, the ergative). Examples are from Hale (1982:268):

3-14 ngarrka-ngku ka yankirri luwa-rni ngapa-ngka
man-ERG PRES emu(ABS) shoot-NPST water-LOC
At the water hole, the man is shooting the emu.

3-15 ngarrka-ngku ka yankirri luwa-rni ngapa-ngka-riu
man-ERG PRES emu(ABS) shoot-NPST water-LOC-ERG
The man at the water hole is shooting the emu.
from the sequence restriction against other suffixes following the LOCative (3.2.3).

for the LOCative can be used adnominally in just the two contexts where sequence
restrictions are not violated: (a) where the relevant NP is nominative, as in
imperatives (3-16) (b) where the head NP is in the OBLique, giving the LOC:OBL
portmanteau -kurrka on the adnominal. (As shown in 3.2.3, the OBLique is the
only case that may follow the LOCative (3-17)).

3-16 bilarri-na dathin-a nguku-wa wurruman-ki, warra-a ngku
spill-NEGIMP that-NOM water-NOM billy-(ADN)LOC far-NOM water(NOM)
Don’t pour out the water in the billy; the well’s a long way off.

3-17 kunawuna bilarri-nyarra nguku-ntha wuruman-kurrk
child(NOM) spill-APPR water-MOBL billy-(ADN)LOC:MOBL
The kid might spill the water in the billy.

In one interesting example a kurrka construction forces an adnominal construal:
the recursive LOCative NP [at this place [on Mornington Island]] takes an
ASSOCIating OBLique as argument of the nominalized verb wirdija ‘stay at’:

3-18 nga-l-da wirdi-n-da dan-inja dulk-inja kunhanha-wurrk
1-PLU-NOM stay-N-NOM this-AOBL place-AOBL Mornington-(ADN)LOC:AOBL
We stay at this place on Mornington Island.

Were the two LOCatives merely apposed - ‘we stay at this place, on
Mornington Island’ - the second LOCative would, like the first, take only
the ASSOCIating OBLique inflection: kunhanha-ntha.

3.3.3.3 Semantic extensions of the locative: time, ambient cause, manner,
contrast and ‘ethical effect’

A number of other (relational) uses of the Kayardild locative reproduce
patterns of syncretism found in many languages. I lack the space to examine the
semantic reasons for this, and will content myself with English glosses whose
prepositions illustrate the same syncretism.

Locative of time: Temporal adjuncts, both durative (3-19) and punctual
(3-20) take the locative:

3-19 ri-in-ki warrku-ya ngada wirdi-ja ngakan-ki
east-PROM-LOC sun-LOC I:NOM remain-ACT sandbank-LOC
All morning (as the sun was coming from the east)
I remained on the sandbank.
3-20  kabin-ji  mala-ya biril-wa-th
low tide-LOC sea-LOC fine weather-INCH-ACT
It gets fine at low tide.

*Immediate/ambient cause:* Where a cause is still present and effective at the
time of the proposition, the LOCative is used (3-21). As with the LOCative of
location, this is replaced by an appropriate modal case in marked modalities
(3-22).

3-21  mutha-ya wun-ki  bunkurru-ya yubuyubu-y, nyingka
much-LOC rain-LOC immersed-LOC track-LOC you:NOM
yuulu-tha  warra-ji
go ahead-IMP go-IMP
With all this rain, with the track covered in water, you go ahead!
(Don’t wait around).

3-22  dathin-a dangka-a kizzbuyi-n-da wirdi-n-d, ngada
that-NOM man-NOM snore-N-NOM stay-N-NOM I:NOM
yiwi-nangku niwan-ju kizzbuyii-n-ku
sleep-NEGFUT him-MPROP snore-N-MPROP
That man keeps snoring, I can’t get to sleep for his snoring.

*Manner NPs:* Occasionally, the LOCative may mark manner NPs:

3-23  nyingka ngudi-ja  mirra-ya wumburu-ngudi-n-ki
you:NOM throw-IMP good-LOC spear-throw-N-LOC
Throw it like a good spear-thrower would!

3-24  ngada banaba-ya  kurri-ja niwan-ji
I:NOM ignorance-LOC see-ACT him-MLOC
I looked at him in ignorance (without recognizing him).

These are the only attested examples of manner NPs with the LOCative — usually
manner NPs are second predicates on the subject, and take the NOMinative.
Without more data one cannot know why the LOCative appears in these particular
eamples.

*Contrast NPs:* NPs contrasting the attribute of one participant with that of the
clausal subject take the LOCative:

[In a humorous song rejecting an ugly suitor:]

3-25  nyingka birdi-ya kurri-i-ja ngijin-ji mirra-y
you:NOM bad-NOM see-DT-ACT me-LOC good-LOC
See how ugly you are compared to (beside) beautiful me!
Lit.: See your ugly self beside beautiful me.

*Adversely affected participant:* these take the LOCative (cf the English ‘on’
construction, and the Romance or Russian ‘ethical dative’).
(Someone) broke my spear on me!

3.3.3.4 Other uses of the LOCative

The use of the LOCative to mark demoted agents in passives is discussed in 6.3.2.2. As a modal case it marks ‘instantiated modality’ (7.1). And it may function as a complementizing case – see 9.1.4.

3.3.4 ABLative (-kinaba)

3.3.4.1 Note on word-internal and word-final forms

The degree of truncation depends on protected vs unprotected position, on age and style, and on syntactic function.

Word-Internally, the full form -(k)i)naba- is always used before LOC (e.g. (3-27)); -(k)i)naa- is used before OBL (3-28).

3-27 kalman-da wirdi-ja bilthurrka-naba-ya daru-y
sleepy snake-NOM stay-ACT bloodwood-(ADN)ABL-LOC hole-LOC
The sleepy snake lives in the holes of bloodwood trees.

3-28 [niwa kurrka-tharra-ntha wumburung-kinaa-nth]
3sgSUBJ:COBL take-PST:COBL spear-MABL:COBL
He must have taken the spear.

Most speakers realise this as ((k)i)na word-finally11 (3-29 below).

For all speakers, however, the full form ((k)i)naba is retained with -THarrba (‘precondition’) constructions (5.2.3.8).

3.3.4.2 Source of motion (relational)

Among older speakers the ablative may indicate the source of motion:

3-29 mutha-na dulk-ina jani-ja maku-wala niwan-ju
many-ABL place-ABL search-ACT woman-LOT(NOM) him-PROP
A lot of women (came) from many places to look for him.

3-30 nga-rr-a warngiij-ina bardaka-na
1-DU-NOM one-ABL belly-ABL
We (come) from the one belly (have the same mother).

Where the main verb is transitive, and the movement of the object rather than the subject is being stressed, the ablative is followed by a modal case suffix:

11The resulting final /a/ is not lost by prosodic truncation, probably because -kina itself results from a sort of truncation.
In the cognate case in Yukulta this 'source of motion' meaning is primary. In K, however, it is increasingly being expressed by the 'verbal ablative' (3.4.2.4), and is perhaps the least common function of the nominal ABLative. I retain the gloss 'ablative', however, because it makes it easier to see what is common to the other case meanings.

3.3.4.3 Possession due to parentage, inheritance or manufacture (adnominal)

The ABLative may function adnominally, marking possession. It is often interchangeable with the GENitive (3.3.8), so that 3-27, for example, could take either. But there is a subtle difference in meaning: the ABLative stresses that the possession comes from some past event: parentage (3-32), inheritance (3-33), or manufacture (2-45).

3-32 ngijin—jina thabuj—ina kunawuna kurzka—th
my—ABL EB—ABL child(NOM) take—ACT
My older brother's child took it.

3-33 burdumbanyi waydbala raba—nangku ngijin—jinaba—wu
ignorant(NOM) white man(NOM) tread—NEGFUT my—ABL—MPROP
ngarriju—naba—wu jardi—naba—wu dulk—u
MM—ABL—MPROP mob—ABL—MPROP country—MPROP
The ignorant white man must not trespass on the country of all my mother's mothers (that came down to me from them).

3.3.4.4 Extended time (relational)

The ABLative is occasionally used to indicate an extended period time leading up to the time of the clause:

3-34 nga—ku—l—da warra—ja wirdi—j warru—na birangkarr—ina
l—INC—PLU—NOM go—ACT stay—ACT sun—ABL long time—ABL
wurankarri, diya—n—marri
hungry(NOM) eat—N—PRIV
We've been walking around hungry for a long time, without eating.

3.3.4.5 Demoted agents (relational)

The demoted agents of passives (3-36) and of resultative and passive consequential nominalizations (3-35 & 8.4) may take the ABLative. Other choices are discussed in the relevant sections. In each case the action is seen as 'coming from' the (demoted) agent.
where-NOM child(NOM) form-PAC-DT-N CONS aunty-ABL

Where is the child who was delivered ('given form') by aunty?

NEG steal-IMP thing-NOM white-ABL man-ABL shoot-DT-APPR

Don't steal things, or you'll be shot by the white man!

3.3.4.6 Modal use

The ABLative serves as a modal case with Past, Precondition and ALMOST clauses, expressing the 'prior' modality. The possible relations between the basic spatial meaning of the ABLative and its modal meaning are discussed in 7.2.

3.3.5 PROPrieteive (-kurul)

3.3.5.1 Note on word-internal and word-final forms

Word-internally, the PROPrieteive is always ((k)u)ru, except that it may reduce to (k)uu when in modal function before a following OBLique (see examples is 7.1.1).

Word-finally, it may retain the full form (3-41) or be truncated to -(k)u. Truncation is most likely where it functions modally, progressively less likely where it functions relationally or adnominally, and never occurs when it derives a new nominal. In other words, the closer it is to the root, the less likely it is to be truncated. Age, sex and style also determine the frequency of truncation, with full forms most common among older speakers, among women, and in declamatory or song styles.

Because the formal possibilities overlap, are statistically rather than discretely determined, and because the full form is always possible, there are no grounds for postulating several suffixes. A more insightful analysis would treat (-kurul) as a Labovian 'linguistic variable' (Labov 1972) responsive to the multiple factors of phonology (word position), syntax (level of function) sex (male vs female) and style (informal vs declamatory or song). I have not carried out a full study of this and the above observations are impressionistic only.

Note that variations in truncation are NOT used to distinguish single from double occurrences of the PROPrieteive: double occurrences
have two full suffixes:\footnote{In this respect K differs from Lardil, where the reduced form \((k)ju\) is used when the suffix occurs once (whether modally, as when marking future objects (3-38), or relationally, when marking instruments (3-37), and the (historically) full form appears when the suffix occurs twice (e.g. instrumental plus modal in (3-38)) (Hale 1981:27-8).}

3-39 $\text{ngada} \text{ kurri-ju midijin-kuru-uru} \text{ dangka-wuru}$

$I: \text{NOM see-FUT medicine-PROP-MPROP person-MPROP}$

*I will see the doctor (medicine-having person).*

3.3.5.2 (Potential) having (relational, adnominal and derivational)

The primary function of the PROPrietive is to express the proposition ‘X has Y’. ‘Have’, however, is a highly ambiguous word in English, and the following explication of the Kayardild PROPrietive is more precise: ‘X can expect Y to be in the same place as X when X wants, and X can do with Y what X wants’. This allows for the possibility that Y is not currently in X’s immediate possession (X may have left it at home, or lent it to someone); the PROPrietive may be used felicitously in such situations. The related ASSOCIative case, on the other hand, also expresses a kind of ‘having’, but can only be used when X and Y are actually in the same place (see 3.3.10).

What is basically the same semantic relation may take a number of syntactic forms.

(i) *an adnominal relationship* between two NPs:

3-40 $\text{niya} \text{ karrngi-ja dun-kuru-ya} \text{ maku-y}$

$3\text{sgNOM keep-ACT husband-PROP-LOC woman-LOC}$

*He is living with a married woman*

(ii) *‘instruments of equipment’*: the PROPrietive, along with the INSTRumental and ASSOCIative, is one of the three cases used to denote instruments. The

\footnote{In this respect K differs from Lardil, where the reduced form \((k)ju\) is used when the suffix occurs once (whether modally, as when marking future objects (3-38), or relationally, when marking instruments (3-37), and the (historically) full form appears when the suffix occurs twice (e.g. instrumental plus modal in (3-38)) (Hale 1981:27-8).}

3-37 $\text{ngada} \text{ yuud-netha karnjin-i wangalk-ur}$

$I: \text{NOM PERF-hit(UNM) wallaby-OBJ boomerang-INSTR}$

*I hit the wallaby with a boomerang.*

3-38 $\text{ngada} \text{ ne-thu karnjin-ku wangalk-uru}$

$I: \text{NOM hit-FUT wallaby-FOBJ boomerang-INSTR:FOBJ}$

*I will hit the wallaby with a boomerang.*

This appears to result from an underlying form $\text{wangalk-uru}-r$ [boomerang-INSTR-FOBJ] in which the full form of the inner suffix is protected by the following suffix, itself lost. For parallels in dependent clauses see Hale (1981:28) and Appendix E.
PROPrieteive is semantically the most general, and stresses that the actor was 'equipped' with a certain tool: as in (3-41). The semantic differences between the three cases are discussed in 7.3.2.1.

3-41 dathin-a barrki-ja wandawanda-wuru, narra-wuru kala-th
that-NOM chop-IMP stone axe-PROP shell knife-PROP cut-IMP
thubul-uru bijurr-uru burukura-th
cockle sp.-PROP cockle sp.-PROP scrape-IMP

Chop it with a stone axe, cut it with a shell knife, and scrape it with a thubuld or bijurr shell.

(iv) deriving nouns of 'characteristic having': the PROPrieteive may derive nouns denoting a person, mythical being, thing, animal or place characterized by possession of a particular entity:

kuja-wuru
pubic hair-PROP
young preinitiate

bardi-wuru-bardiwuru
grey hair-PROP-REDUP
old man

nal-kardarra-wuru
head-water lily-PROP
name of a mythical being who emerged from the earth with a water-lily on his head

tharda-wanka-wuru
shoulder-wing-PROP
aeroplane

mardal-kuru
mud-PROP
place name, Bentinck Island

daman-kuru
tooth-PROP
'whistler', old dugong with big teeth

Although formally similar to inflected adnominal formations, derived nouns can be distinguished from these latter in three ways: (a) adnominals need a head noun (e.g. midijinkuru dangkaa 'medicine-having person'), derivations do not. As adnominals become frozen, the head typically disappears: 'aeroplane' is thardawankawuru thungald on Wurm's 1960 tapes but today simply thardawankawuru. (b) typically there is some specialization of meaning in derivations. Thus kujawuru is not used of anyone with pubic hair (it would be inappropriate for an old man, for example), but only of preinitiates. (c) Like all derivational suffixes in K, the derivational use of the PROP is restricted to words, whereas the adnominal use can apply over NPs. See 2.1.2.1 and 3.6.3.
3.3.5.3 Thing transferred (relational)

With verbs of transfer like *wuuja* 'give' or *marndija* 'deprive of, take off' the PROPrierteve marks the entity whose ownership is in question (see 6.2.5 for further examples and discussion).

3-42 *dathin-a dangka-a dangka-walath-iya marndi-ja yakuri-wuru*

That man takes fish off lots of people.

A number of other relational and derivational uses develop the 'potential' component of the more basic 'having' meaning.

3.3.5.4 Intentional objects (relational)

The 'intentional objects' (Quine 1960:219-23) of a number of verbs describing actions directed into the future, e.g. *janiia* 'search for', *ngakatha* 'wait for', take the PROPrierteve. These are discussed and exemplified in 6.2.3.

'Nominal predicators' in which anticipation is an important component, such as *mulurra* 'jealous over, suspicious of' and *bardakayulaanda* 'terrified of', also take PROPrierteve arguments (6.1.7). Some transitive verbs have an alternative NOM:PROP case frame, with the implication that the action was attempted but not necessarily achieved, e.g. *balatha* '(a) shoot OBJ; (b) shoot at PROP' (6.2.6.4).

3.3.5.5 Things discussed, sung about or presaged (relational)

PROP may mark entities absent from the scene but potentially present, either because the participants speak (3-43), send messages (3-44) or sing about them (3-45) (i.e. *have* them in mind), or because they are immanent in the situation, as when presaged by something else (7-18).

3-43 *jardaka kamburi-j kurirr-wu dangka-wu*

The crow speaks of dead men.

3-44 *bath-in-da warra-ja marrjin-d, bijarrba-wuru kunbulk-uru*

From the west came a messenger, with (news of) dugong, big game and fish.
3-45 waa-ja wirdi-ja ngada bijarrba-wuru
   sing-ACT stay-ACT I:NOM dugong-PROP
   I am singing about a dugong.

3.3.5.6 Other uses:

The PROPrieteive may attach to nominalized verbs, deriving nouns of ‘potential action’. This formation is discussed in 8.2.10.1. It may also function modally, signalling futurity or potentiality. This, and its semantic relationship to the more basic relational and adnominal meanings is discussed in Chapter 7.

3.3.6 OBLique case (-inja)

The Yukulta cognate of this case (probably preserving the ancestral use) is a DATive with a wide range of relational functions: indirect object, goal, purpose, beneficiary, recipient of transfer verb, and so on. In K these have mostly been delegated to various ‘verbal cases’ (3.4) and the old relational case functions have been overshadowed by the newly-extended modal, associating, and complementizing functions. For this reason I have chosen the non-committal case-label ‘oblique’. However, some minor relational uses remain.

3.3.6.1 Purpose

Older speakers occasionally use the OBLique for purpose NPs (3-46). But the verbal purposive is far more common (3.4.2.7) and indeed the only choice for younger speakers.

3-46 nyingka wanjii-ja kuru-nth!
   you:NOM go up-IMP egg-OBL
   You climb up for eggs!

3.3.6.2 Indirect objects of middle nominal predicators

In Yukulta (and pT) the cognate case marked the indirect object of a number of middle verbs. In K these take the PROPrieteive or ‘verbal dative’ (3.4.2.2), and the ‘indirect object’ use of the oblique is limited to its optional use with the nominal predicate mulurra (3-47). (Even here, the PROPrieteive is more common – see 6.1.7).

3-47 dathin-a dangka-a mulurr-a niwan-inja maku-nth
   that-NOM man-NOM jealous-NOM his-OBL wife-OBL
   That man is jealous of his wife.
3.3.6.3 Suitability of kin relationship

The oblique may be used in a nominal clause, stressing the suitability of the kinship relation between one person and another, or that one is an ongoing beneficiary from the existence of another (cf 'he was a father to me').

3-48 mirra-a kunawuna wurkara ngijin-inja duujin-inj
good-NOM child(NOM) boy(NOM) my-OBL younger sister-OBL
(He's a) good son for my little sister.

3.3.6.4 Standard of comparison

The OBLique may mark the standard in a comparative construction:

3-49 niya jungarrba ngijin—inj, ngada kunya—a
3sgNOM big(NOM) me-OBL I:NOM small-NOM
He's bigger than me, I'm small.

3.3.7 ALLative (-kir(ing)-)

This case is mainly used by older speakers. Its directional use has been replaced among the young by the verbal dative and verbal intransitive allative (4.4). and its extensive, pergressive and perlative uses have been lost altogether - younger speakers use the less specific LOCative to express these.

3.3.7.1 Direction of motion (relational)

The allative may show direction of motion, with transitive and intransitive verbs alike.

3-50 kurrka-tha nga-kul-da natha-r nga-ku-1u-wan-jir
take-IMP 1-INC-PLU-NOM camp-ALL 1-INC-PLU-POSS-ALL
Let's take (it) to our camp!

3-51 dathin-a thungal-da niwan—jiri barji-ja kirdil-ir
that-NOM tree-NOM him-ALL fall-ACT back-ALL
That tree fell onto his back.

13In Lardil the OBJective case is used (Klokeid 1976:204-5); this is cognate with the K OBLique and the Yukulta dative: niya mutha ngithaan [3sgNOM big(NOM) 1sg:OBJ] 'he is bigger than me.'
3.3.7.2 Extensive, pergressive and perlative uses

It may also indicate a locale through which something is scattered ('extensive'. 3–52 and 6–12) or across which it passes ('pergressive'. 3–53) or lies ('perlative'. 3–54):

3–52 mutha–a dangka–a dathin walmunkarra–r dulk–ir
many–NOM man–NOM there(NOM) on top–ALL place–ALL
There are lots of men all over the top of that hill.

stone–NOM throw–IMP river–ALL north–FROM–ALL
Throw the stone from the north across the river!

3–54 dathin–a wumburung–ka ngijin–da dulk–ir
that–NOM spear–NOM my–NOM ground–ALL
That spear of mine is lying along the ground there.

3.3.7.3 Non-relational uses

The allative also marks 'DIRected modality' (7.1), and appears in 'movement purpose clauses' (8.6).

3.3.8 GENitive (-karra(n)–)

3.3.8.1 Notes on form

Word–internally the form is –karran–. Note that in nominal predicate constructions a following nominative inflection appears, giving the form karran–da (e.g. 3–59, 3–61, 3–58). Word–finally (as when modifying a nominative NP) it is –karra–.

In Yukulta the cognate suffix is –bakarra(n)–. This form is limited in Kayardild to the distance locationals dan– 'this; here' and dathin– 'that, there'. The recency of the contraction to karra explains its failure to undergo the reductions found with other inflections in –kVX (4.2).

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14 Avery Andrews (p.c.) has suggested a possible reason for this syncretism: in all these cases the eye must move along a certain path to see all the entities involved.
Possession (adnominal)

The GENitive is one of the three ways of marking possession, along with the ABLative (3.3.4) and the apposed-noun construction (4.4.3.5). We have seen that the ABLative is used for possession 'coming from' some past event, such as manufacture or inheritance: the apposed-noun construction is used for 'part-whole' relations and 'inalienable' possession. The GENitive covers the remaining types of possession. In general it contrasts with the ABLative in stressing that ownership is present or expected, and contrasts with the apposed noun construction in stressing separability or alienability. More specifically, it covers:

(a) kin, where the possessee is not seen as senior:

3-55 dathin-karra maka-karra kularrin-da kurrka-th
that-GEN woman-GEN brother-NOM take-ACT
That woman's brother took (it).

(b) ownership of land, seen as a presently existing right:

3-56 maraka kurri-ju dathin-ku dulk-u, dibirdibi-karran-ju
CTRLCT see-FUT that-MPROP place-PROP Rock Cod-GEN-MPROP
dulk-u
place-MPROP
(We) would have liked to to see that place, Rock Cod's place.
(Rock Cod is the name of the woman who owns it).

The GENitive is used for ownership by people. But with mythical beings who are the originators and alternate manifestations of places (e.g. the 'moon story place' in Line 18 of Text 4), the 'part-whole' construction is used (4.4.3.5).

(c) expected allocation. In (3-57), for example, a number of hunters have taken turns to spear turtles; now it is the 'father-in-law's' turn.

3-57 burri-ja niwan-karra kardu-karra bang-a - kurirr
come out-ACT his-GEN WF-GEN turtle-NOM dead(NOM)
Up comes his father-in-law's turtle, (and then it's) dead.

(d) body parts that are severed (3-58), or traces left by a body part (3-59). (Tracks may also take the apposed nominal 'part-whole' construction - 4.4.3.5).

3-58 bijarrba-karra marl-da nga-rr-a kurri-ja kabara-y
dugong-GEN hand-NOM 1-DU-NOM see-ACT saltpan-LOC
We saw a dugong's (severed) flipper on the saltpan.
3-59  jar-a dangka-karran-d  
track-NOM person-GEN-NOM  
*The track is a human’s.*

(e) the source of material, when the material has been removed (3-60) or thoroughly transformed (3-61). Elsewhere the part-whole construction is used, as in ‘grass string’ (4.4.3.5).

3-60  nguka  
murdu-karran-d  
string-making bark(NOM) corkwood-GEN-NOM  
*String-making bark comes from the corkwood tree.*

3-61  ... malba-karra mijil-d  
wallaby grass-GEN net-NOM  
... a net made with wallaby grass string.

Younger speakers are extending GEN at the expense of the ABLative and apposed-noun constructions. They will use it, for example, with all types of kin relation (e.g. dangkakarra kunawun ‘man’s child’) and with inalienable body parts (e.g. dangkakarra miburid ‘the man’s hand’).

3.3.8.3 GENitive plus LOCative: vague location

The sequence GEN-LOC indicates vagueness of location (3-62), or that one entity is surrounded by or encircled by another:

3-62  warrun-ki ngada dan-da kurri-ja wida-karran-j i  
mangrove rat-MLOC I:NOM here-NOM see-ACT hole-GEN-LOC  
*I saw a mangrove rat by this hole somewhere.*

3-63  mutha-a majimaji thaldi-ja kaburrba-karran-ji  
many-NOM dugong tail(NOM) stand-ACT fire-GEN-LOC  
*Dugong tails stuck up all around the cooking fires.*

3-64  ngirrngud-a kala-ja nal-karran-ji  
fly-NOM fly-ACT head-GEN-LOC  
*A fly is flying around (my) head.*

3.3.9 INSTRumental -nguni

3.3.9.1 Phonological note

The sequence nguni-wu (INSTR: MPROP) sometimes reduces to ngunu. Before a pause, following modal LOCatives may be lost: nguni-ya ‘nguni, as in (3-67). Modal LOCatives lost in this way will not be glossed.
3.3.9.2 Instrument of contact

The instrumental is one of three cases available for denoting instruments, and in many sentences is interchangeable with the PROPriective or ASSOCiative cases (see 7.3.2.1): fighting with boomerangs or spears, catching fish with nets, digging yams with sticks. But the instrumental is the only appropriate case when the physical contact between implement and object is being stressed, especially when the 'instrument' is extended in space and is therefore in contact with the object over a large area:

3-65 mardala-tha rirr-nguni
rub-ACT grease-INSTR
(He) rubbed (it) with (dugong) grease.

3-66 kari-ja kuwan-d, dunbu-wa-nharr,
cover-IMP firestick-NOM extinguished-INCH-APPR
wunkurr-nguni kari-j!
grass-INSTR cover-IMP
Cover the firestick, lest it go out, cover it with grass!

3.3.9.3 Locale as instrument

The instrumental may also mark a locale whose special properties help the agent achieve his goal. In (3-67) the sandhill is high, a good vantage point: in (3-68) the fugitive adolescents choose a nice secluded place to eat their illicit food: and in (3-69) the complainant wants to find somewhere where no-one will come and cadge off him.

3-67 thaldi-ja kurri-ja dumu-nguni-ya walmathi-nguni
stand-ACT look-ACT sandhill-INSTR-MLOC high-INSTR(MLOC)
(T hey) stood and looked from on top of the sandhill.

3-68 warra-warra-nguni-ya diya-j jungarrba-na dangka-na
far-REDUP-INSTR-LOC eat-ACT, big-ABL person-ABL
kurri-i-nyarr
see-DT-APPR
(The adolescents) ate (the forbidden food) far far away, so that they wouldn't be seen by the adults.

3-69 jina-nguni-wu baa-ju ngad?
where-INSTR-MPROP smoke-PUT I:NOM
Where can I smoke (so that no-one can see me and cadge all my cigarettes?)
3.3.10 ASSOCIATIVE -nurru

This case is used in a variety of situations where two entities are temporarily in the same place: temporary location, transient possession, and temporary use.

3.3.10.1 Temporary co-location

The ASSOCIATIVE may be used relationally as an alternative to the LOCATIVE, but stresses the temporary nature of the location:

3-70 ngada dangka-walath-i junkuwa-tha yubuyubu-nurru
   I:NOM person-LOT-MLOC meet-ACT track-ASSOC
I met the people on the track.

Is also used for adnominal location. See 3.2.3.

3.3.10.2 Temporary having

The ASSOCIATIVE may, like the PROPRIETIVE, mark possessed objects. But whereas the PROPRIETIVE implies ownership, and allows the possibility that the possessor does not have the object with him at the time, the ASSOCIATIVE implies the opposite: the possessor must have the object with him at the time ("just like he holding it"). but need not entail ownership — the item may be borrowed, for instance.

3-71 ngada wangal-kuru // wangal-nurru
   I:NOM boomerang-PROP boomerang-ASSOC
I have a boomerang (own one // have one with me).

In this use, the ASSOCIATIVE normally functions adnominally, agreeing with its head, as in:

3-72 kaba-tha dathin-ki dangka-y dangka-nurru-ya wara-y
   find-ACT that-MLOC man-MLOC man-ASSOC-MLOC mouth-MLOC
   (They) found that fellow with a man in his mouth.
   (Literally: with a man-having mouth).

The temporarily-present object may be an implied cause:

3-73 kurirr-a kujiji-nurru, bukawa-th
   dead-NOM spear-ASSOC die-ACT
   (He) was dead with a spear (through him), died.

The use of the ASSOCIATIVE with instruments is discussed in 7.3.2.1: it is suitable for instruments that have been borrowed or snatched up for the purpose at hand. The pattern of modal and associating case marking, I will argue, suggests that
ASSOCIative instruments are true ‘second predicates’ on the subject, conveying the meaning ‘SUBJ. having ASSOC with SUBJ at the time. Ved’.

Because the possession expressed by the ASSOCIative is so transient, it is usually inadequate for identifying the possessor, and rarely used in deriving entity nominals; this contrasts with the PROPrieteive (3.3.5). There is one revealing exception: pregnant women, temporarily characterized by the presence of a child in their womb, are bardakunawunanurru [belly-child-ASSOC].

3.3.10.3 Accompaniment

Here, too, the ASSOCIative NP functions as a second predicate on the person accompanied. In all my examples the accompaniment is temporary: in 3-74 it is a prerequisite for the clausal action.

3-74 ngijin-urru thabuju-nurru niya warra-j
my-ASSOC E.Br-ASSOC 3sgNOM go-ACT
She’s going (there) with my big brother.

3-75 nga-ku-lu-wan-urrru bi-l-da wirrka-ju
1—INC—PLU—POSS—PROP 3—PLU—NOM dance-FUT
They’ll dance with us (i.e. when we get there).

3.3.10.4 Temporary ambience

Temporary environmental or meteorological conditions that facilitate the clausal activity may be expressed with the ASSOC:

3-76 ngimi-nurru ra-yii-j
darkness-ASSOC spear—DT—ACT
(They) were speared under cover of darkness.

3.3.11 ORIG—wa(a)n—

This case marks origin, provenance or source.

It only functions adnominally (if one counts its use to mark demoted agents with nominalized clauses as adnominally). I group it with the case inflections on the basis of its clausal scope (e.g. iungarra-wan-da mala-waan-d [big-ORIG—NOM sea—ORIG—NOM] ‘from the high seas’), and because it forms a paradigmatic series with the ‘true’ cases. that can also function adnominally.

15 Tindale gives 'dolnoro' (dulnurru) for 'patrilineally inherited territory'. This comes from dulnurru dangkaa 'land—ASSOC person', and is at odds with the transient association normally expressed by this case. In fact my informants reject dulnurru dangkaa in favour of dulkurru or dulmarra dangkaa, with the PROPrieteive or UTILitive case.
3.3.11.1 Habitual or characteristic location

The entity under consideration may be human, as in dan-man-da dangka-a [here-ORIG-NOM person-NOM] 'Lardil person', or it may be a member of the animal kingdom (3-77) or a plant.


People, languages and customs are usually characterized by the ORIGin form of the various compass terms (4. 2. 4. 4).

Objects thought of as 'belonging to', or always found in, other objects, also take ORIG:

3-78 maramara-wan-ji murndulk-i darrbuu-j dinghy-ORIG-MLOC rope-MLOC pull-ACT We pulled on the rope from the dinghy.

3.3.11.2 Characteristic time

Creatures characteristic of a particular time of day may also be described using an adnominal ORIGin NP. Warrkuwanda kungulda [sun-ORIG mosquito] are those appearing during the day: ngimiwanda kungulda are those appearing at night. A slight semantic extension of this is exemplified in (3-79), where the speaker is thinking not so much of when turtles appear, as of when they can be speared:

3-79 bang-a, ngimi-waan-d, ngimi-ya marri-ja, ngimi-wan-ja turtle-NOM night-ORIG-NOM night-LOC listen-ACT night-ORIG-MLOC raa-ja bang-a spear-ACT turtle-MLOC Night-time turtles, at night we listened, we speared night-time turtles.

3.3.11.3 Source of existence

The ORIGin case may give the material or economic source of an entity's existence:

3-80 muth-a nguku mangara-waan-d much-NOM water(NOM) storm-ORIG-NOM There's a lot of water from the storm.
3.3.11.4 Inanimate cause with resultative nominalization

With RESULTative nominalizations the ORIGIN case may mark an indirect and inanimate cause of the event (cf 8.4).

3-82 bi-1-da dunbu-ru-thirri-n-da thura-waan-d
3-PLU-NOM deaf-FAC-RES-N-NOM loud human noise-ORIG-NOM
They (the initiates) were deafened by the noise.

These ORIGIN NPs could be parsed (a) as adnominals modifying the resultative nominalization and agreeing with it in (NOMinative) case; (b) as double nominal predicate constructions, with both nominalization and ORIGIN NP directly modifying the subject. I see no way of deciding between these two analyses.

3.3.12 PRIVative -warri

3.3.12.1 Lack, absence

The main function of the PRIVative is to express the lack or absence of an entity.

Usually the PRIVative functions as adnominally, either as an attributive (3-84) or as a second predicate on the subject (3-83):

3-83 nginyinangkuru-ya kiwali-ja niwan-marri wumburu-warri
whomplaint-MLOC wade-ACT his-PRIV spear-PRIV
Why is he wading about without his spear?

3-84 nga-ku-rra warra-ju dangka-warri-wu dulk-u
1-INC-DU go-FUT person-PRIV-MPROP country-MPROP
We will go to uninhabited places.

Privatives may also be used relationally, as adjuncts nominating the lack of a person or thing as a precipitating cause (3-85), or expressing the lack of an impediment (9-3).

3-85 ngijin-marri-wu / dangka-warri-wu maraka yuuma-thu
me-PRIV-MPROP person-PRIV-MPROP CTRFCT drown-FUT
Without me / had no-one been there (he) would have drowned.
3.3.12.2 Negation

The PRIVative may also function as a negator, as in:

3-86 nyingka kurrka-na dan-da dangka-a, ngumban-da
you:NOM take-NEGIMP this-NOM man-NOM your-NOM
waijyangu-warri, bulbirdi
betrothed-PRIV wronghead(NOM)

Don't take this man (for a lover), he's not your betrothed,
he's wronghead (to you).

As (3-86) illustrates, the PRIVative need not display full phrasal concord when functioning as a negator; instead, the domain of case marking depends on the logical scope of negation. In (3-86), the nature of the man's marriageability is at issue (he's not your betrothed); were the emphasis to shift to whose betrothed he was, the possessive pronoun would be negated: ngumbanmarri waijyangu 'not your betrothed'. The full-concord version, ngumbanmarri waijyanguwarri is more vague - it can be true under either of the above conditions - and is pragmatically unlikely. The whole issue of negation is discussed in 6.6.

3.3.13 CONSequential -ngarrba

3.3.13.1 Succession and cause

Used adnominaly, this means 'one who has previously been in contact/involved with NP-CONS'. e.g. dararr-ngarrba wurdalji 'meat that has been on the coals'. mala-ngarrba dangkaa 'person who has been involved with beer, drunken person'.

Like other adnominal NPs. CONSequential NPs frequently function as second predicates on the subject (see 6.4.1.1 for syntactic evidence of their second predicate status). CONSequential second predicates may express temporal consequence (contingent succession) or cause (necessary succession): often the two cannot be distinguished.

3-87 niya warrku-ngarrba bukawa-th
3sgNOM sun-CONS die-ACT

He died because of the sun / after being in the sun.

---

16 As Fauconnier (1975) has remarked, several factors, some of them pragmatic, may be at work to produce logical effects and scope differences.
That man might die from a snake(bite).

I have one example of CONS being used as a second predicate on the object: here it means ‘(at the time) after OBJ became a NP-CONS’.

He adopted (her) after she became an orphan. (Lit. ‘he took her on behind (her parents)’).

The CONSequential may be used derivationally: here X-ngarrba means ‘formerly X’. For example, a speaker discussing the former unity of the Yangkaal and Kayardild tribes described them as dul-warngili-uru-ngarrba [country-one-PROP-CONS] ‘formerly having one (and the same) country’. (On the use of compounding to feed derivations, see 3.6.3.)

The CONSequential is used on nominalized verbs of various sorts, to indicate prior situation (8.2).

A homophonous suffix marks kinship dyads (Appendix B).

The UTILitive expresses the conventional, expected use that will be made of an entity. Two semantic types may be recognized:

(i) to make into X-UTIL. Here the UTILitive expresses the form into which the entity will be transformed:

17Yukulta lacks this case, using the DATive instead (Yukulta data from my own field work.):
3-91 barrki-ja dathin-a burldamurr-a thungal-d, bankirri-marra
chop-IMP that-NOM three-NOM tree-NOM windbreak-UTIL
nga-ku-lu-wan-marr
1-INC-PLU-POSS-UTIL
Chop down those three trees for our windbreaks!

From 3-91 one might surmise that the UTILitive was functioning adnominally (modifying 'those three trees'). There are examples, however, in which the UTILitive is clearly an independent 'relational' NP. In 3-92 the UTILitive argument takes modal case, while the object to be transformed takes the ASSOCIative and serves as a second predicate on the subject:

3-92 nyingka ngi-nurru-wa dali-jarra kuwan-marra-na?
you:NOM wood-ASSOC-NOM come-PST firestick-UTIL-MABL
Have you brought wood for firesticks?

(ii) to use for doing things to X-UTIL:

3-93 barrki-ja dathin-a muri-y, nguku-marr
chop-IMP that-NOM baler shell-NOM water-UTIL
Chop (a handle into that) baler shell, we'll use it for (getting) water.

3-94 yakuri-marra nga-ku-lu-wan-marra burldi-ja malba-a, birrk,
fish-UTIL 1-INC-PLU-POSS-UTIL roll-IMP grass-NOM string(NOM)
babara-th!
hurry-IMP
Roll some grass string quickly, for (catching) our fish.

In this second function, a nominalized verb may be present, describing the action one wishes to perform on X-UTIL: hitting in (3-95), roasting in (3-96), and cutting in (3-97).

3-95 ngada jungarra-wu wangalk-u barrki-ju dangka-walany-marra-wu
I:NOM big-MPROP boomerang-MPROP chop-PUT person-LOT-UTIL-MPROP
bala-n-ku
hit-N-MPROP
I will make a big boomerang for hitting lots of people.

3-96 ngambura-tha bi-l-da maku-wa bithiin-da yakuri-marra-y
dig hole-ACT 3-PLU-NOM woman-NOM man-NOM fish-UTIL-MLOC
dathin-marra-ya wuran-marra-ya kawa-n-ki
that-UTIL-MLOC food-UTIL-MLOC roast-N-MLOC
Those men and women are digging a ground oven for roasting that fish.
That baler shell is for cutting trees down, for making spears.

Sentences (3-95) to (3-96) invite two possible analyses:

(a) as an embedded construction, in which the UTILitive NP is an argument of the nominalized verb. This would have the semantic interpretation reflected in the glosses, e.g. 'to hit lots of people'.

(b) as a flat, double-predicate construction, with both nominalized verb and UTILitive NPs being independent arguments of the matrix clause. This would imply the semantic analysis: 'to V with, to do things to N-UTIL with'.

There are two advantages to the second analysis. Firstly, were the UTILitive NP an argument of the nominalized verb, we would wrongly expect it to take an ASSOCIATING OBLIQUE case (2.4.5). Secondly, we would only expect UTILitive NPs to appear with nominalized verbs, whereas as we have seen they regularly occur independently. Postulating an embedded construction is therefore an unnecessary complication.

The UTILitive suffix may function derivationally, providing names for tools or clothes: damuru-marra [panja-UTIL] 'stick used for (digging) panja'; thukan-marra [chin-UTIL] 'thing used for (shaving) chin: razor'; mibur-marra [eye-UTIL] 'thing used for (helping) eyes: glasses'; murnu-marra [elbow-UTIL] 'thing used for (supporting) elbow, sling'.

A somewhat idiomatic use is in the term dulmarra dangkaa [country-UTIL person] 'custodian of sacred site'. Here we can explain the presence of the UTIL through the paraphrase 'person used for (maintaining/guarding) country'.

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18A similar meaning is expressed by the Nyangumarda suffix *pinti* 'COMPLEMENT OF' (O'Grady 1960) 'denoting an element of the material culture which is associated with a particular object or action', e.g. *ngarnka* 'beard', *ngarnka-pinti* 'razor'. But in Nyangumarda this suffix may be used with nominalized verbs, e.g. *yangkan-* 'spread over', *yangkan-pinti* 'jam', whereas the K UTILitive is, as far as I know, limited to basic nouns.

19The cognate *dulmarr* 'totemic and associated authority derived from ego's patriline' (Hale 1981) and its derivatives are to my knowledge the only remnant of the UTILitive case in Lardil.
3.3.14.2 Targeted time

Attached to time NPs, the UTILitive expresses the time for which some activity is targeted or scheduled (see also 2-29):

3-98 birangkarra bi-l-da mardala-a-j, ngimi-marra-y
long time(NOM) 3-PLU-NOM paint-DT-ACT night-UTIL-MLOC

They've been painting up a long time for (the dance) tonight.

This is similar in meaning to the verbal 'translative' case (3.4.2.3), which is superseding it among younger speakers.

3.3.14.3 VOCative -ki ~ -ya

This suffix is treated here because it is in the same paradigmatic series as the other (relational) case suffixes. Functionally, however, it is not a proper case, as it derives interjection-like utterances rather than relating the phrase it appears in to some larger syntactic unit.

Its form is -y(a) after vowels and -ki after apical nasals (Declension 5b): these are the only allomorphs attested.

The vocative appears on nominal utterances (usually shouted) that either suggest that something is relevant to the hearer (3-99, 3-100, 3-101) or that it is true of the hearer (3-102, 3-103):

3-99 warirra-y!
nothing-VOC

(To a garbageman): Hey, (there's) nothing there (for you).

3-100 wanku-ya dathin-ki ri-in-ki!
shark-VOC there-VOC east-FROM-VOC

Hey, there's a shark (coming at you) from the east there!

3-101 mutha-y!
much-VOC

(Directing A's attention to B): Hey, (he's got) lots (of fish)!

3-102 (Circumcizer mocking initiand during circumcision ceremony:)
mala-yurruyuru-ya kakiju-y
sea-persistent-VOC son in law-VOC

Hey you spend too much time in the sea!

3-103 (Granny to toddler:)
rajurri-n-ki
walk-N-VOC

Hey you can walk!
The formal similarity between this and the LOCative case (also -ki after declension 5a stems and -y(a) after vowels) is striking. It possibly arose through convergence of two vocative suffixes:

(a) the vocative ending yi, found in Yukulta, e.g. thabutha-yi 'hey brother!', and in other Australian languages.

(b) the 'summons' suffix -kayi (see Appendix B), restricted in Kayardild to kin terms.

Another connection between the second person and the locative is found in the complementizing case system (9.1.4).

3.4 Verbal case

3.4.1 Introduction to verbal case

In addition to the regular nominal cases discussed in 3.3. Kayardild, as well as the other Tangkic languages has a set of what might be called 'cases with verbal form' (Keen 1983) or, more briefly, 'verbal cases' (not to be confused with modal cases!). These are listed in Figure 3-4.

These have morphologically verbal endings, which agree with the main verb in the verbal categories of tense, mood and polarity (3-104, 3-105, 3-106).

3-104 ngada warra-jarra dathin-kiwa-tharra ngilirr-iiwa-tharr
I:NOM go-PST that-V.I.ALL-PST cave-V.I.ALL-PST
I went to that cave.

3-105 ngada warra-ju dathin-kiwa-thu ngilirr-iiwa-thu
I:NOM go-FUT that-V.I.ALL-FUT cave-V.I.ALL-FUT
I will go to that cave.

3-106 ngada warra-nangku dathin-kiwa-nangku ngilirr-iiwa-nangku
I:NOM go-NEGFUT that-V.I.ALL-NEGFUT cave-V.I.ALL-NEGFUT
I will not go to that cave.

Like main verbs, too, they can be nominalized (8.2). Yet they resemble case inflections both in meaning and in syntax. They exhibit concord over the NP, as the above sentences show. And they can frequently be paraphrased with 'normal' cases. 3-105, for example, can be paraphrased with the 'normal' allative:

20 In Diyari, for example (Austin (1981a:32)), words may be suffixed by phonetic [Ai] in shouted speech. Note, though, that Austin specifically rejects the suggestion that the Diyari form is a vocative, glossing it DISTORT, since it can occur on both nominals and verbs.

21 The similar Yukulta and Lardil systems are discussed by Keen (1983:207-8) and Hale (1981:34-7) respectively. Hale advances similar reasons to those given here for considering these suffixes to be inflections rather than derivations.
<table>
<thead>
<tr>
<th>Case</th>
<th>Form</th>
<th>Corresponding Free Form</th>
<th>Meaning of Free Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>Verbal Intransitive</td>
<td>{-kiiwa-tha} (1)</td>
<td>None</td>
<td></td>
</tr>
<tr>
<td>Allative</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Verbal Dative</td>
<td>{-maru-tha}</td>
<td>marutha</td>
<td>'put'</td>
</tr>
<tr>
<td>Verbal Translative</td>
<td>{-marii-ja} (2)</td>
<td>mariija</td>
<td>'be put'</td>
</tr>
<tr>
<td>Verbal Ablative</td>
<td>{-wula-tha/</td>
<td>bula-tha</td>
<td>'pull off, remove'</td>
</tr>
<tr>
<td></td>
<td>-wula-a-ja}</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Verbal Evitative</td>
<td>{-waalu-tha/</td>
<td>waalu-tha</td>
<td>'drive away'</td>
</tr>
<tr>
<td></td>
<td>-waal-i-ja}</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Verbal Gift</td>
<td>{-wu-ja} (3)</td>
<td>wuu-ja</td>
<td>'give, put'</td>
</tr>
<tr>
<td>Verbal Purposive</td>
<td>{-jani(i)-ja} (4)</td>
<td>jani-ja</td>
<td>'look for'</td>
</tr>
</tbody>
</table>

Figure 3-4: Verbal cases in Kayardild

Notes:

**General:** Verbal cases follow the usual nominal stem and induce or undergo normal morphophonemic changes. Ngij- plus {-maru-tha}, for example, gives nginyumarutha by PROGRESSIVE ASSIMILATION OF NASALITY. And the initial /w/ of the verbal ablative, evitative and gift cases assimilates to /m/ after nasals (ngarn- 'beach' + -wula-tha 'V.ABL' → ngarnmulatha).

Like other verbals, verbal cases belong to one of two conjugations: the dental, with citation forms in -tha, and the palatal, with citation forms in -ja.

1. The verbal intransitive allative (kiiwatha) is formally the LOCative (kiya) plus the inchoative (wa-tha). The initial portion has the same allomorphy as the normal LOCative. The change from /iya/ to /ii/ before following suffixes is not confined to the LOCative - the place name minakuriya, for example, undergoes a similar change before the 'born at' suffix -ngathi, becoming minakuriingathi.

2. The TRANSitive -marii-ja is formally the DeTRANSitivized Verbal Dative, but is distinct enough semantically to be treated as a separate case.

3. The GIFT case (wu-ja) has two formal irregularities on top of the regular morphophonemic changes:

   a. the allomorphs -wu-ja and -mu-ja are often pronounced -wi-ja and -mi-ja, assimilating to the following palatal.

   b. the /w/ is lost after liquids, even though /lw/ and /rw/ are phonotactically possible in K.

4. As with the ORIGIN suffix (-wa(a)n-), the final vowel of -jani-ja is lengthened after prosodic truncation of the preceding vowel.
I will go to that cave.

Moreover, verbal cases resemble normal cases in being fully productive: they can apply to any semantically appropriate NP.

It is possible to omit the main verb in constructions involving verbal case, as in:

3-108 ngada dathin-kiiwa-thu ngilirr-iiwa-thu
I:NOM that-V.I.ALL-FUT cave-V.I.ALL-PUT
I will go to that cave.

This is also allowed with some normal cases (2.2.2) but more frequent with verbal cases.

Another example is:

3-109 niya waa-jarra wangarr-ina ngumban-maru-tharra
3sgNOM sing-PST song-MABL your-V.D-PST
thabuju-maru-tharr?
EBr-V.D-PST
Did she sing the song for/to your elder brother?

Here the benefactive NP 'for your brother' takes the verbal case -marutha, glossed here as 'V(erb)al D(ative)'. Again this agrees with the main verb, taking the PaST inflection. And like a normal case suffix it displays concord over the whole NP.

The forms of both the above verbal cases are etymologically transparent.

The form -marutha, though usually bound in K, occasionally occurs as a free verb meaning 'put'. In Yukulta, which lacks this verbal case, a cognate form -marlutha recurs in a number of compounds involving putting, e.g. darr-marlutha [thigh-put] 'put on lap'. All but one of the Tangkic verbal cases can be related to free verbs of movement, transfer of position, searching, and avoiding.

The form -kiiwatha, by contrast, comprises the LOCative (kiya) plus the verb-derived INCHOative suffix -watha. Ngilirriiwiwatha in (3-105), in other words, is transparently 'become at the cave', which is precisely the semantic analysis Dowty (1979) and subsequently Foley and Van Valin (1984) propose for the ALLative complements of motion verbs. This is the only verbal case whose form suggests derivation from an inflected nominal.
Each of these two verbal cases suggests an alternative to the ‘case’ analysis. I will examine these before proceeding.

3.4.1.1 Are verbal cases derived motion verbs?

One alternative, particularly tempting with the Intransitive Allative, would be to treat these arguments as a type of derived motion verb, obtained by first inflecting a noun for the LOCative, then adding the INCHOative suffix. To illustrate this analysis, consider the Yukulta sentence (3-110) where, I would claim, genuine derivation is at work:

3-110 dangka-ra-ngka warra-ja kalarr-i-wa-tha / natha-rlu
man-ABS=PRES go-IND open-LOC-INCH-IND camp-ALL

*The man is going into the open/ to the camp.*

From the noun *kalarr-* ‘open space, clearing’, we first get the LOCative *kalarr-i* ‘in the open space’, then add the INCHOative suffix *-watha* to derive a new verb *kalarriwatha* meaning ‘become in an open space’ or, more idiomatically, ‘emerge, come out into the open’.

This may be used in a coverbal construction with a motion verb, as in (3-110). And the verb *kalarriwatha* is at least partly interchangeable with an ALLative noun phrase like *natha-rlu* ‘to the camp’.

But in Yukulta, unlike in Kayardild, this process is not productive – in fact, *kalarriwatha* is the only derived word of this type in Keen’s Yukulta corpus. What is more, it applies to a word rather than a NP – one could not use this with a phrase like ‘into the large clearing’. In short, the Yukulta formation is non-productive, and lexical rather than phrasal. These features stamp it as a derivation.

In K, by contrast, the process is productive – any semantically appropriate NP can take the verbal intransitive allative case. And it applies to phrases, as in (3-105), not just to words. (This distinguishes it from the derivational suffix *-watha* ‘become’, which is limited to words and therefore defined as derivational by the criteria given in 3.1.2.1.) For these two reasons, the Kayardild intransitive allative, unlike its Yukulta cognate, must be treated as an inflection.

This is not to say, however, that it did not originate as a

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22 Derivation of verbs from inflected nouns is quite common in Australian languages. A Warumungu example is *jalkkaji-kkma-rni* [spear-ALL-FACT] ‘put spear in spearthrower’ (Simpson 1983b).
derivation. It is likely that Yukulta preserves an earlier state of affairs, where the LOC:INCHOATIVE sequence was derivational, and that Kayardild (and Lardil) later extended this use, making it fully productive and giving it phrasal concord.

Nor do I wish to claim that all uses of the form {-_kilwatha} function as case-inflections. There are a few words, such as dulk-ii-watha [ground-LOC-INCH] 'be born', where the suffix is clearly derivational. Here the meaning is idiosyncratic, and the scope is lexical, ruling out phrases like ngarrku-yi-watha dulki-i-watha [hard-LOC-INCH ground-LOC-INCH] 'be born onto the hard ground' (although of course the 'regular' inflectional meaning is possible here: 'go onto the hard ground').

3.4.1.2 Are verbal cases serial verbs?

Where verbal cases have corresponding free forms functioning as verbs, e.g. -maru-tha in 3-109, a tempting alternative analysis is to treat the verbal element as a serial verb.

Constructions using serial verbs as prepositions, or to show case-like relations, are found in languages as widespread as Yoruba, Igbo, Thai and Chinese. In Thai, for example, recipients of motion verbs take a serial verb construction using häy 'give', as in:

3-111 dék khìn nàjë́ñ häy khruu
boy return book give teacher

*The boy returned the book to the teacher.*

*(Foley & Van Valin 1984:189)*

In Chinese, a number of NP arguments which would be realized in English as prepositional phrases, and in most Australian languages as phrases bearing oblique cases, appear as serial verb constructions, in which the NP is object of the added verb: 'I eat with chopsticks' is 'I use chopsticks eat food', 'I'm making fried rice for her' is 'I give her make fried rice', and 'we are going to Taipei' is 'we arrive Taipei go' (Stockwell et al 1977:37).

Could we not analyse the K verbal cases as serial verbs in which the argument is incorporated into the valence-adding verb?

There are four arguments against this.

Firstly, it would be unusual for the incorporation process to be repeated for each word in the NP.

Secondly, serial verb constructions do exist in K with motion verbs, but verbal cases have nothing in common with them syntactically. In the serial verb
construction, discussed in 5.10 as 'verb complexes', the order of the two verbs is fixed; this is not so of the verbal case construction.

Thirdly and most tellingly, the nominal arguments in verbal case constructions are not in a syntactically or semantically consistent relation to the verbal formative. With -marutha, for example, the incorporated nominal is 'destination' of the corresponding main verb. With the verbal ablative -wulatha, whose corresponding free form bula-tha means 'pull off, remove', the incorporated nominal is always the source, never the object (the thing pulled). Such irregular semantic relationships are more reminiscent of nominal compounding, with its inexplicit and varied relationships between formatives, than of serial verbs, where the added argument is always the object of the serial verb.

Finally, there is comparative evidence that such verbal cases originated not as serial verbs, but by increasing the productivity of compounds like the Yukulta verb darrmarlutha [thigh-put] 'put on lap'.

To summarize, verbal cases are neither serial verbs with prefixed objects, nor derived nouns. They resemble normal cases in their phrasal scope, concord, complete productivity, and, as we shall see, in their range of meanings. (They do, however, have some verb-like syntactic characteristics, to be discussed in 3.4.3.)

3.4.2 Functions of the verbal cases

I will now discuss the meanings which verbal cases can express, and the question of how much they parallel, and how much they complement, the 'normal' case system given in 3.3.

3.4.2.1 Verbal Intransitive ALLative (-kiwi-tha)

*Direction of motion with transitive verbs:* This was exemplified in 3–104. Unlike the normal ALLative, which can be used with transitive and intransitive verbs alike, (kiwi-tha) is restricted to intransitives. (With transitives, the Verbal Dative is used – see below). A further difference is that (kiwi-tha) implies that the subject has, or intends to, reach the specified destination, whereas the normal allative merely states the direction of motion.

Among younger speakers the verbal intransitive allative has entirely replaced the normal allative, except with locative and compass words, so the latter distinction is not possible.
Goal at a place: Sometimes it means 'to the place where X can be found', rather than just 'to X':

3-112 ngada warra-ja bijurr-iiwa-th
I:NOM go-ACT cockle-V.I.ALL-ACT
I'm going to the place where there are cockles (to the cockles).

This is yet another way of marking 'goal' or 'purpose' in K (besides the PROPrietive, UTILitive, Verbal Dative and Verbal Purposive). It is limited to situations where the desired object is reliably and characteristically located at a certain place.

Demoted agents of passives, if non-human, may also take this case:

3-113 nyingka ra-yii-nyarra kurdalalng-kiiwa-nharr
you:NOM spear-DT-APPR stingray-V.I.ALL-APPR
You might get stung by a stingray.

The semantic rationale here seems to be that the subject 'gets stung, coming into contact with a stingray'. However, there is no requirement that the passive subject initiate the activity or move toward the agent - I have sentences of this type involving piles of dead fish being eaten by marauding seagulls. What is important is that the two participants come together. As Roland Moodoonuthi put it, 'never mind who move, long as they both end up the same place'.

As with other verbal case functions, it is possible to omit the main verb, so that (3-113) can be rephrased as:

3-114 nyingka kurdalalng-kiiwa-nharr
you:NOM stingray-V.I.ALL-APPR
You might have something done to you by a stingray.
(Lit.: you might get stingrayed.)

3.4.2.2 Verbal dative -maru-tha

This is one way of marking the recipients of ditransitive verbs (3-115, see also 6.2.5). It may also mark destination with transitive motion verbs (3-116), and beneficiaries as in 3-117. Note that whereas the recipient and destination meanings allow alternative codings with normal cases, the beneficiary meaning can only be expressed by a verbal case:

3-115 wuu-ja ngijin-ji wadu / (wuu-ja) ngijin-maru-tha wadu
give-IMP me-MLOC smoke(NOM) give-IMP me-V.D.-IMP smoke(NOM)
Give me a smoke!
3-116 nyingka kurrka-tha wumburung-ka ngarn-maru-th / ngarn-kir
you:NOM take-IMP spear-NOM beach-V.D-IMP beach-ALL
You take this spear to the beach!

3-117 kardu kala-tha kakuju-ya kunawuna-maru-th
Fa-in-law(NOM) cut-NF son-in-law-MLOC child-V.D-ACT
A father-in-law circumcizes his son-in-law for his daughter.

This polysemy parallels the semantic range of the dative in languages as diverse as Latin and Warlpiri; without making a detailed semantic analysis here it is clear that a metaphorical extension of the change-of-position meaning is involved, with an object, or more intangibly, the benefits of an action, being transferred to a third participant.

Like other verbals, the verbal dative can be passivized using the DeTransitivizing suffix:

3-118 binthu kurda-marii-j (wu-yii-j)
prepuce(NOM) coolamon-V.D-DT-ACT put-DT-ACT
The prepuce is put in a coolamon.

3.4.2.3 Verbal Translative -marii-ja

In (3-118) the DeTransitive suffix applies regularly to the verbal case -marutha, giving the syntactically and semantically predictable passive meaning. But the DeTransitive suffix, even with normal verbals, does not always effect a systematic change in meaning (5.4.1). Thus alongside regular pairs like raaja 'spear', rayiija 'be speared, spear oneself' are idiosyncratic pairs like marraaja 'show', marrayiiia 'know' (although the regular meaning 'be shown, show oneself' is also possible').

The Verbal Translative is an example of such an idiosyncratic alternation, found with a verbal case: although formally identical to the 'DeTransitive' form of the verbal dative in (3-118), its meaning is sufficiently different to warrant treatment as a distinct case. It marks goals that (a) define the temporal endpoint of an activity, often translatable as 'until' (3-119) or (b) are something that must be passively waited for (3-120). A possible semantic connection with the verbal dative marutha (or with the free form marutha 'put') is that the subject mentally 'puts himself' at the awaited moment.
3-119 kurndu-thaldi-ja mirdi-marii-j / kala-a-n-marii-j
chest-stand-ACT stingray pin-VTRANSL-ACT cut-DT-N-VTRANSL-ACT
(The novices) lie chest up until the stingray pin (comes) / until
(they) are cut.

3-120 dii-ja nga-ku-l-da mani-marii-j
sit-ACT 1-INC-PLU-NOM money-V.TRANSL-ACT
We are sitting waiting for our pension cheques.

Although it frequently follows nominalized verbs, as in (3-119), it may also occur
with nouns seen as arriving or being metered out by someone else: the stingray pin
at the crucial point of the circumcision ceremony, beer when the canteen opens,
money when the welfare cheques arrive, and so on. As mentioned in 3.3.14.2,
the 'targeted time' use of the UTILitive case is similar in meaning to the Verbal
Translative: the latter has entirely superseded the former among younger speakers.

3.4.2.4 Verbal ablative -wula-tha ' -wula-a-ja

This can be related to a free form bula-tha 'pull off, remove', and marks
the source of motion:

3-121 bilarii-ja nguku-wa dathin-mula-tha wuruman-mula-tha
tip-IMP water-NOM that-V.ABL-TR: IMP billy-V.ABL-IMP
Tip the water out of that billy.

This case may appear in either basic or detransitivized forms. The choice is rather
complicated, and it is easier to begin with the simpler Yukulta and Lardil systems.
There, the verbal ablative has two forms, basic form, used with transitive motion
verbs (3-122, 3-124) , and a detransitivized form used with intransitive motion verbs (3-123, 3-125).

Yukulta (either 'normal' or 'verbal' cases may be used):

3-122 ngudi-ka biyuka mirra-wula-tha nguku-wula-tha /
throw-TR:IMP rubbish(ABS) good-V.ABL-TR:IMP water-V.ABL-TR:IMP
mirra-naba nguku-naba
good-ABL water-ABL
Skim the rubbish off the good water!

3-123 bathin-da=kadi mirla-ja kurlukurlu-wula-ja / kurlukurlu-naba
west:from-NOM-I:PRES return-IND Corinda-V.ABL-DT:IND Corinda-ABL
I've just come back from Corinda out west.

Lardil:

3-124 maari yaka mar-burri
take(IMP) fish(NOM) hand-V.ABL(IMP)
Take the fish from my hand.
At first sight, the K data are comparable. Thus alongside transitive sentences like (3-121), with the -wulatha form, are intransitive sentences like (3-126), with the -wulaaja form:

3-126 warngiida dangka-a rar-id-a buruwan-mula-a-ja budii-j
one-NOM man-NOM south-CONT-NOM bora ground-V.ABL-DT-ACT run-ACT
One man ran away southwards from the initiation ground.

Other examples correlate with a voice alternation on the main verb:

3-127 warngal-da mibul-ula-tha ngijin-ji rila-th
wind-NOM sleep-V.ABL-ACT me-MLOC wake-ACT
The wind woke me up from sleep.

3-128 ngada mibul-ula-a-ja warngal-iiwa-tha rila-a-j
I:NOM sleep-V.ABL-DT-ACT wind-V.I.ALL-ACT wake-DT-ACT
I was woken from sleep by the wind.

However, there remain a number of sentences in which either form can occur with a transitive verb:

3-129 wara-tha ngirrungu-d-a mibur-ula-th / mibur-ula-a-j
shoo-IMP fly-NOM eye-V.ABL-IMP eye-V.ABL-DT-IMP
Shoo the fly away from your eyes!

My initial reaction to such sentences was to assume a difference in focus. The first alternative, I hypothesized, would focus on the fly, meaning something like: 'Shoo the fly. Because of that the fly will move from your eyes.' The second would focus on the shooer: 'Shoo the fly. Because of that, your eyes will no longer be clogged with flies'.

Unfortunately I was unable to obtain informants' translations or explanations confirming this. So I tried setting up situations where one focus would be preferred. An example is the contrast between 3-130 and 3-131:

3-130 nga-ku-l-da buu-ja walbu-ya ngakan-mula-th
1-INC-PLU-NOM pull-ACT raft-MLOC sandbank-V.ABL-ACT
We pulled the raft off the sandbank.
In 3-130 the focus is naturally on the raft - one would not utter it unless the raft moved, while the fate of the subject is indifferent. As predicted, the transitive form was chosen. In (3-131), on the other hand, the nature of the activity decrees that the subject move with the raft. And, as predicted, the DeTransitivized form was chosen.

We can subsume all the above under a single generalization: the unmarked form of V.ABL expresses the meaning 'object moves from V.ABL': the detransitivated form expresses the meaning 'SUBJ moves from V.ABL'. In other words, the form of VABL specifies whether the movement is predicated of the subject or the object of the clause.

3.4.2.5 Verbal Evitative -waalu-tha -waal-i-ja

This derives from the free form waalutha 'chase away', and usually expresses movement resulting from fear. Although fewer examples are available, the conditioning of the transitive/intransitive choice seems to parallel that found with the verbal ablative: it may code an active/passive contrast (3-134 vs 3-135) or switch the focus from effect on the object (3-136) to effect on the subject (3-137).

23 Many ergative Australian languages express a similar meaning via agreement of the directional NP with a core argument, as in the following Warlpiri sentences (Hale 1982:260):

3-132 kurdu-ngku ka maliki ngurra-kurra wajillipi-nyi
  child-ERG PRES dog(ABS) camp-ALL chase-PRES
  The child is chasing the dog to the camp.

3-133 kurdu-ngku ka maliki ngurra-kurra-rlu wajillipi-nyi
  child-ERG PRES dog(ABS) camp-ALL-ERG chase-PRES
  The child is chasing the dog (all the way) to the camp.

In (3-132) the allative NP is not further inflected and is thereby associated with the absolutive object 'dog', implying that the dog reached the camp, but not necessarily the child. In (3-133), on the other hand, the allative NP takes a further ergative inflection and is associated with 'child', suggesting that the child reached the camp as well.

Yet another way of expressing this distinction is found in the Caucasian language Lak (Kibrik, 1979), where the locational noun agrees in noun class with the argument whose movement is being stressed.
He shot (at us), forcing us out of hiding.

We were forced to come out of hiding.

Let's chase the horse away from this place! (So it goes somewhere else)

Let's chase the horse away from this place! (So we won't have it in our backyard).

I am sitting far (from the fire), fearing the sparks.

People stayed high up at Bardathurr, away from the storm.

The child is afraid of that man.

Except for its use with yulaaja, where it may be replaced by object-like case marking (6.2.4.1), the verbal evitative has no parallel in the normal case system.
3.4.2.6 Verbal gift case (-wu-ja)

With ditransitive verbs this may replace the 'normal' PROPrietary case, which can marks the thing transferred (6.2.5):

3-141 ngada ngumban-ji wumburung-kuru kiyarrng-kuru wuu-j
  I:NOM you-MLOC spear-PROP two-PROP give-ACT
  " " wumburu-u-ja kiyarr-wu-ja (wuu-ja)
  spear-V.GIFT-ACT two-V.GIFT-ACT give-ACT

I gave you two spears.

It may mark songs, stories etc. that are taught to a listener (OBJECT). See 6-91 and 6-92.

The GIFT case may also mark instruments, again replacing the normal PROPrietary case:

3-142 nga-l-da kurdala-tha yakuri-ya mak-u-j / mak-uru
  1-PLU-NOM spear-ACT fish-MLOC torch-V.GIFT-ACT torch-PROP

We speared fish using a bark torch.

I have only three examples of this and am unsure of the semantic difference here.

3.4.2.7 Verbal purposive -jani(i)-ja

This derives from the free verb janija 'look for': like the ORIGIN case -wa(a)n- the penultimate vowel is optionally lengthened when prosodic truncation removes the final /a/.

It marks entities which the subject is actively trying to obtain (3-143, 3-144, 3-146) or be with (3-145):

3-143 ngambura-th, nguku-janii-j
  dig well-ACT water-V.PURP-ACT
  (They) dug a well, trying to get water.

3-144 niya warra-ja rar-ung-ka mala-janii-j
  3sgNOM go-ACT south-ALL-NOM beer-V.PURP-ACT
  He's gone south (to Burketown) to get some beer.

3-145 ngada niwan-jani-ju balmbi-wu dali-ju
  I:NOM him-V.PURP-FUT morrow-MPROP come-FUT
  I'll come for him tomorrow.

24 The lengthened vowel here is also what one would expect of the DeTransitivized form, raising the possibility that -jani-ja, like the verbal ablative and evitative, may have both transitive and de-transitivized alternatives. Within my corpus of 30 odd examples, however, vowel length only appears in truncated words, suggesting that prosodic factors rather than DeTransitivization are responsible.
3-146 jina-a nyingka warra-j? jal-janii-j?
where-NOM you:NOM go-ACT cunt-V.PURP-ACT

Where are you off to? After cunt?

This is roughly synonymous with the 'intentional object' use of the PROPrietive case (6.2.3). Where the subject is moving around seeking the object, either can be used, and I have been unable to find any difference in meaning. With verbs of paying attention, such as 'listen (for)', however, only the PROPrietive is possible. The verbal translative (3.4.2.3) may also express a very similar 'purpose' meaning, but implies passive waiting on the part of the subject, rather than an active effort to procure the goal.  

3.4.3 Verb-like syntactic properties of verbal case

So far I have emphasized the functional resemblance of verbal case to 'normal cases'. But they also share several important syntactic properties with verbs.

3.4.3.1 NPs inflected for verbal case used as main verbs

Main verbs are frequently omitted from clauses containing NPs inflected for verbal case (3-108, 3-114, 3-136). A further example is:

3-147 (nyingka) (wuu-ja) ngijin-maru-tha kuwan-d!
(you:NOM) (give-IMP) me-V.D-IMP firestick-NOM
(You) give me the firestick!

In such sentences one may treat the modal case-bearing NP as governing NP arguments in various grammatical functions, shown here by arrows:

3-148

\[\text{Subject} \quad \text{Object} \quad \text{Complement of Destination}\]

The proposition this encodes needs to make reference both to the free NP arguments and to the incorporated NP. A rough logical representation of 3-148 is 'SUBJ cause OBJ to move to INCORP' where INCORP is the incorporated NP.

---

25 Such 'purpose' meanings are usually expressed in Yukulta with the normal dative or proprietive. But a few individual lexemes may be compounded with the verb janija, as in warrun-janija 'goanna-hunting', kambalarri-janija 'sugarbag-gathering' (Yukulta data from my own field notes).

26 Omission of the main verb is attested with all verbal cases. With the Verbal Dative, however, it is only possible with the transfer of position or transfer of ownership meanings, not with the benefactive meaning.
A satisfactory representation of verbal case, then, requires verb like argument structures, making reference to several NP arguments and their grammatical functions. But it must also allow verbal case to distribute over every word in the NP, or, alternatively, to incorporate as a prefix every word in the NP. How this is done will depend on the syntactic theory being used, and I will not go into this question here.

The two alternatives of 'distribution' and 'incorporation' imply different representations – the former more case-like, the latter more verb-like. Historically the Verbal Intransitive Allative arose through distribution, the other verbal cases through nominal prefixation (i.e. incorporation).

3.4.3.2 Non-conflicting grammatical functions.

Like co-members of a verbal complex (5.10), main verbs and verbal cases must assign non-conflicting grammatical functions to the core NPs in their clause. In the following clause schemas both main verb and verbal case have the same subject and the same object:

3-149

A (SUBJ) gives B (OBJ) to C.

3-150

A (SUBJ) gives C (OBJ) B.

3-151

A (SUBJ) pulls B (OBJ) away from C.

Two verbal cases may be present, provided they and the verb all have the same subject and object:
A (SUBJ) chases B (OBJ) to D away from C

Note also that the possibility of using the detransitive form of the verbal case with -wulatha and -waalutha does not create problems, since intransitive and transitive verbs may combine in verb complexes provided they have the same subject (5.10). Our requirement stipulates only that the relations of each coverb not conflict, not that each coverb must govern the same number of relations.

A (SUBJ) paddles B (OBJ) off C.

The principle of non-conflicting relation assignment, applied to verbal cases, also accounts for certain co-occurrence restrictions between verbal cases. Wuuja, for example, has two argument frames involving verbal cases (plus others with normal cases – see 6.2.5). It may select the Theme as object, with the verbal dative on the Recipient (3-149), or the Recipient as object, with the verbal gift case on the Theme (3-150). But it may not select both the Verbal Dative and the Verbal Gift cases. We can now see why: the verbal dative would select the theme as object and the verbal gift would select the recipient, leading to conflicting assignment of grammatical relations. Ignoring what grammatical relations are assigned by the main verb:

3.4.3.3 Restrictions on argument status

In all my corpus there is not a single example of a NP taking a verbal case being relativized on, or being the pivot in any complex construction. This may be an accidental gap, but more likely it reflects the less-than-full argument status of such constituents.
3.4.4 Discussion

3.4.4.1 Origins

As we have seen, the verbal case system integrates complex verbals of quite different provenance. The intransitive allative was formed by deriving an inchoative verb from a nominal inflected for the locative case. Formation of all the other cases involved prefixation of nominals to verbals, but the case relation originally obtaining between the prefixed nominal and the verb varied considerably: proprietive with the verbal purposive and gift cases, ablative with the verbal ablative and evitative, and locative with the verbal dative.

Comparative evidence suggests that the fully-fledged verbal case systems in K and L have evolved quite recently. Yukulta has two verbal cases, corresponding to the Verbal Ablative and Verbal Evitative in K. Corresponding to other verbal cases in K, Yukulta has non-productive patterns of derivation (e.g. kalarr-i-watha [open space-LOC-INCH] 'come out into the open') or nominal prefixation (with marlutha 'put' and janija 'look for'). The verbal case systems almost certainly evolved by increasing the productivity of these formations, and by expanding the scope from word to phrase.

How was the transition made from lexical to phrasal scope? I believe that the 'apposition' or 'unmerged' analysis of NP structure (4.4.1) provides an answer. Under this analysis, the words of an NP like 'the big man' are not parsed as sister NPs below a common NP node, but as apposed NPs: 'the big one, the man'. If NPs in proto-Tangkic had this kind of structure, each word of the 'unmerged NP' could undergo the word-level process of derivation or compounding, e.g. 'big-put man-put'. Later changes in syntax, leading to a more structured 'merged' interpretation of the NP, would cause such sequences to be reinterpreted as NPs over which 'put' shows concord, rather than apposed compounds.

3.4.4.2 Integration of normal and verbal case systems

Despite their diverse origins, the verbal cases are fully integrated into the K case system. Figure 3-5 summarizes the main functions of normal and verbal cases.

Semantically, verbal cases are partly complementary and partly parallel to the normal case system. Core syntactic functions are always marked by normal case.
Figure 3-5: Summary of normal and verbal case functions

<table>
<thead>
<tr>
<th>Function</th>
<th>Normal case</th>
<th>Verbal Case</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subject</td>
<td>NOMinative</td>
<td>MOD</td>
</tr>
<tr>
<td>Object</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Location</td>
<td>*LOCative</td>
<td></td>
</tr>
<tr>
<td>Direction of Motion</td>
<td>*(ALLative)</td>
<td>V. Intransitive ALLative/ V. Dative</td>
</tr>
<tr>
<td>Source of Motion</td>
<td>*(ABLative)</td>
<td>V. ABLative</td>
</tr>
<tr>
<td>Instrument</td>
<td>*PROPrietive</td>
<td>V. GIFT</td>
</tr>
<tr>
<td></td>
<td>INSTRumental</td>
<td></td>
</tr>
<tr>
<td></td>
<td>ASSOCIative</td>
<td></td>
</tr>
<tr>
<td>Theme (in ditr.)</td>
<td>*PROPrietive</td>
<td>V. GIFT</td>
</tr>
<tr>
<td>Recipient (in ditr.)</td>
<td>*[OBLique]</td>
<td>V. Dative</td>
</tr>
<tr>
<td>Beneficiary</td>
<td>*(OBLique)</td>
<td>V. Dative</td>
</tr>
<tr>
<td>Purpose</td>
<td>*PROPrietive</td>
<td>V. PURPOSE V. TRANSLative</td>
</tr>
<tr>
<td></td>
<td>UTILitive</td>
<td></td>
</tr>
<tr>
<td>Temporal Target</td>
<td>UTILitive</td>
<td>V. TRANSLative</td>
</tr>
<tr>
<td>Demoted Agent</td>
<td>*ABLative</td>
<td>V. Intransitive Allative</td>
</tr>
<tr>
<td></td>
<td>*LOCative</td>
<td></td>
</tr>
<tr>
<td></td>
<td>*[OBLique]</td>
<td></td>
</tr>
<tr>
<td>Cause/Consequence</td>
<td>CONSequential</td>
<td>V. EVITative</td>
</tr>
<tr>
<td>Possessor</td>
<td>GENitive</td>
<td>---</td>
</tr>
<tr>
<td></td>
<td>*ABLative</td>
<td></td>
</tr>
<tr>
<td>Having</td>
<td>PROPrietive</td>
<td>---</td>
</tr>
<tr>
<td></td>
<td>ASSOCIative</td>
<td></td>
</tr>
</tbody>
</table>

* marks cases that can be used modally
( ) marks moribund uses of a case
[ ] marks extinct uses of a case (reconstructable for pT, but no longer found in Kayardild)
as are 'static' functions like the LOCative; so are all adnominal functions (which are also static). What may be broadly described as 'dynamic' functions, involving change over time (e.g. change of location, change of possession) tend to take verbal cases. Some dynamic functions, like the allative, ablative and purposive, take either, but the verbal case is gaining ground.

This may be attributed in part to the inherent suitability of verbs for expressing 'dynamic' relationships, and in part to a shift in the functional load of the corresponding normal cases, increasingly used to signal modality or other non-relational functions. It is significant that in Yukulta, where the 'normal' cases do not double as modality markers, the role of verbal cases is very limited, whereas in K, Yangkaal and Lardil, where modal cases have developed, the motion function of normal cases is moribund (as in K) or has disappeared completely (as in L).

3.4.4.3 Why verbal case?

This leads us to the typological question of why verbal case should only be attested in the Tangkic languages, languages that are already peculiar in other ways. After all, it has been widely claimed that 'semantic cases' and prepositions are predicates (e.g. Becker and Arms (1969), Fillmore (1971)), and verbs are the most natural lexical category for supplying predicates. Verbs with prepositional functions are found in many languages (see 3.4.1.2), but nowhere else, to my knowledge, have they become case-like inflections with phrasal concord.

Although it is difficult to find definite answers to such typological questions, I believe that the co-occurrence of 'modal' and 'verbal' case in the Tangkic languages is more than coincidence. Firstly, as mentioned above, the evolution of modal case in K and L greatly increased the functional load of certain normal cases, and would have favoured the development of new ways of expressing their erstwhile primary meaning. For every modal case in Kayardild except the LOCative there has developed a verbal case to express the once-primary 'relational' meaning.

Secondly, K and L have, for whatever reason, developed a system in which tense and mood are signalled on NPs as well as verbs. Verbal case, which signals the full range of verbal categories instead of the six values signalled by modal case, provides an efficient way of doing this (although unlike modal case it
cannot be used 'independently' (7.1.3) to multiply the number of expressible modalities).

In summary, I believe that the two factors of functional shift and modal marking on NPs favoured the full development of verbal case in Kayardild and Lardil\(^{27}\), and have been sufficient to outweigh the negative factor of high redundancy that is probably responsible for preventing their development elsewhere.

3.5 Number suffixes

As mentioned in 3.1, number suffixes are in the same rank as adnominal case inflections, which they may follow or precede depending on their semantic scope: cf. *jingka-wan-jiyarrng-ka* [swamp-ORIG-DU-NOM] 'two from the swamp' and *jingka-yarr-wan-da* 'from the two swamps'.

Number suffixes display concord over the whole NP, except where the LOT suffix co-occurs with the quantity nominal *muthaa* 'many' (see 3.5.2)\(^{28}\)

Number marking is optional on K noun/adjectives (though obligatory on pronouns (4.1)), and are only used when the number is being stressed. Generic statements like 'great food-eaters were the south people' (9-118), for example, are unmarked for number.

Included in this section are two other suffixes, the 'another' suffix -*yarraTH-* and the 'every' suffix -*walaTHida* which have semantic affinities with the number suffixes. I have been unable to determine whether these have phrasal scope.

3.5.1 DUal -*kiyarrng-*

The initial allomorphy of this suffix parallels the LOCative (-kiya) - 3.2.

Informants translate it as 'two', just like the free form, and in most situations they are interchangeable and mutually exclusive:

3-155 (a) ngijn-da kiyarrng-ka kularrin-da ngumal-d
   my-NOM two-NOM sister-NOM single-NOM
(b) ngijn-da kularrin-jiyarrng-ka ngumal-d
   my-NOM sister-DU-NOM single-NOM
(a) and (b): My two sisters are single.

\(^{27}\)But they cannot explain its initial development in proto Tangtic, which remains a mystery.

\(^{28}\)An unexplained exception to complete concord involves the DUal in 6-141: *niwan-da darr-iyarrng-ka* [her-NOM thigh-DU-NOM] 'her thighs'.

When the two objects are seen as a pair, as united spatially or functionally, the suffix form is preferred:

3-156 jirma-ja mar-iyarrng-ki
    lift-ACT hand-DU-MLOC
    (I) lifted (the dugong) by its two front flippers.

Younger speakers use the free form in all contexts.

3.5.2 LOT -bala(TH)- -wala(TH)-

This is -balaTH- after nasals and -walaTH- elsewhere; it is the only morpheme with this alternation. Like other nominals in stem-final TH-, the nominative delaminates: -walad-a. This may further reduce (irregularly) to -wala. Kunawuna 'child' has the irregular form kuna-walaTH-a, based on the unreduplicated form (not otherwise attested).

LOT is used to designate a 'lot'. 'mob' or large group: bithiin-bala 'group of men, many men', maku-wala 'group of women, many women'. Most of my examples involve humans, but a few involve geographical features, as in (3-158); interestingly, none involve animals.

3-157 jina-a ngumban-bala karndi-wala
    where-NOM your-LOT(NOM) wife-LOT(NOM)
    Where are your wives?

3-158 mangara kurrka-tha thangkan-ki banki-walany-maru-th
    storm(NOM) take-ACT porpoise-MLOC pool-LOT-V.D—ACT
    The storm took porpoises up into the pools (behind the dunes).

Whereas the Dual suffix and the free form 'two' are synonymous and mutually exclusive, LOT and the quantifying nominal mutha-a 'many' are not synonymous, and a given nominal can be modified by both: mutha-a dangka-wala 'a group of many people'. Mutha-a here does not take -walad-, possibly because both suffix and quantifier having equivalent scope (over the root).

3.5.3 EVERY -walathida

This expresses the sharing of a characteristic by all members of a large group. Whereas karndi-nurru-walada [wife-ASSOC-LOT] means 'a lot of men with wives (and perhaps also some without wives)', karndi-nurru-walathida means 'a lot of men, all of whom have wives'. Kurirr-walathida [dead-EVERY] can be used to refer to a mass of recently killed fish, and buru-walathida [cooked-EVERY]
describes a group of yams that have all been cooked. In a song lamenting a morning spent spearing bonefish, all of which escaped wounded, the singer laments:

3-159 mutha-a, minbarra-walthid
many-NOM scar-EVERY
(There were many), all of them scarred.

The suffix is most often used when the shared characteristic is recently acquired, and hence worthy of comment, but this is not a necessary condition: in the following example the assertion of sameness is a rhetorical reminder to a mother being reprimanded for favouring her own children:

3-160 kunawuna-nurru-walthid
child-ASSOC-EVERY
Everyone's got children (so let's share the food equally)!

In all my examples this suffix appears in a nominal predicate rather than an attributive phrase. Accordingly I have no examples with following inflections.

One could analyse this suffix further into 'LOT' -walth- plus the clitic -ida 'SAME'. But the clitic would then deviate from its normal postnominal meaning, which is to show persistence of a state (6.7.4.1). It is more likely that, in both, -ida derives from the free nominal niida 'the same', with appropriate semantic specialization in each case.

3.5.4 PLENTY -wuthin-

Initial /w/ assimilates (regularly) to /m/ after nasal-final stems. The final /n/ selects palatal-initial following suffixes, like nominals in Declension 6.

This suffix is clearly related to the free form wuthin-da 'lots, plenty' (3-161), as well as to the reduplicated wuthin-wuthin-da 'thick, dense (of trees)'.

3-161 kala-a-n-marri, [wuthin-jinaa-ntha dana-tharra-nth]COBL
cut-DT-N-PRIV plenty-MABL-COBL leave-PST-COBL
(The dugong meat) hasn't been cut up, (they) left plenty (of it).

Like -walth-, -wuthin- can often be translated as 'many', but applies to the entities that eschew -walth-: animals, plants, implements and meteorological forces. Jardi-wuthin-da [group-PLENTY-NOM] is typically used of a horde of

29 The only time I heard -wuthin- applied to humans was when they were seen from a plane, and deliberately compared with ants.

-wuthin-da may also follow numerals, adding a sense of approximation:

3-162 maarra mirndin-muthin-mirndin-muthin-d, maarra wumburu-nurru
all several-PLENTY-several-PLENTY-NOM all spear-ASSOC
_each (man) is carrying four or five spears._

(The reduplication here expresses plurality of subjects – see 3.6.4.)

3.5.5 ANOTHER –yarratha-

This means ‘another’ in the sense of French ‘encore un’ rather than ‘un autre’, viz. ‘another token of the same type’: kakuju-yarrad-a [uncle-ANOTHER-NOM] ‘(your) other uncle’: birriilbirdi-yarrada ‘another immoral (person)’. Further examples are:

3-163 balmbi-yarrath-u kada thaa-nangku
morrow-ANOTHER-MPROP again return-NEGFUT
He won’t return the day after tomorrow (‘the other tomorrow’) either.

(Discussing edible yams:)

3-164 jalakarrangu diya-a-n-kuru-yarrad, nguku-wirdi-n-d
The jalakarrangu is another edible one, that grows in fresh water.

To convey the other sense of English ‘other’ (i.e. ‘different’), the free nominal /atha-a is used:

3-165 kamarr jatha-a wuran-d, dangka-kurulu-n-d
stonefish(NOM) other-NOM sort-NOM person–kill–N–NOM
Now the stone fish is something else again, it’s a deadly one.

In simple existential clauses the addition of –yarratha– conveys the meaning ‘there are plenty of Xs left yet’:

3-166 kurda-kurda-yarradd!
coolamon–REDUP–ANOTHER
There are coolamon and coolamons of food left yet!

Note also the idiom nyingka kada-yarrada [you again–ANOTHER] ‘are you at it again?’. 
3.6 Derivation, compounding and reduplication in the noun/adjective class

3.6.1 Derivational suffixes

(Derivational suffixes restricted to kin terms are discussed in Appendix B.)

3.6.1.1 INDIVidualizer -(i)n-

This is -in- after consonants, -n- after /a/ and /i/. The initial /i/ of this suffix displaces stem-final /u/, e.g. bardangu, bardanginda 'see below'. Derived forms join the palatalizing Declension 6 (e.g. dirrkuli-n-ji [husband-INDIV-LOC], except for the word karndi-n-da 'female tree', which does not palatalize: karndi-n-ki [female-INDIV-LOC].

This suffix only occurs on some 10 nouns, and the semantics are rather heterogeneous. Often the derived noun means 'something that can be thought of as (a) Y':

<table>
<thead>
<tr>
<th>Origin</th>
<th>Derived Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>bardangu</td>
<td>bardang-in-da</td>
</tr>
<tr>
<td>dirrkuli</td>
<td>dirrkull-n-da</td>
</tr>
<tr>
<td>karndi</td>
<td>karndi-n-da</td>
</tr>
<tr>
<td>bardang-in-da</td>
<td>'big toe, thumb'</td>
</tr>
<tr>
<td>dirrkull-n-da</td>
<td>'male (tree)'</td>
</tr>
<tr>
<td>karndi-n-da</td>
<td>'female (tree)'</td>
</tr>
</tbody>
</table>

Note also kuwa-n-da 'firestick', from kuwa, an archaic word for 'eye'. Informants drew my attention to this etymology by saying the burning tip of the firestick was like an eye glowing in the dark.

Two names of winds are derived by this suffix, from fruits characteristically eaten in the season when they blow: kambud-a 'pandanus fruit'. kambuda-n-da 'north wind': minjirr-a 'flesh of pandanus nuts that have been cooked in bushfires'. minjirr-in-da 'cyclone'.

Because of the limited and semantically unpredictable nature of this morpheme, it will not be segmented off in glosses given outside this section.

3.6.1.2 REMote -ij-

This stresses the distance of the named location. Though most common with locationals (4.2.4.7), it sometimes occurs with noun/adjectives:

3-167 wambal-ij-i, wambal-i warra-ya wirdi-j

bush-REM-LOC bush-LOC far-LOC stay-ACT

(They) stayed way off in the bush, in the far bush.
Keep an eye on the firestick!
(Lit.: ‘keep it in your far eye’).

3. 6. 1. 3 BORN AT -ngathi

This derives personal birth-place names, through addition to the name of the place where someone was born. Different place-names may be applied to the same individual depending on how precisely the birth-place is being identified: Darwin Moodoonuthi was born at Marrkukinji, in the region known as Murdumurdu, and could be called either Marrkukinjingathi or Murdumurdungathi.

3. 6. 2 Compound-like derivations

The following three derivational suffixes are transparently derived from free forms: -mirra ‘INTENSifier’ from mirra-a ‘good’, -kunya ‘SMALL’ from kunya-a ‘small’, and -mutha ‘abundant’ from mutha-a ‘many’. They could perhaps be treated as compounds, but I have somewhat arbitrarily decided to restrict this term to words where every component is identical to the free form. This excludes the above suffixes, which in the nominative all differ from the corresponding free forms in lacking final long vowels, e.g. mirra-a ‘good’ but jungarra-mirr(a) tbig-INTENS ‘very big’. In the other cases, however, the forms are identical: mirra-na [good-ABL], jungarra-mirra-na [big-INTENS-ABL].

3. 6. 2. 1 INTENSifier -mirra

As mentioned above, this derives from the free form mirra-a ‘good’. Bound -mirra indicates the possession of a quality to an exceptional degree, as in...
kunya-mirra 'very small'. With object-prefixed agentive nominalizations (8.2.1) it adds the meaning 'a great, a champion':

3-169 niya banga-durrwa-n-mirra dangka-a
3sgNOM turtle-chase-N-INTENS man-NOM
He is a champion turtle-chaser.

With nominals denoting groups it increases the number: ngurrnga-mirra [mob-INTENS] 'big mob'.

Hyper-intensives are formed by sandwiching -mirr- between two tokens of the nominal:

3-170 mutha-mirra-mutha-a dangka-a
many-INTENS-many-NOM person-NOM
lots and lots of people.

3-171 bijarrba-diya-a-n-mirra-bijarrba-diya-a-n-d
dugong-eat-DT-N-INTENS-dugong-eat-DT-N-NOM
a place where lots and lots of dugong can be eaten
see 8.2.3 on locational nominalizations.

3. 6. 2. 2 SMALL -kunya
(Cf kunya-a 'small')
This usually derives nouns commenting on the small size of a body part: mun-kuny [arse-SMALL] 'short-arsed'; munirr-kuny [breast-SMALL] 'small-breasted'. But it may also modify other nouns, as in mala-kunya [sea-SMALL] 'low tide':

3-172 ngada mala-kunya-na thaak-tharr
I:NOM sea-SMALL-MABL return-PST
I came back at low tide.

3. 6. 2. 3 ABUNDANT -mutha
(Cf mutha-a 'big')
This derives nominals designating a place where a particular food-source is abundant. Allen Island is warrun-mutha [goanna-ABUNDANT] and also:

3-173 mirra-a dulk, bangaa-mutha
good-NOM place(NOM) turtle-ABUNDANT(NOM)
Good country, with lots of turtles.

On one occasion I heard a woman, married many times, describe herself as dangka-mutha [man-ABUNDANT]. I am unsure how typical this use is.
3.6.2.4 Excessive -muthan-da

This could be segmented into -mutha- plus INDIVIDualizer -n-; like the latter it derives Declension 6 nominals. There is a significant difference in meaning, however: -mutha- is always favourable and -muthan- generally unfavourable. So I will treat the two as distinct suffixes.

-muthan- derives deprecatory or humorous expressions of excess, always with human referents. The exact meaning depends on the nominal base: (a) 'person indulging in too much X'. (b) 'person having too much X'. (c) 'person using their X too much'. (d) 'person spending too much time with X'. The derived meaning depends to some extent on the semantic type of the base, so that meaning (a) is produced with action nouns like rik- 'crying' and nominalized verbs, (b) and (c) with body part nouns, and (d) with human nouns.

(a) ka-muthan-da
   ri-muthan-da
   mibul-muthan-da
   kulu-yii-n-muthan-da

(b) kubul-muthan-da

(c) mibur-muthan-da

(d) karndi-muthan-da
   maku-muthan-da

3.6.2.5 Laden -thalkuru

This has not been attested as a genuine free form, although it does occur in the idiomatic dual thalkuru-yarrng-ka [laden-DU-NOM] 'mating turtles (one on top of the other)'. It may ultimately derive from thali 'heavy' plus PROP -kuru.

As a derivational suffix it expresses the idea of being 'fully loaded with X' (3-174): 'overburdened with X', as when a turtle carrying a man is described as dangka-thalkuru [man-LADEN]: 'covered with X', as when the tip of a fighting spear is wanku-thalkuru [stingray-LADEN] 'covered with stingray barbs': 'wrapped in X', as when initiatory stingray pins are kurda-thalkuru [paperbark-LADEN] 'thoroughly wrapped in paperbark': or 'riddled with X', as when Moon, after a treacherous attack, disappears into the ground kurrumbu-thalkuru-da [spear-LADEN-SAME] 'still riddled with spears'. 
3.6.3 Nominal Compounding

Nominal compounding is extremely productive in K. and only a sketchy account is possible here. Most are exocentric ‘bahuvrihi’ compounds (Bloomfield 1935:235): a compound XY typically has the meaning ‘a person/thing whose X is Y’.

3.6.3.1 Order of elements

Bahuvrihi compounds are made up of a head followed by a modifier, e.g. *nguku-birdi* [water-bad] ‘place having bad water’, *kirr-maku* [face-woman] ‘effeminate looking man’. Note that although the modifier is usually a ‘qualifying nominal’ (4.4), it may also be the name of an entity when a ‘part-whole’ construction would be appropriate, e.g. *maku-wa kirrk-a* [woman-NOM face-NOM] ‘woman’s face’ (4.4.3.5). The head-modifier order found in such compounds is the opposite of that found in normal NPs.

A few compounds are made up of a nominal predicator and its object. Here, as with normal prefixed-object constructions, the object precedes the predicator, e.g. *dabarr-mungurru* [tree-knowing] ‘tree expert, child who keeps climbing trees’.

3.6.3.2 Some examples

There appears to be no limit on what nominals can be compounded. Some words, however, are particularly common as the second elements of compounds:


*Dami* ‘blunt’, can be compounded with a number of body-part terms to give the names of emotions or of somatic manifestations of telepathy felt in the particular body-part, e.g. *birrmu-rdami* [sternum-blunt] ‘be telepathically aware (of someone’s death)’, *kurndu-rdami* [chest-blunt] ‘sad’.

*Mungurru* ‘knowing, expert’, as in *mala-mungurru* [beer-expert] ‘alcoholic’;

---

33 In the present orthography the retroflexion symbol r, omitted from initial occlusives, is included in compounds.
mibul-mungurru [sleep-expert] ‘sleepyhead’; katha-mungurru [bed-expert], used of a dog that always found its way into people’s beds, and kunawuna-mungurru [child-expert] ‘couple who can’t stop procreating’.

3.6.3.3 Use of compounds to feed NPs into lexical derivations

As mentioned in Chapter 2, a clear distinction can be made in K between inflection, which has phrasal scope and phrasal concord, and derivation, which has lexical scope (and no concord).

To repeat an example given there, the INCHoative suffix -wa-tha, deriving verbs of becoming from nouns, can apply to a single nominal word like murndundun-kuru [maggott-PROP], giving murndundun-kuru-watha ‘become full of maggots’, but not to a phrase like jungarra-wuru murndundun-kuru ‘full of big maggots’; to express this, a copula plus nominal predicate construction must be used (6.1.8).

The same goes for nominal–nominal derivational suffixes, and even derivational uses of case suffixes. The PROPrietive, for example, can be used adnominally to express ‘having’, in which case it has phrasal scope and concord: jangka-wuru maku-uru [other-(ADN) PROP woman-(ADN) PROP] ‘having another woman’. As we saw in 3.3.5, it may also be used derivationally, yielding nouns of ‘characteristic having’, like daman-kuru [tooth-(DER) PROP] ‘old man dugong’. But in this derivational, ‘characteristic having’ use it cannot apply to whole NPs.

The prefixation of objects to nominalized verbs (8.2.1) likewise operates with words, not phrases. Thus we can prefix the word bang- ‘turtle’ to the agentive nominalization raa-n-da [spear-N-NOM] ‘spearer’, giving bang-raa-n-da ‘turtle spearer’. But we cannot prefix each member of a NP in this way: mutha-raa-n-da bang-raa-n-da ‘?many-spearer turtle-spearer’ is unacceptable.

In all these situations the ban can be dodged by first turning the NP into a single word by compounding, then feeding the compound into the word-level processes of nominal–nominal or nominal–verbal derivation, or nominal prefixation, as in the following examples.

---

34 While this restriction holds for most types of multi-word NP, it is relaxed with part-whole and generic-specific constructions, so that formations like ‘man-eater blood-eater’ and ‘cartilaginous fish-spearer shark-spearer’ are possible. See 4.4.3.4 and 4.4.3.5.
3-175 (a) NP ———> Compound nominal ———> Inchoative verb
birdi—ya nal—da nal—birdi nal—birdi—watha
bad—NOM head—NOM bad (in the) head mad, crazy become drunk, mad

3-176 (b) NP ———> Compound nominal ———> Compound + Derivation
birdi—ya ngunguk—a ngungu—birdi ngungu—birdi—wuru
bad—NOM story—NOM bad story scandal scandalmonger

Note also the word dul—warniij—uru—ngarrba [place—one—PROP—CONS]
'formerly having one and the same country', where a compound noun feeds
two successive nominal—nominal derivations. See 3.3.13.2.

The construction N₁—N₂—PROP need not mean 'having an N₁ that is N₂. It
can also mean 'having an N₂ on/in its N₁', as in tharda—wanka—wuru
'shoulder-branch—PROP' 'having branches on its shoulders (aeroplane)'. or
wara—dangka—wuru [mouth—man—PROP] 'having a man in his mouth (Kajurku)'.

3-177 (c) NP ———> Compound ———> Nominal prefix to
mutha—a wuran—da wuran—mutha—raa—n—da
much—NOM food—NOM food—much—spear—N—NOM
a lot of food spearer of lots of food

3.6.3.4 Compounds with minyi 'like a'

Minyi 'toward: thus' is usually a preverbal particle indicating that a trajectory
is nearing its endpoint (5.8.5) or a sentence particle introducing the conclusion
of a story (6.7.2.6).

It may also follow nominals, with a semblative meaning: dangkaa minyi 'like a
man'.

There are a number of compound nominals with minyi as first element.
These, too, have a semblative meaning, although the point of resemblance is not
always clear to Europeans: compare minyi—ngarnala 'witchetty grub' and ngarnala
'white cockatoo' (both are white), minyi—kandungka 'praying mantis' and kandungka
'jabiru' (both are long with thin folding legs).

Highly abusive expressions can be formed on this pattern, using the
kin term of a close relative, e.g. nyingka minyi—ngamathu 'you are like
your mother'. This expression manages to insult both the addressee and
the relative concerned, the implication being that both share various
unspeakable qualities. It is interesting that such abuse is reported
using a compound verb comprising the kin term plus -marutha 'put': the curse just given would be reported as niya ngamathu-marutha ngijinji 'he mother-put me; he insulted me by comparing me to my mother'. The spatial metaphor begun by using minyi 'towards' as a semblative is thus preserved in the reported speech act by using the transfer verb 'put'.

3.6.4 Nominal reduplication

The phonology of reduplication is discussed in Appendix C.

Nominal reduplication has six main functions:

3.6.4.1 Nonce reduplications

Many nominals are formally reduplications, but lack unreduplicated equivalents. Examples are the words rukaruka 'cumulustratus cloud' and buyilbuyilka 'large shovel-nosed stingray': there are no unreduplicated correspondents *ruka or *buyilka.

3.6.4.2 Entity having quality

Some reduplications derive the names of entities characteristically having some quality named by the unreduplicated form:

marrkaTH-a 'soft' marrkany-marrkaTH-a 'soft swamp weed used for swaddling newborns'

balarr-a 'white' balarr-walarr-a 'white of egg'

bardiwuru 'whiskery' bardiwuru-bardiwuru 'old man'

3.6.4.3 Quality exemplified by entity

This is the reverse of 3.6.4.2, and considerably more common. Examples are:

kandu 'blood' kandu-kandu 'red'

kurndungkal-da 'multi-coloured mudstone' kurndungkal-kurndungkal-da 'bright, multi-coloured'

jilangan-da 'hand-axe' jilangan-jilangan-da 'sharp'

I have two examples where manner nominals are derived, with fairly idiosyncratic semantic changes:

junku 'straight' junkuyunku 'in return, in retaliation'

murruku 'woomera' murrukumurruku 'bellicose, with hostile intent'
3.6.4.4 Number

Some nominals may be reduplicated to indicate plurality: *marngan-da* 'prepubescent girl', *marngan-marngan-da* 'many prepubescent girls'; *kurda-a* 'coolamon', *kurda-kurda-a* 'many coolamons' (see 3-166).

Note also *kunya-wunya* 'a few' from *kunya-a* 'small', and the nonce reduplication *kurraji-wurraji* 'a measly, inadequate amount'.

3.6.4.5 Plurality of actors (manner nominals)

Nominals functioning as second predicates of manner (including nominalized verbs and inherent manner nominals) can be reduplicated to show that many actors perform the same action:

3-178 *warra-ja ngarn-ki, wakiri-n-wakiri-n-d*

*go-ACT beach-LOC carry coolamon-N-carry coolamon-N-NOM*

*(They) went along the beach carrying coolamons.*

Reduplication is also possible with manner nominals serving as object complements:

3-179 *ngada kurri-jarra bi-l-wan-jina rar-i-lar-ii-jina*

*I:NOM see-PST 3-PLU-POSS-MABL south-CONT-south-CONT-MABL*

*I saw them all heading ever southward.*

(See 4.2.4.6 for discussion of the compass manner nominal *rariida*.)
CHAPTER 4

NOMINALS II: REMAINING NOMINAL SUBCLASSES; STRUCTURE OF THE NP.

In Chapter Three we discussed the nominal case system, and various number suffixes, derivations, compounds and reduplications that apply to the noun/adjective class. In this chapter we turn to the specific properties of the remaining nominal subclasses: pronouns, locationals, manner nominals, time nominals and nominal predicators. Finally, we discuss the structure of the Noun Phrase.

4.1 Pronouns

Kayardild has a rich set of free form pronouns, distinguishing person (first, second, first plus second or first inclusive, and third) and number (singular, dual and plural). Apart from minor differences (4.1.2), the pronominal case system is identical to that of other nominal subclasses.

There are no bound pronouns in Kayardild, unless one counts the slightly contracted 3sg form ni (cf the full form niya) sometimes placed after the verb in narrative (2.2). I argue in 7.4.3 that in this respect K (and Lardil) preserve the PT situation, and that the bound-form pronouns in Yukulta are an innovation.

Pronouns are mainly used with human referents, but also with other animates (e.g. dugong in 4-73 and fish in 8-53), and places when seen as personifications of mythical beings (Text 4. Line 18). Elsewhere demonstratives are used (4.2.2.2).

4.1.1 Stem forms

At most three stem variants occur: nominative, possessive pronoun, and 'subject oblique'. This last is limited to the pronominal subjects of clauses complementized with the OBLique case (9.1.1). These are illustrated in 4-1. Note that the 1st inclusive has an alternative non-singular form with a simplified stem.
All other case suffixes are added to the possessive pronoun stem (all Declension 6). The lsg possessive pronoun stem, for example, is *ngijin-da*: from this we obtain the first singular LOCative *ngijin-ji(ya)*, the first singular PROPrietive *ngijin-ju(ru)*, the first singular verbal dative *ngijin-marutha*, and so on.

**Figure 4-1:** Kayardild Pronouns

<table>
<thead>
<tr>
<th>Person/Number</th>
<th>Nominative</th>
<th>Possessive</th>
<th>Subject Pronoun</th>
<th>Oblique</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 sg</td>
<td>ngada</td>
<td>ngijin-da</td>
<td>ngijuwa</td>
<td></td>
</tr>
<tr>
<td>du</td>
<td>nga-rr-a</td>
<td>nga-rr(a)-wan-da</td>
<td>nga-rr(a)-wa</td>
<td></td>
</tr>
<tr>
<td>plu</td>
<td>nga-l-da</td>
<td>nga-l(a)-wan-da</td>
<td>nga-la-wa</td>
<td></td>
</tr>
<tr>
<td>1+2 du</td>
<td>nga-ku-rr-a</td>
<td>nga-ku-rr-wan-da</td>
<td></td>
<td></td>
</tr>
<tr>
<td>plu (non-sg.)</td>
<td>nga-ku-l-da</td>
<td>nga-ku-l(u)-wan-da</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>nga-kin-da</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 sg</td>
<td>nyingka</td>
<td>ngumban-da</td>
<td>ngumbaa</td>
<td></td>
</tr>
<tr>
<td>du</td>
<td>ki-rr-a</td>
<td>ki-rr-wan-da</td>
<td>ki-rr-waa</td>
<td></td>
</tr>
<tr>
<td>plu</td>
<td>ki-1-da</td>
<td>ki-1(u)-wan-da</td>
<td>ki-lu-wa</td>
<td></td>
</tr>
<tr>
<td>3 sg</td>
<td>niya</td>
<td>ni-wan-da</td>
<td>ni-waa</td>
<td></td>
</tr>
<tr>
<td>du</td>
<td>bi-rr-a</td>
<td>bi-rr-wan-da</td>
<td>bi-rr-waa</td>
<td></td>
</tr>
<tr>
<td>plu</td>
<td>bi-l-da</td>
<td>bi-l(u)-wan-da</td>
<td>bi-lu-wa</td>
<td></td>
</tr>
</tbody>
</table>

Bracketed epenthetic vowels are optional, except that where the pronoun is breath-group final the epenthetic vowel of the 1st dual Subject Oblique is obligatory, supporting the final /w/ left by prosodic truncation: */ngarraw*/.

Apart from slight changes in the distribution of epenthetic vowels, these are identical to the Yukulta forms and, we may assume, to the proto Tangkic forms. Yangkaal pronouns are also virtually identical, except that the 1st and 2nd nominative singular have the extra forms *nganha* (besides *ngada*) and *nyiwa* (besides *ningga*). The use of these forms is unclear. They may have been emphatic forms deriving from incorporation of an erstwhile emphatic clitic */-ma* into the singular stems: lsg *nganha* (Yangkaal) < *nganh-ma* (Yukulta + stative clitic) < 1sg *ngaTH- plus emphatic */-ma*, 2sg *nyiwa* ( < 2sg *nyi(ng)- plus emphatic ma, with irregular lenition of the nasal). Lardil pronouns have undergone a number of phonological changes, and have innovated a 'harmonic' vs 'disharmonic' distinction in non-singular pronouns (see Hale 1966).
4.1.1.1 Analysis of stems: comparative remarks

Temporarily leaving aside the non singular forms, the nominative and possessive pronoun forms can be neatly segmented:

<table>
<thead>
<tr>
<th>Person</th>
<th>Inclusion</th>
<th>Number</th>
<th>Possessive stem</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>nga-</td>
<td>-ku-</td>
<td>Dual -rr- -wan-</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Plural -1- -wan-</td>
</tr>
<tr>
<td>2</td>
<td>ki-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>bi-</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The possessive pronoun formative -wan-, with irregular -(u)mban- in the second singular ngumban-, is clearly cognate with the ORIGin case, with its parallel irregular alternation between -wan- with noun/adjectives and -umban- with compass locationals (the source of 1sg -(i)jin- is a mystery). It is likely that in pT -mban-/wan- was the possessive case form. and that semantic specialization has in the modern languages split this into a possessive pronoun formative with pronominals. and a distinct ORIGin case elsewhere; certainly in K they can no longer be treated as one suffix.

Most 'subject oblique' forms add -waa (after consonants or monosyllables) or -wa (after vowel-final disyllables) to the possessive pronoun stem, minus the -wan- formative. (Alternatively, they can be derived by deleting /n/ from the possessive stem). Epenthetic vowels that are optional in the possessive pronoun forms are obligatory in the subject oblique:

(e.g.) POSSESSIVE PRONOUN SUBJEC T OBLIQUE

| 2 sg   | kirr-wan-da | kirr-waa |
| 3 sg   | ni-wan-da   | ni-waa   |
| 2 plu  | kil(u)-wan-da | kilu-wa |

Inclusive forms of the subject oblique do not occur. because of a syntactic ban on the complementizing oblique with inclusive subjects (9.1.4).

Subject oblique forms in K are cognate with dative forms in Yukulta and probably proto Tangkic, as in the Yukulta sentence:

4-1 nguku-wa kirla-ka=thu ngi juwa
water-ABS fetch-IMP=1sgOBL 1sgDAT
Get some water for me!

1My gloss 'DATive' here corresponds to Keen's 'benefactive'. See Appendix D for justification.
The Yukulta dative forms were presumably also used for the subjects of clauses complementized with the dative case (9.6.1). This would have given rise to the Kayardild 'subject oblique' use, which is the only place these forms still appear in modern K.

For other OBLique functions the prT dative has been replaced in modern K by the OBLique suffixed to the possessive pronoun stem, as in:

4-2  dathin-a wangku  baa-nyarra ngijin-inj
     that-NOM shark(NOM) bite-APPR 1sgPOSS-MOBL
     That shark might bite me.

4.1.2 Special characteristics of pronominal case

In most respects, case use with pronominals is indistinguishable from that with other nominals. Two differences are discussed in this section: the use of possessive pronouns to show possession of all types, and the formal identity (outside the NOMinative) of possessives and ordinary pronouns. Two other important differences are discussed elsewhere: the optional use of the LOCative case with pronominal objects of imperatives (2.4.3), and the unusual case forms of pronominal subjects in complementized clauses (9).

4.1.2.1 Possessive pronouns

These are used for all types of possession. The three-way distinction maintained with noun/adjectives between the ablative (possession through inheritance or manufacture), the apposed noun construction (inlienable possession) and the genitive (the unmarked case) is neutralized, with possessive pronouns being used for all types:

4-3  ngamathu-na wunkurr  ni-wan-da  wunkurr
     mother-ABL grass shelter(NOM) 3sg-POSS-NOM shelter(NOM)
     Mother's grass shelter
     (that she made)

4-4  dangka-karra dulk
     man-GEN country(NOM)
     the man's country
     (that he has rights to)
     ni-wan-da  dulk 3sg-POSS-NOM country(NOM)
     his country
     (that he has rights to)

4-5  kunawuna  kirrk
     child(NOM) face(NOM)
     the child's face
     ni-wan-da  kirrk 3sg-POSS-NOM face(NOM)
     his face

I noted in 3.3.8.2 that younger speakers are generalizing the
genitive case at the expense of the ablative and appositional constructions, and attributed this to English influence. Another possible explanation is that possessive pronouns, which neglect the distinction, are taken as a model.

Sentence examples are:

4-6 dathin-a ngumban-da wumburung-k
that-NOM 2sgPOSS-NOM spear-NOM

That is your spear.

4-7 ringurrnga ngijin-da dulk
Sweers Island(NOM) 1sgPOSS-NOM country(NOM)

Sweers Island is my country.

4-8 nyingka thurrung-ka bula-a-ja kirrk-a ngumban-d
you:NOM snot-NOM remove-DT-IMP nose-NOM your-NOM

You clean that snot out of your nose!

4.1.2.2 Neutralization of pronoun/possessive pronoun distinction in non-nominative cases

This occurs because non-nominative pronominal cases are built on the possessive stem. Thus niya [3sgNOM] is formally distinct from the possessive form ni-wan-da [3sg-POSS-NOM], but the LOCative of both is ni-wan-ji(ya), which is ambiguous between 'him-LOC' and 'his-LOC'.

Another example is bilwanji in the following two sentences:

4-9 ngada kurri-ja bi-l-wan-ji
I:NOM see-ACT 3-PLU-POSS-MLOC

I saw them.

4-10 ngada kurri-ja bi-l-wan-ji ngamathu-y
I:NOM see-ACT 3-PLU-POSS-MLOC mother-MLOC

I saw their mother.

Given the possibility in K of conjoining nominals by simple apposition (4.4.3.6), e.g. maku-wa bithiin-da [woman-NOM man-NOM] 'women and men', and of representing groups by a 'set' pronoun and a 'subset' nominal (e.g. bilda ngamathu 'they (including mother)') one would expect this formal neutralization to lead to ambiguity: could not bilwanji ngamathuya in (4-10), for example, mean either 'their mother' or 'them, including mother'? Kayardild speakers, however, do not consider this ambiguous, accepting only the possessive meaning. Where ambiguity would arise, the set-subset construction is not used, and the ASSOCIATIVE of accompaniment is used in its stead:
4-11 ngada kurri-ja bi-l-wan-ji ngamathu-nurru-y
I:NOM see-ACT 3-PLU-POSS-MLOC mother-ASSOC-MLOC
I saw them, including mother.

4.2 Locationals

4.2.1 Introduction

The locational subclass includes three types of inherently locative words:

(a) The demonstratives dathin-a 'there, that' and dan-da 'here, this'. A third
demonstrative, nganikin-da 'that, beyond the field of vision' is rarely used.

(b) The four compass locationals jirrkara 'north' rar-a 'south', ri-ya 'east'
and bad-a 'west'.

(c) A number of positionals, including marrwa-a 'near, nearby', kukurdu 'close',
kurangkuru and warra-a 'far: far away', walmu 'on top of: up high'; walmathi
'high': ngaruwarra 'between'; yurda-a 'inside': dulkalarri 'outside': yuthiji 'in front
of', bud-a 'behind (in a line)', jardi-ya 'behind'. kirnkirn-da 'overhead': nal-iya
'on top of' [lit. head-LOC]: dulkida 'low off the ground': and yark-a 'underneath'.

Both demonstratives and compass locationals are deictic expressions;
positionals are deictic when used adverbially (e.g. 'a near(by) house')
but not when used as space-relational (see below): 'near the house'.

All locationals can function as adjuncts of location. Since location is
inherent in their meaning, they do not ordinarily inflect for the relational LOCative
taken by other nominals (e.g. 'beach'), but appear in the nominative in
instantiated (a) and zero (b) modalities.

(a) I am here / in the west / far off / inside // on the beach.
(b) Stay here / in the west / far off / inside // on the beach.
4-13  
\[
\text{dii-ja rar , rara thula-th}
\]
\[\text{sit-}\text{ACT south(NOM) south(NOM) descend-}\text{ACT}\]
He sat down in the south, in the south he went down.

4-14  
\[
\text{kanduwadangkaa marrwawuthun-da dulk}
\]
\[\text{(place name) ghost-NOM place(NOM)}\]
\[
\text{dathin-}\text{a barrki-i-nangku, buthuraa-nangku dan-ku,}
\text{there-}\text{NOM chop-}\text{DT-NEGPUT sleep-}\text{NEGPUT here-MPROP}\]
\[
\text{nganikin-da barrki-ja jirrkar}
\text{yonder-NOM chop-}\text{IMP north(NOM)}\]
Kanduwadangkaa is ghost country. (Wood) mustn’t be chopped, (one) mustn’t sleep there. Chop (wood) way up north (of there)!

4-15  
\[
\text{warra-}\text{a ngijn-da kularrin-}\text{d}
\]
\[\text{far-NOM my-NOM brother-NOM}\]
Far off is my brother.

The lack of locative marking in such constructions is my criterion for grouping these lexemes together in a special ‘locational’ subclass. In addition, special derivational possibilities are available to distance and compass locationals.

Outside zero-modal and instantiated clauses, locationals inflect normally for modal case. (This parallels the noun/adjective pattern: in non-zero and instantiated modalities, locationals take the NOMinative and other nominals the LOCative; in other modalities, all subclasses take modal case alone).

4-16  
\[
\text{ngada wirdi-ju dan-ku / bath-u /ngarn-ku}
\]
\[\text{I:NOM stay-}\text{FUT here-MPROP west-MPROP beach-MPROP}\]
I will stay here / in the west / on the beach.

4-17  
\[
\text{dathin-}\text{ku ri-wu dii-ju yakuri-}\text{y}
\]
\[\text{there-MPROP east-MPROP sit-}\text{FUT fish-NOM}\]
The fish will sit down (be trapped) there in the east.

Locationals may also take other spatial cases, normal or verbal (e.g 4-19, 4-20), spatially-related adnominal cases like the ORIGin (4-18) and the ‘instrument of place’ use of the instrumental (4-53):

---

2 We shall see, however, that under various conditions the LOCative case can appear: (a) when showing agreement with a LOCative-marked head (b) when functioning as discourse determiners (c) in certain kinds of ‘space relational’ use (see below).

3 Compass locationals have special ORIGin and ALLative forms, discussed in 4.2.4.
They took our man, another man, the one from there, the custodian of that place.

They're dragging it up, to the west.

The sea was foaming, so they went away from there.

And with those motion verbs which code locations as objects (warraja 'go to', jawija 'run to', diija 'sit on' etc.), distance locationals take a locative (4-21, 4-22), which is a modal case marking the object (2.4.3).

Two white men went to that place.

(He) ran to there in the west.

4.2.2 Functions of locationals

The local adjunct function just discussed is only one of four possible functions carried out by locationals. The others are:

(a) spatial determiners, which use spatial information to restrict the reference of their heads. The demonstrative and compass locationals can be used in this way, and some of the positionals.

(b) discourse determiners, which use discourse information to restrict the reference of their heads. Only the distal demonstrative dathin-a 'that' can have this function.

(c) space-relationals\(^4\), which refine the basic spatial information given by the local cases. Ngambirr-lya 'hut-LOC', for example, merely states the broad coincidence of figure and location, and is thus vague between 'in the hut', 'at the hut', 'by the hut', 'on the hut' and others. Locationals can combine with it to give

\(^4\)This term is from Hale (1982a).
a more accurate specification, e.g. \textit{walmu-ya ngambirr-iya} 'on top of the hut'. \textit{marrwa-ya ngambirr-iya} 'near the hut', \textit{yurda-ya ngambirri-ya} 'inside the hut'. Compass locationals and positionals, but not distance locationals, can be used space-relationally.

4-2 summarizes the interaction of locational functions with the three subtypes.

<table>
<thead>
<tr>
<th>Type of Locational</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>Local Adjunct</td>
<td>Spatial Determiner</td>
</tr>
<tr>
<td>distance</td>
<td>+</td>
</tr>
<tr>
<td>compass</td>
<td>+</td>
</tr>
<tr>
<td>positional</td>
<td>+</td>
</tr>
</tbody>
</table>

Figure 4-2: Functions of distance, compass and position locationals

We will now examine the determiner and space-relational functions in more detail.

4.2.2.1 Spatial determiner function

As mentioned above distance and compass locationals, and some positionals, can serve as spatial determiners. Note that this requires a different set of English translation equivalents in the case of the distance locationals: 'here' and 'there' for adverbial function, 'this' and 'that' for determiner function. Similarly, the compass locationals translate as 'in the east', 'in the west' etc when functioning adverbially, and 'the east one', 'the west one' etc. when functioning as determiners.

\textit{4-23 dan-da kujiji birdi-y, kalangin-d, dathin-a kujiji mirra-a}
\textit{good-NOM}
\textit{This spear is bad, it's old; that spear is good.}

4-24 \textit{bana ri-ya kardu wirrka-a-ja bandingka-y and east-NOM WP-NOM initiate-DT-ACT Bentinck-LOC}
\textit{And your east father-in-law (i.e. the one staying at the east end of the settlement) was initiated on Bentinck Island.}

Determiners based on positionals take the ORIGIn case: \textit{marrwa-wan-da dangka-a [near-ORIG-NOM man-NOM] 'the man nearby'; ngaruwarra-wan-da [between-ORIG-NOM] 'the (one) from in between', and so forth.}
Distance and compass determiners may be combined, as in:

4-25 \textit{dan-da ri-ya dangka-a daami-jarra ngijin-jina} \\
\textit{this-NOM east-NOM man-NOM ask-PST me-MABL} \\
\textit{This man in the east asked me.}

Since they are now functioning as modifiers they agree in case with their head, even if this is in LOCative case (contrasting with the non-appearance of the LOCative when used adverbially):

4-26 \textit{ngada wirdi-ja dan-ki ngambirr-iy} \\
\textit{I:NOM stay-ACT this-LOC hut-LOC} \\
\textit{I am staying in this hut / in the west hut / in the far camp.}

So in the zero and instantiated modalities the determiner use is distinguished from the adverbial by the presence of the LOCative, as well as by the potential for pause (and consequent prosodic truncation) in adverbials, since pauses can fall between NPs but not within them.

4-27 \textit{ngada wirdi-ja dan-d(a) (,) natha-y} \\
\textit{I:NOM stay-FUT here-NOM camp-LOC} \\
\textit{I will stay here in the camp.}

When other modal cases apply only the potential for pause distinguishes the two functions:

4-28 \textit{ngada wirdi-ja dan-ki natha-y} \\
\textit{I:NOM stay-ACT this-LOC camp-LOC} \\
\textit{I stay in this camp.}

4-29 \textit{ngada wirdi-ju dan-ku (,) natha-wu} \\
\textit{I:NOM stay-PUT here-MPROP camp-MPROP} \\
\textit{I will stay here in the camp.}

4-30 \textit{ngada wirdi-ju dan-ku natha-wu} \\
\textit{I:NOM stay-PUT this-MPROP camp-MPROP} \\
\textit{I will stay in this camp.}
4.2.2.2 Discourse determiner function

In many Australian languages demonstratives double as third person pronouns, referring anaphorically to previously mentioned protagonists. Because Kayardild, somewhat unusually for a Pama-Nyungan language, possesses third person pronouns, the discourse role of demonstratives is more limited, though still present.

Only *dathin-a* 'that' is used. It occurs with

(a) referents which cannot be represented by a pronoun (4.1) but which have been established in prior discourse. These include motives for action (4-31), implements (4-32), and places (4-33):

4-31 *birdi-ya birrjilk, kambin-ji karrngi-j, maraka dathin-kuru*

*bad-NOM way-NOM child-MLOC keep-ACT CTRFCT that-PROP*

*ra-yii-ju*

*spear-DT-FUT*

*It was wrong, he committed incest with his own daughter, he should have been speared for that.*

4-32 *yuuma-th, dathin-ki thungal-i warna-j, dathin-kuru*

*drown-ACT that-MLOC thing-MLOC dislike-ACT that-PROP*

*bala-a-myarr*

*shoot-DT-APPR*

*They drowned, because they didn’t like that thing (McKenzie’s gun), they were afraid they’d be shot by it.*

4-33 *mala-a warna-ja bardathurr-i, maku-wa bithin-da kaa-ja*

*sea-NOM avoid-ACT place name-MLOC woman-NOM man-NOM shelter-ACT*

*dathin-kiya kaa-j*

*that-LOC shelter-ACT*

*The high seas avoided Bardathurr. Women and men sheltered there / at that place.*

Note that in the possible English translation 'men and women sheltered there', 'there' is vague between discourse and spatial deictic functions. In Kayardild the discourse deictic use requires the LOCative, which does not appear with the locational use.

(b) established human referents are usually ellipsed or pronominalized. But *dathin-a* may be used to give prominence to the main protagonist. Text Two provides several examples of this: the main character, Kajurku, is repeatedly identified as *dathin-a dangkaa* 'that fellow', whereas his relatively anonymous victim and pursuers merely rate zero anaphora or simple pronouns.
4.2.2.3 Space relational function

Positionals and compass locationals can combine with local adjuncts to give more precise location, as in:

4-34 wirdi-jarra walmu-na kurndaji-na
   stay-PST up-MABL sandhill-MABL
   They were up on the sandhill.

4-35 dali-ja ngijin-jiiwa-tha marrwa-yiwa-th, dan-kiwa-th !
   come-IMP me-V. I. ALL-IMP near-V. I. ALL-IMP here-V. I. ALL-IMP
   Come close to me, here !

Such complex locational expressions are of two types:

(a) Expressions like 'to the east of us', 'near to us' or 'on that side of us', which give a directional relation between two distinct entities in different places. Here the reference point takes a locative governed by the space-relational, e.g. danda-nangan-da kamarr-i [this-side-NOM stone-LOC] 'on this side of the stone'. Examples in unmarked modalities, such as this, and (4-36), are crucial in deciding the syntactic relationship here: because the two components differ in case, we can conclude that the relation is one of government by the directional rather than agreement with the reference point. In marked modalities, where both take a modal case, e.g. danda-nangan-ju kamarr-u [this-side-MPROP stone-MPROP], there is no way of telling whether agreement or government is involved.

[Traversing the central salt-pans of Bentinck Island must be done in complete silence, for fear of the damurra dangkaa 'short people' who inhabit the cliffs nearby. Anyone looking in their direction, or attracting their attention with untoward movements or bright clothing, risks instant death. Following a tense journey the leader speaks up:]

4-36 kamburi-ja ngada dathin-ki jardi-ya kunawuna-y: wirrka-j=xna,
   say-ACT I:NOM that-MLOC mob-MLOC child-MLOC play-IMP=NOW
   ri-ya nga-ku-lu-wan-ji dathin-a kiyarrng-xa ngilirr
   east-NOM we-INC-PLU-POSS-LOC that-NOM two-NOM cliff(NOM)
   I said to all the boys: relax now, those two cliffs are to the east of us.

4-37 marrwa-a dii-ja niwan-jil
   near-NOM sit-IMP 3sg-LOC
   Sit close to him!
Sit down cross-legged on the north side of him!

(b) Expressions like 'on top of', 'at the west end of', or 'inside', where the 'position' is actually seen as 'part' of the reference point. Here both take the same case (like a part-whole relation - 4.4.3.5):

4-39 baa-n-marri mala-a, ngarn-da bath-inyin-da
bite-N-PRIV sea-NOM beach-NOM west-END-NOM
The tide didn't cover it, the western end of the beach.

4-40 dathin-a kuna-walad-a nal-iya kamarr-nya wirrka-j
that-NOM child-LOT-NOM top-LOC stone-LOC play-ACT
Those children are playing on top of the stones.

4-41 nyingka kali-ju barji-ju yark-iring-ku ngambu-ring-ku
you:NOM jump-FUT fall-FUT bottom-ALL-MPROP well-ALL-MPROP
You will fall to the bottom of the well.

The part-whole construction is also used of positions 'in between' the reference point(s):

4-42 bakii-ja yiwi-ja ngaruwarra-ya kaburba-ya, [kalarrang-inja
all do-ACT sleep-ACT between-LOC fire-LOC mosquito-COBL
ba-yi-nyarra-nth] COBL
bite-DT-APPR-COBL
(They) all slept between fires, so they wouldn't get bitten by mosquitoes.

Because the distinction between 'directional' and 'part-whole' constructions is only maintained in the instantiated and zero modalities (elsewhere both parts of both construction types agree in receiving modal case) decisive examples are rare, and the exact set of positionals occurring in each construction remains a matter for further investigation.

4.2.3 Special derivatives with demonstrative locationals

Demonstratives take the following special derivational suffixes:

(a) -nangan-da 'side' attaches to the full nominative form, deriving the manner demonstratives dandananganda 'this way' (4-43) and dathinananganda 'that way'.

4-43 dan-da-nangan-da, ngada ngumban-ju marraa-ju
this-NOM-side-NOM I:NOM you-MPROP show-FUT
This way, I'll show you.
(b) the REMote suffix -ij-, which follows the stem:

4-44 kurirra dathin-ij-i dii-ja mala-y
dead-NOM there-REM-LOC sit-ACT sea-LOC

They sat down dead way over there in the sea.

These two suffixes also combine with cardinal demonstratives, where they are described in more detail.

(c) A suffix -murrkida 'as far as, up to'. which only occurs on demonstratives:

4-45 dan-murrkida budii-j
this-AS FAR AS run-ACT

(1) was running about (with water) up to here (pointing to thigh).

4-46 dathin-murrkida dulk
there-AS FAR AS country(NOM)

(The wind story) country (reaches) as far as there.

4.2.4 Derivatives of compass locationals

Compass locationals and their derivatives are centrally important in K. They recur constantly in myths and other narrative, and even requests to squeeze a few inches across a car seat make use of them: *jiirkara-yiwa-th!* (north-V.I.ALL-IMP) 'move to the north!' is a typical command in such circumstances. In locating objects or giving directions the words, *junku* 'right' and *thaku* 'left' are rarely employed: compass locationals are used in their stead. Even in visualizing imaginary situations a cardinal reference is established. Once Dugald Goongarra was singing the praises of a newly made *kujiji* spear with many barbs. It would penetrate a big queenfish, he said, as far as the second barb: a turtle's fin, as far as the fourth: a man's chest, as far as the tenth. And speared into a dugong:

4-47 burri-ja bath-innyin-da thawurr-i
come out-ACT west-END-NOM throat-LOC

The west end (of the spear) comes out of its throat.

[I have no idea why 'west' was chosen here - probably because the speaker visualized himself on a particular beach, with the dugong facing a particular way.]

Reflecting the importance of the compass locationals, a large number of
special derivatives exist. These are discussed in this section. For semantic coherence I will also include:

(a) the ALLative and ORIGin cases, whose forms differ slightly from the regular nominal equivalents, as do their distributions: (i) they must follow the root, whereas the nominal ALLative and ORIGin cases may be positioned further out. (ii) the allative form of cardinals must be followed by some other case (if only the nominative).

(b) special verb-deriving suffixes limited to compass locationals.

4.2.4.1 Forms

Compass locationals are rather irregular morphologically. Three stem sets must be recognized:

(a) The ordinary stem, exemplified by the following nominative and locative forms (recall that the word for 'south' has the alternate stems ra– and rar– (4.2)).

<table>
<thead>
<tr>
<th>North</th>
<th>South</th>
<th>East</th>
<th>West</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nominative</td>
<td>jirrkara</td>
<td>ra-a, rar-a</td>
<td>ri-ya</td>
</tr>
<tr>
<td>Locative</td>
<td>jirrkara-ya</td>
<td>ra-ya, rar-i</td>
<td>ri-ya</td>
</tr>
</tbody>
</table>

All case inflections except the ALLative and ORIGin are based on these, in addition to a number of derivations applicable to all nominals (e.g. the INCHoative).

The root bad- 'west' is irregular. Before vowels it behaves like a laminal final stem (e.g. bath-ı); but before nasals it becomes an apical rather than the expected lamino-palatal nasal: ban-maru-tha [west-V.D-ACT] and ban-mall [west-HAIL] rather than the expected bany-maru-tha and bany-mall. Before w-initial inflections like -wula-tha [V.ABL] the final segment is lost altogether: ba-wula-tha.

(b) The 'from' stem set. This is identical to the ordinary set, except for the loss of final -ra from the 'north' form, and the unavailability of the rar option for the 'south' form. It occurs with the irregular 'from' and 'boundary' derivations:

5Such rich sets of compass derivatives are common round the in Australian languages. Furby and Furby (1976) and Laughren (1973) describe similarly complex systems in Garawa and Warlpiri respectively. The Garawa system includes formatives like muwa 'hidden (needing to be uncovered) to the X', ngura 'belonging to a specific place to the X', and -njanga /-jba 'obscured from view by a vertical object to the X'. To a greater extent than in Kayardild, these may be concatenated into forms such as gula-najnga-ngurra 'one belonging to a south place obscured from view.' Lardili and Yukulta have systems that closely resemble the Kayardild one, with most morphemes being cognate.
FROM  jirrk-a-an-da  ra-yin-da  ri-in-da  bath-in-da
BOUND  jirrk-a-rngg-a/  ra-ngurrnga  ri-ngurrnga  bath-urrnga

(c) The allative stem set, found with the ALLative, ORIGin, and CONTinuous forms:

ALL  jirrkur-ung-ka  rar-ung-ka  ril-ung-ka/  bal-ung-ka
     rul-ung-ka
     rul-umban-da
CONT  jirrkur-i(i)d-a  rar-i(i)d-a  ril-i(i)d-a  bal-i(i)d-a

Some speakers vowel-ham onize the 'east' root before Allative and ORIGin suffixes - see Appendix C.

The allative stem is also used before the verbal derivatives -iia-tha 'turn to the X' and -ijulu-tha 'move (OBJ) to the X'.

Each derivation draws all its forms from the same stem set, except for {-(i)injin-da) 'END', which takes ordinary stems except for the 'east' form, based on the nominative: riya-nyin-da.

Finally, the suffix -nangan-da 'side' attaches to the full nominative form, e.g. bada-nangan-da 'west side of'. It is not a clitic, however, since case-marking appears on -nangan-da, not the preceding stem, e.g. bada-nangan-ju [west-SIDE-MPROP]. There is evidence that it has only recently become a bound form: in Yukulta (Keen 1983:262) it may still precede the reference point, e.g. nangan-da dan-da [side-ABS this-ABS] 'this side, this way' (cf K danda-nangan-da).

4.2.4.2 Multiple derivations

The only multiple derivations I have heard involve the CONTinuous suffix, which may follow the 'FROM' form (4-58) as well as the root: the HAIL form, which may follow the ALLative and FROM forms as well as the root: and the CENTRIPETAL BOUNDary form, which may follow the FROM stem as well as the root.

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6The final /I/ in the east and west forms is a vestige of a pT ALLative form *(k)rllu. (Proto Tangkic /rl/ has split in modern K into /r/ and /ll/.)
4.2.4.3 ALLative

The compass ALLative, like the ordinary ALLative, can mark the observable direction of motion. Here it takes the appropriate modal case (4–48):

4–48 niya warra-jarra rar-ung-kina
he-NOM go-PST south-ALL-MABL
He went southwards.

Two other uses of the compass allative are not found when the ALLative combines with other subclasses:

(a) It may mark the intended destination rather than the current direction. I may, for example, be going to somewhere in the west, but en route move first northwards, then southwards, then eastwards. A compass allative is used to give the intended direction (here, west); it is followed by a relational ‘PROPrietary of anticipation’, and escapes modal case:

4–49 ngada warra-ja bal-ung-ku
I:NOM go-ACT west-ALL-PROP
I am going to the west.

(b) It may function as a local adjunct referring to the horizon, or some distant place towards the horizon in a given direction.

4–50 rul-ung-ka kalnaa-j
east-ALL-NOM dawn-ACT
It’s dawning in the east.

When naming places, compass allatives can combine with verbal cases expressing movement, e.g. bal-u-wula-a-n-da [west-ALL-V. ABL-DT-N-NOM] ‘leaving from the far west’.

4.2.4.4 ORIGin

The form -umban- is a suppletive alternative of the ORIGin suffix {-wan-}7. It derives ordinary noun/adjectives naming the inhabitant of a region (4–51) or its language or ways (4–52).

4–51 ngada rar-umban-d
I:NOM south-ORIG-NOM
I am a southerner (from Bentinck Island)

7The same alternation is found in Yukulta and Lardili; and in the Kayardild possessive pronoun system (4.1.1.1).
4-52 nyingka marri-ja nga-la-wan-ji rar-umban-ji kangk-i
you:NOM hear-ACT we-PLU-POS MLOC south-ORIG-MLOC talk-MLOC

You can understand our southern language (Kayardild)

4.2.4.5 FROM -Vn-

In contrast to the cases expressing movement, which must function as local
adjuncts, the FROM may modify any NP, agreeing with it in case. In (4-53) it
modifies the subject, taking the nominative (and escaping modal case); In (4-54)
it modifies the object, agreeing with it in taking the modal LOCative:

4-53 walmathi-nguni jirrka-an-da warra-ja ngarn-ki
high-INSTR north-FROM-NOM go-ACT beach-LOC
wakirinwakirin-d
with coolamon-NOM

Passing through the high country (we) came from the north along the
beach carrying coolamon.

4-54 jirdawa-tha marri-ja ngada wangarr-i mutha-ya bang-ya
salivate-ACT hear-ACT I:NOM song-MLOC many-MLOC turtle-MLOC
bath-in-ki
west-FROM-MLOC

Drooling with anticipation I heard the song of many turtles coming
from the west.

FROM may also feed the ‘instrumental of place’ (3.3.9.3):

4-55 ra-yin-nguni-ya kurri-ja kanthathu, yirrbaa-j
south-FROM-INSTR-MLOC see-ACT father(NOM) skite-ACT

Father had seen (the European boat) by looking from the south,
and bragged about it.

Although usually implying movement concurrent with the main clausal
action, this is not necessary; the subject may be temporarily at rest.
The sentence thaldi-ja ri-in-da [stand-ACT east-FROM-NOM], for instance,
was explained to me as ‘stand up, then he gonna come along again’.

Like motion verbs it may take the pre-verbal directional particle minyi
‘towards’ when modifying the subject:

Because of this, because it is limited to the four compass points (and lacks parallel categories outside
the compass locationals with which agreement could be set up) and because of its fixed position after the
root, I consider it a derivation rather than a case inflection. Klokeid (1976) treats the cognate Lardil suffix
as an ‘elative case’, restricted to compass locationals.
4-56 duburrka kala-tha minyi ri-in-d
mullet-NOM cut-ACT towards east-FROM-NOM
The Mullet Being cut it out (the Makarrki estuary) on his way back from the east.

4.2.4.6 CONTinuous -i(i) d-
This derives nominals with the sense ‘continually heading Xward’:

4-57 minyingkal-d jirrkur-iid
groper-NOM north-CONT(NOM)
Heading ever northward was a groper.

It may follow the root, as just shown, or the ‘from’ form:

4-58 ngada katharr-u biya-ju wanjii-ju bath-in-ij-u
1:NOM lagoon-MPROP swim-FUT go up-FUT west-FROM-CONT-MPROP
I will swim the lagoon and, far away (i.e. on the other side) still moving from the west, will climb up.

Syntactically, such nominals function as second predicates of manner. This is shown by their agreement (a) in relational case with the actor, which is usually subject (4-57, 4-60) but may also be object (3-179). (b) by their failure to take an associating OBLique case when coreferential with the subject of a nominalized clause (4-59) and (c) by their reduplication to show plurality of actors (3-179).

4-59 bi-l-da bal-iid-a warra-n-d
3-PLU-NOM west-CONT-NOM go-N-NOM
They headed ever westward.

It often combines with bardaka ‘belly’, adding the meaning ‘facing X’:

4-60 nga-ku-rr-a ril-iid-a bardaka warra-j
we-INC-DU-NOM east-CONT belly(NOM) go-ACT
We two went along facing eastwards.

This suffix probably derives from the nominal niida ‘same’ (like the clitic (i)da, which differs from it only in vowel length (6.7.4.1)).

4.2.4.7 REMote -ij-
This suffix, also found with noun/adjectives and demonstratives, stresses distance of location. It may follow the ordinary stem (4-61, 4-62) or the FROM suffix (4-58).

‘Remote’ may range from 100 metres to twenty kilometres (the greatest distance on Bentinck Island): for distances beyond that (in today’s circumstances, Cairns or Mt Isa) the ALLative form is used.
The REMote suffix does not alter the function of its host, so compass locationals bearing it may function either as adnominals, agreeing in case with their head (4-61), or as local adjuncts. In this latter function a LOCative case inflection is explicitly present after the REMote suffix (4-62).

4-61 bal-ung-ku nga-ku-l-da thaa-thu , bath-ij-uru west-ALL-MPROP we-INC-PLU-NOM return-FUT west-REM-MPROP
dulk-u kurri-ju place-MPROP see-FUT
We’ll go back west now, to see that far west country (about 15 km away).

4-62 ngambura-tha bi-l-d, riya-th-i
dig well-ACT 3-PLU-NOM east-REM-LOC
They dug a well, way off in the east.

4.2.4.8 END -(i)nyin- " -(i)nyin-
This is -(i)nyin- (phonemically /-(i)nyin-/ ) in older speakers; this form is also found in Yukulta (Keen 1972:98). With younger speakers the stop segment is lost, giving -(i)nyin-. For all speakers the stop is retained when another suffix follows, e.g. bath-injin-marutha [west-END-V.D].

This names a location at the end of, but still a part of, the entity under discussion. Thus in (4-47) above it specifies the western end of the spear thrust into the dugong; in (4-63) below it refers to the western end of the beach which the tide would have encroached upon; and in (4-64) it refers to the part of the traveller’s body furthest to the west (his ‘west shoulder’). This forms a ‘part-whole’ NP (4.4.3.5) with the nominal denoting the full entity, agreeing with it in case.

4-63 baa-n-marri mala-a, ngarn-da bath-inyin-da
bite-N-PRIV sea-NOM beach-NOM west-END-NOM
The tide didn’t cover it (bite it off), the western extremity of the beach.

4-64 myingka bath-inyin-da wuu-ja tharda-a
you:NOM west-END-NOM put-IMP shoulder-NOM
(To a traveller approaching the deadly cliffs at Wamakurid: Put (your gear) on your western shoulder.)
4.2.4.9 Boundary -ngurrnga

This refers to a point of discontinuity or geographical boundary, located to the X of some other entity (not the entity denoted by the stem). It is appropriate when describing the coast of an island (4-65), and in fact Ringurrnga and Rangurrnga are often used as proper names for Sweers Island, which lies to the south east of Bentinck Island. It may also be used of a cliff or bluff (4-66) and even the wall of a building.

4-65 ri-ngurrnga bi-rr-a dali-j
   east-BOUND(NOM) they-DU-NOM come-ACT
   They came to the east side (of Albinia Island)

4-66 jatha-a ngilirr bath-urrng , jatha-a ri-ngurrng
   other-NOM cliff-NOM west-BOUND(NOM) other-NOM east-BOUND
   There was one cliff on the west side (of a saltpan bounded by cliffs), another on the east side.

As these examples show, -ngurrnga words are themselves locationals and do not inflect for the locative: like other locationals they may take modal case:

4-67 maraka wirdi-ju mutha-a ra-ngurrnga-wu
   CTRFCT stay-FUT many-NOM south-BOUND-MPROP
   A whole lot of (Water Lilies) should have stayed on the south coast.

A single noun/adjective takes this suffix: dumu-rrnga [sandhill-BOUND] 'shoreline'.

Ngiyambaa, only distantly related to the Tangkic languages, has a similar morpheme -ngur 'side', suffixable to demonstratives (Donaldson 1980:145).

4.2.4.10 Centripetal Boundary -kirida

This also denotes a geographical boundary, but the compass direction is centripetal rather than centrifugal, as with -ngurrnga. X-ngurrnga, that is, denotes a boundary encountered in direction X as one moves away from the reference point: X-kirida a boundary in direction X moving towards the reference point.

Taking Gununa township as an example reference point, one sees the northern end of Denham Island as one looks south. This is therefore described as ra-ngurrnga 'south-BOUND'. Alternatively, it could be described as ra-yin-kirida 'south-FROM-CENTRIPETAL BOUND', since one passes through it by moving from the south towards the speaker.
Two possible segmentations of this suffix are LOC -ki plus -rid-a 'side', or ALL -kiri plus the SAME clitic -(i)da. At present my small corpus (about four examples) does not allow me to decide whether one of these is correct. The first is most unlikely, however, since no other suffixes ever follow the LOCative.

4.2.4.11 SIDE -nangan-da

This is another suffix sometimes translated as English 'side'. It derives positionals giving the orientation on a flat surface of one location with respect to another, e.g. of houses laid out on flat ground (4-68) or of a swimmer relative to a rock (4-69). Like other positionals it does not take the LOCative in the instantiated modality, and may be turned into a determiner by adding the ORIGIN suffix (4-68).

4-68 rara-nangan-man-da dangka-a kurrka-th
south-SIDE-ORIGIN-NOM man-NOM take-ACT
The man from next door (from the house to the south) took it.

4-69 kunawuna biya-ja jirrkara-nangan-da kamarr-i
child(NOM) swim-ACT north-SIDE-NOM rock-LOC
The child swam around the north side of the rock.

-nanganda also suffixes to distance demonstratives (4.2.3) and the interrogative jina-a 'where' (6.5).

4.2.4.12 HAIL -mali

This is used in hailing an unidentified person or group located in a particular direction. It follows the ordinary root if the person is stationary ; if the group is moving it may follow the ALLative (4-71) or FROM (4-72) forms:

4-70 nyingka ngaak , ban-mali?
you:NOM who-NOM west-HAIL
Who are you, standing to the west? (Answered by: I'm your uncle.)

4-71 ril-u-mali, dali-ji
east-ALL-HAIL come-IMP
You going eastward, come!

4-72 jirrkara-an-mali, ngaaka-wuru warra-wa-th, dali-ja marrwa-yiwa-th!
north-FROM-HAIL INTERR-PROP far-INCINH-ACT come-ACT near-V.I.ALL-ACT
You coming from the north, why are you hanging back, come up close!
4.2.4.13 Sea Territory -mirdamirda

This follows the allative stem. It derives locational nouns referring to stretches of sea territory, particularly dugong hunting grounds. Although mirdamirda does not occur as a free form, a related noun mirdaa means 'water churned up by dugong grazing’. My only examples of this are nominal clauses like X jirrkurumirdamirda 'X is a dugong hunting ground to the north’.

4.2.4.14 Wind names

Several names for winds are derived from compass terms, e.g. balu-balung-ka [west-ALL-west-ALL-NOM] 'west wind’, jirrkurubudiinda [north-ALL-run-N-NOM] 'north wind’, jirrkaralinda ‘strong north wind’, rulunganda ‘east wind’, and rarunganda ‘south wind’. The -linda and -nganda formatives in the last three words are not found elsewhere; -nganda may be reduced from -nangan-da 'SIDE’.

4.2.4.15 Idioms and compounds involving compass words

A number of special idioms and compounds exist.

(a) Compass-ALLative/FROM + Terrain Traversed. These are idioms rather than compounds: word order is fixed, but both words are fully inflected and individually stressed. Examples are ngarn-da bal-ung-ka [beach-NOM west-ALL-NOM] 'westward along the beach’, mala-a ri-in-da [sea-NOM east-FROM-NOM] 'from the east across the sea’.

(b) Body-part Noun + Compass-ALL/FROM. These involve the body-part nominals bardaka 'belly’ and thukan-da ‘chin’.


The thukan-da forms are compounds, only attested with the ALLative compass term, e.g. ril-u-thukan-da [east-ALL-chin-NOM] ‘facing/heading eastwards’:

4-73 jijina kurrngu-w? kurri-ja junku-ru-tha
whither dugong's feeding path-NOM look-IMP straight-FACT-IMP
kurrngu-w, niya ril-u-thukan-da thaa-thu, bath-in-ku
path-NOM 3sgNOM east-ALL-chin-NOM return-FUT west-FROM-MPROP
Which direction is the dugong moving? Look straight ahead at where its muddied the water, it'll head back eastward, from the west.
(c) Compass-ALLative-rayaa-da. The verb rayaa-ja means 'open up; open one's eyes'; its nominalized form may be compounded with the ALLative, e.g. rar-u-rayaa-n-da [south-ALL-open eyes-N-NOM]. These function as manner nominals, meaning 'previous night's camp in the X'. because this orients the hearer to the coming day, it normally occurs with suffixes giving 'movement away from'.

4-74 rabi-ja bal-u-rayaa-n-mula-a-n-d
arise-ACT west-ALL-open eyes-N-V.ABL-DT-N-NOM

They got up, leaving their previous night's camp in the west.

(d) nganikin + compass word. Allative or root forms may follow the distance locational nganikin- 'yonder' in a compound, as in nganikin-bad 'way over there to the west'. nganiki-lil-ung-ka³ [yon-east-ALL-NOM] 'way over there to the east'. and:

4-75 nganiki-la-a kurrka-a-ja mirrayala-a-j
yon-south-NOM take-DT-ACT make-DT-ACT

(Discussing the creation of a track by Rainbow:)
Way out of sight to the south it was taken, and made.

(e) Intermediate directions. Surprisingly, there are no morphologized forms for intermediate directions. These may be specified by combining two cardinals:

4-76 dathin-a dangka-a dali-j bath-in-da jirrka-an-d
that-NOM man-NOM come-ACT west-FROM-NOM north-FROM-NOM

That man is coming from the north west.

4-77 budubudu rar-ung-ka ru-lung-ka warra-j
boat(NOM) south-ALL-NOM east-ALL-NOM go-ACT

The boat is going south east.

Smaller deviations may be indicated by the word ngaruwarra 'between':

4-78 ngijin-da kajakaj ngaruwarra ra-yin-da dali-j
my-NOM daddy(NOM) between(NOM) south-FROM-NOM come-ACT

My daddy is coming from a bit off south.

³Initial /r/ in the south and east forms alternates with /l/ in the compounds by regular LATERALIZATION - see 1.7.3.5.
4.2.5 Verbalizing derivatives of compass words

The first two of these are based on the allative stem, the third on the ordinary stem.

4.2.5.1 TURN to the X -ija-tha:

This is used of entities turning around to face to the X:

4-79 tharda-wanka-wuru ril-ija-tha, dii-ju
shoulder-branch-PROP east-TURN-ACT sit-FUT

The aeroplane is turning to the east, so it can land.

Occasionally the /j/ is lenited to /y/ (see 9.4.3 on this construction).

4-80 [jirrkur-iya-thurrk, warmara-tha ra-yn-inja
north-TURN-IMMED:COBL wind-COBL south-PROM-COBL
ngudi-jurrk] [jirrkur-iya-thurrk, warmara-ntha ra-yn-inja
north-TURN-IMMED:COBL wind-COBL south-PROM-COBL

It's blowing round to the north, the wind is throwing from the south now.

4.2.5.2 MOVE TO the X -ijulu-tha:

This derives verbs meaning 'move (OBJ) to the X':

4-81 jirrkur-ijulu-tha dathin-a thungal-d!
north-MOVE TO-IMP that-NOM thing-NOM

Move that thing to the north (away from the flames)!

The detransitivized form is common, with a reflexive meaning:

4-82 wadu-wa jinka-j, yakay! ngada ril-ijul-i-j!
smoke-NOM follow-ACT EXCLAM I:NOM east-MOVE TO-DT-ACT

The smoke's following (me), yakay! I'm moving round to the east (side of the fire).

4.2.5.3 LOOK to -maru-tha:

The ending -maru-tha, formally identical to the free form maru-tha 'put' and the verbal dative case (3.4.2.2), may attach to compass stems. It functions here as a verb-deriving suffix meaning 'look to the X' (attached to the unmarked form) or 'look from the X' (attached to the FROM form):

4-83 ri-maru-tha kurri-j
east-LOOK-ACT look-ACT

He looked to the east.
Black Crane looked from the north, from the east he cast his eye.

4.3 Minor nominal classes

Three minor nominal classes have limited inflectional possibilities, due to semantic or functional restrictions: manner nominals, time nominals and predicative nominals. Note that manner, time and nominal predicative functions are not limited to the corresponding minor nominal classes: certain ordinary noun/adjectives, for example, may function as manner, time, or predicative nominals. The distinguishing feature of these minor subclasses is that they are restricted to one function, whereas the other nominal classes are versatile.

4.3.1 Manner nominals

These must function as second predicates of manner, usually on the subject but sometimes on the object (see 6.2.4.3 for a discussion of object complements). When construed with the subject they take the nominative relational case and escape modal and associating case, as do other nominals in this function (6.4). When construed with the object, they agree with it in case.

4-3 lists all known Kayardild manner nominals, segmented into stem plus nominative. Some sentence examples are:

4-85 nga-l-da wuu-ja kantharr-jarrad
we-PLU-NOM give-ACT self-OTHER(NOM)
We’re sharing among ourselves (but YOU have to cook your own food).

4-86 ngada junkuyarrad-a bala-thu ngumban-ju kirrk-u
I:NOM in return-NOM hit-FUT you-MPROP face-MPROP
I’ll hit you back, in the face.

4-87 junkuyunku ri-in-ki bath-in-ki kurrka-th
towards each other(NOM) east-FROM-MLOC west-FROM-MLOC take-ACT
(They’re) taking nets from the east and west towards each other.

4-88 maarra junkuyunku munirr-wu-j
all among each other(NOM) breast-give-ACT
(In the old days) all (the women) suckled each others children.
Figure 4-3: Kayardild Manner Nominals

<table>
<thead>
<tr>
<th>Nominal</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>kantharrk-a</td>
<td>Alone, unaided, without interference (8-36)</td>
</tr>
<tr>
<td>kantharrk-uru</td>
<td>&quot; &quot; &quot; (4-92)</td>
</tr>
<tr>
<td>kantharrjarrad-a</td>
<td>Among members of a group (Etym: kantharrka plus -yarraTH- 'OTHER')</td>
</tr>
<tr>
<td>junkuyarrad-</td>
<td>In return, in retaliation (4-86)</td>
</tr>
<tr>
<td></td>
<td>(Etym. junku 'straight' + -yarraTH- 'another')</td>
</tr>
<tr>
<td>junkuyunku</td>
<td>In return; towards each other (4-87); among one another (4-88).</td>
</tr>
<tr>
<td>junkiid-a</td>
<td>In reciprocation, e.g. returning gift of food (4-89)</td>
</tr>
<tr>
<td>warrjawarri</td>
<td>Slowly, without undue movement. (Etym: perhaps from warraja 'go' plus -warri 'PRIV')</td>
</tr>
<tr>
<td>rakin-da</td>
<td>Promptly, soon after (4-90)</td>
</tr>
<tr>
<td>murrukumurruku</td>
<td>Hostilely, with aggressive intent, e.g. a raiding party. (Etym: murruku 'woomera') (4-91)</td>
</tr>
<tr>
<td>rarrdararrda</td>
<td>Separately (4-92)</td>
</tr>
<tr>
<td>jaburra</td>
<td>Kneeling.</td>
</tr>
<tr>
<td>jardirid-a</td>
<td>behind people's backs (jardi 'behind')</td>
</tr>
<tr>
<td>karbakarba</td>
<td>In water up to waist.</td>
</tr>
<tr>
<td>kirrkajara</td>
<td>Gingerly, carefully (kirkka 'nose' + jara 'foot')</td>
</tr>
<tr>
<td>kirthan-da</td>
<td>Behind someone's back (Text 3, Line 46).</td>
</tr>
<tr>
<td>wulthuru</td>
<td>Lying in rows.</td>
</tr>
</tbody>
</table>

4-89 niya wuu-n-marri dangka-walay-arri junkii-yarri
he:NOM give-N-PRIV person-LOT-PRIV in.reciprocation-PRIV
He never gives food back to other people.

4-90 rakin-da daman-da burri-ju , walbu-uru baa-ju
soon-NOM tooth-NOM emerge-FUT corkwood-MPROP bite-FUT
(A child's) teeth will soon come, if he will bite on some corkwood.

4-91 dathin-a bath-in-da kalthakalthe-tha dangka-walada
there-NOM west-FROM-NOM sneak up-ACT man-LOT(NOM)
murrukumurruku
warlike(NOM)
There from the west all the men are sneaking ready for war.
4.3.2 Time nominals

Some time nominals are invariable: **banda** 'soon, now (4-94)'; **wuljiya** 'yesterday night'; **dilaya** 'a few days ago'; **kuriwindi** 'some time ago (a few weeks or months)', **yuujbanda** 'in the old days, in historical times'; **yulkaanda** 'forever'; **birangkarr** 'usually; for a long time'. The lack of modally case-marked variants is not due to semantic incompatibility, since these words can occur in marked modalities, e.g:

4.93 niya thaa-tharr kurdiwirdi
3sgNOM return-PST some time ago
*He came back some time ago.*

4.94 ban-da nyingka kantharrkuru kala-thu
now-NOM you:NOM alone(NOM) cut-FUT
*Now you can cut (the spearhead) on your own (without my help).*

4.95 bi-l-da wirrka-ju birangkarr, jungarra-wu ngimi-wu
they-PLU-NOM dance-FUT long time big-MPROP night-MPROP
*They'll dance a long time, late into the night.*

Other time nominals take modal case alone, subject to semantic compatibility. Often the modal case contributes to the temporal meaning:

<table>
<thead>
<tr>
<th>Yan-da</th>
<th>Yan-ki</th>
<th>Yan-ku</th>
</tr>
</thead>
<tbody>
<tr>
<td>now-NOM</td>
<td>now-MLOC</td>
<td>now-MPROP</td>
</tr>
<tr>
<td>now</td>
<td>a little while ago</td>
<td>in a little while</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Balmbi-ya</th>
<th>Balmbi-wu</th>
</tr>
</thead>
<tbody>
<tr>
<td>morrow-MLOC</td>
<td>morrow-MPROP</td>
</tr>
<tr>
<td>on the morrow, the next day (past)</td>
<td>tomorrow</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Barruntha-ya</th>
<th>Barruntha-wu</th>
</tr>
</thead>
<tbody>
<tr>
<td>a few hours off-MLOC</td>
<td>a few hours off-MPROP</td>
</tr>
<tr>
<td>yesterday</td>
<td>in a few hours</td>
</tr>
</tbody>
</table>

Younger speakers take the modally-inflected forms as unanalyseable, so that **balmbiwu** or **balmbu** has become an invariable word meaning 'tomorrow', and **barrunthaya** an invariable word meaning 'yesterday'.

---

10 Although diachronically the words dilaya and wuljiya probably contain a locative inflection -ya.
The word *ngimiijida* 'before daybreak' has an irregular future modal form
*ngimiijuda* '(tomorrow) before daybreak': the root *ngimij-* (with short vowel) is
found before relational cases with a temporal component (e.g. *ngiminy-marii-ja*
(before daybreak-V.TRANSL-ACT) 'in attendance of daybreak'). In all other
modalities *ngimiijida* is used, e.g.:

4-96 *bal-umban-da jardi warra-jarra ngimiijid*
west-ORIG-NOM mod(NOM) go-PST before daybreak(NOM)

*The western mob set off before daybreak.*

The mixed behaviour of this word may reflect the half-completed
absorption of an enclitic into the stem: *ngimi-* 'night' plus -//-'REMOTE' plus the 'SAME' clitic -(i)da, meaning 'far into the night;
still night'.

Three other time words: *yuuda* 'already', *kada* 'again' and *buda* 'behind,
later' are so closely integrated with the verbal complex that they may be treated as
preverbal particles, and are discussed in 5.8.

(b) Time of day terms

These give the time of day by reference to the position of the sun. They
may combine with any modal case. Except for the interrogative, both words of
the idiom inflect.

*kalna-n-da warrku* [dawn-N-NOM sun(NOM)] dawn
*ri-in-da warrku* [east-FROM-NOM sun(NOM)] morning
*kirnkirn-da warrku* [overhead-NOM sun(NOM)] midday
*warrku-nurru* [sun-ASSOC(NOM)] daytime
*warrku bad, bada warrku* [sun(NOM) wesb(NOM)] afternoon

*jinawarrku* [where-sun(NOM)] what time of day

(c) Duration terms. Based on *darri* '(stretch of) time', these give impressionistic
duration. The term *warngiida darri* is a post-contact coinage for 'one week'.

More specific durative expressions may be based on *warrku* 'sun', *waldarra*
'moon' or *wun-da* 'rain(y season)' with multiplicands as for *darri*.

*darri* a while

*mutha-a darri* a long time [much-NOM time(NOM)]
*warngiidi-a darri* one week [one-NOM time(NOM)]
*jangka-a darri* a few weeks later [other-NOM time-NOM]
4.3.3 Predicate nominals

These are restricted to predicate function, either as the main predicates of nominal clauses or as second predicates. They may not be used attributively.

Thus *mungurru* 'knowing, knowlgeable’, may be a nominal predicate, and even take an object or a clausal complement (6.1.7); it may also function as a second predicate, as in (4-97). But it cannot be used attributively: *dathina mungurru dangkaa* [that knowing man] is unacceptable. (Its antonym, *burdumbanyi* 'ignorant', on the other hand, can be used as a main or secondary predicate, and can also be used attributively, as in *burdumbanyi waydaba* ‘the ignorant white man’ (3-33)).

4-97 niya mungurru wirrka-j
3sgNOM knowing(NOM) dance-ACT

*He knows how to dance (lit. he dances knowingly).*

Other nominals that can only be used predicatively are *birrmurdami* 'know, be painfully aware that (Clause), be sad', *jirdaa* 'hungry', *mibulka* 'asleep', *riki* 'in tears'.

4.4 Syntax of the NP

A Kayardild noun phrase consists of a head plus, optionally, one or more modifiers. All words in the NP agree in case (cf 2.4.2.1). Modifiers may be nominal words (4-98) or noun phrases bearing an an adnominal case (4-99, 4-100):

4-98 dathin-a jungarra dangka-a
that-NOM big(NOM) man-NOM

*that big man*

4-99 dathin-a dangka-a kurrka-thu [ dathin-bakarran-ju
that-NOM man-NOM take-FUT that-GEN-MPROP

man-GEN-MPROP woman-MPROP

*That man will take that other man’s wife.*

4-100 [jatha—a dangka-a [natha-wan-da bartha-wan-da]ORIG ]NOM
other-NOM man-NOM camp-ORIG-NOM base-ORIG-NOM

kamburi-j
speak-ACT

*Another man from the west camp spoke.*
NP heads may also be modified by clauses. Nominalized clauses precede and agree in case with the head (8.4). Finite subordinate clauses are adjoined before or after the main clause and do not agree in case with the head (9).

The order of NP subconstituents depends on their function: this is discussed in 4.4.2.

In the vast majority of NPs all subconstituents are contiguous. NP-splitting has clear semantic effects. discussed in 4.4.4.

There are no compelling reasons for distinguishing a 'pronominal' phrasal category in Kayardild. Like other nominals, pronouns may serve several functions: they may be determiners, 'entities', or designate 'supersets' in part-whole constructions. I therefore assume that their phrasal syntax is essentially equivalent to that of other nominal subclasses.

4.4.1 The NP as a syntactic constituent in Kayardild

Several recent works on Australian languages (e.g. Simpson (1983) and Hale (1983) on Warlpiri. and Blake (1983) on Kalkatungu11) have questioned the need for setting up NP constituents in these languages. Instead, they argue, apparent NPs can be treated as apposed, coreferential nominals: this would account for the high incidence of discontinuous or 'unmerged' NPs. Case concord, on this interpretation, need not be mediated by constituency but can be attributed to semantic scope: an apparent 'phrase' like 'big-INSTR knife-INSTR' 'with the big knife' can be paraphrased as 'with the big (one), with the knife'. I shall refer to this as the 'apposition analysis'.

Valid as this analysis may be for some languages, it is not appropriate for Kayardild. for the following reasons:

(a) on the apposition analysis, every nominal word must be capable of occurring independently: sentences like [big camel ' (the) big (one) came' should be acceptable (as indeed they are in Warlpiri). But in Kayardild there are definite restrictions here: a large set of semantic adjectives, such as jungarra 'big', can

11There are of course differences between their analyses, which do not affect the argument here. A quote from Blake (op cit., p.145) sums up the essence of these three scholars' positions: 'the presence of these examples (of ordering permutations - N.E.) suggests that there are in fact no noun phrases, but that where an argument is represented by more than one word we have nominals in parallel or in apposition'.

only appear when qualifying an overt head. Thus *jungarra dalija* [big came] is unacceptable, as is *dathina jungarra dalija* [that big came]: an entity nominal like *dangkaa* 'person' is necessary, as in *(dathina) jungarra dangkaa dalija* '(that) big man came'.

(b) the clear ordering restrictions in K. and the requirement that all words in an NP be contiguous except under special discourse conditions, can be clearly stated in terms of an NP constituent.

Against this an appositionalist could argue that the ordering and contiguity of words in the same 'virtual NP' could be handled by global semantic rules recognizing a semantic but not a syntactic head. This position is quite plausible but as far as I know has not been systematically developed.

(c) Perhaps the most powerful argument for the existence of NP constituents in K comes from the systematic distinction between inflections, with phrasal scope, and derivations, with lexical scope. The appositional analysis would predict that this dichotomy would not exist: derivations could apply indirectly to NPs by applying individually to each apposed word (see the discussion on possible origins of verbal case in 3.4.4.1).

For the above reasons I assume the existence of NP constituents within Kayardild. This is not to say, however, that the apposition analysis is always inappropriate: entity-entity, part-whole and generic-specific constructions are best treated as apposed nominal words (see below), and 'afterthought constructions' involve apposed NPs (4.4.5).

4.4.2 Syntactic functions within the NP

4.4.2.1 Functional structure of the Kayardild noun phrase

The subconstituents of Kayardild NPs are ordered by function, as follows:\textsuperscript{12}:

\begin{center}
\begin{tabular}{lll}
4-101 & \textbf{(MODIFIERS)} & \textbf{HEAD} \\
(Determiner)(Number)(Qualifier) & Entity & (Generic:Specific) \\
 & & (Part:Whole)
\end{tabular}
\end{center}

\textsuperscript{12}Although I disagree with some of his arguments, and find others inapplicable to Kayardild, this section owes much to the stimulating analysis of Kuniyanti NPs by McGregor (1984).
Generic/specific and part/whole appositions occur in the ‘entity’ slot, but the question of which is head is problematic - see 4.4.3.4 and 4.4.3.5. For now I treat them as composite heads.

Note that (a) all modifiers are optional (b) all modifiers precede the head, except that one modifier may be postposed, and (c) the head must be a word in ‘entity’ function (or a generic/specific or part/whole pair). There is one exception to (c): some determiners may head one-word NPs (see 4.2.2.2).

Some sample NPs are:

4-102 nga-la-wan-da ngarrku-wa kang-ka
1-PLU-POSS-NOM strong-NOM language-NOM
(Determiner) (Qualifier) (Entity)
Our strong language (Kayardild)

4-103 kiyarrng-ka yarbud-a ngarnal
two-NOM meat-NOM white cockatoo(NOM)
(Number) (Generic) (Specific)
Two white cockatoos.

4-104 dathin-a kiyarrng-ka jungarra nal-da bang-a
that-NOM two-NOM big(NOM) head-NOM turtle-NOM
(Determiner) (Number) (Qualifier) (Part) (Whole)
Those two big turtle heads.

Note that this functional classification crosscuts the morphological subclasses proposed in 2.1.1. The determiner function, for example, may be discharged by possessive pronouns, demonstratives and compass locationals, genitive and ablative noun phrases expressing possession, and certain noun/adjectives like niida ‘same’ and jathaa ‘different’.

Note also that this places the burden of characterizing the NP on functions like determiner, qualifier, etc., rather than on formally-based phrasal categories like Determiner Phrase, Adjectival Phrase and so on.

Variation in the order of modifiers causes changes in their function. Possessive pronouns, for example, function as definite determiners when they precede the number nominal, but are indefinite qualifiers when they follow it: niwanda kiyarrngka thabuju ‘his two brothers’ vs kiyarrngka niwanda thabuju ‘two (of) his elder brothers’.
4.4.2.2 Nominal lexemes and their function within the NP

Many lexemes can serve several functions within the NP; this does not correlate with their morphological possibilities. *Warngiida*, for example, may be an indefinite determiner ('a certain'), a number ('one') and a qualifier ('common: shared'); the third singular possessive pronoun *niwanda* may be a definite determiner 'the one belonging to him' or a qualifier 'belonging to him'. 4-4 shows the various types of multifunctional lexemes.

<table>
<thead>
<tr>
<th>DETERMINER</th>
<th>NUMBER</th>
<th>QUALIFIER</th>
<th>GENERIC</th>
<th>ENTITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>dathina</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>'that'</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>kiyarrngka</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>'two'</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>jungarra</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>'big'</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>yarbuda</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>'game'</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>balangkali</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>'brown snake'</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>wanku</td>
<td>wanku</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>'elasmobranch'</td>
<td>'stingray</td>
<td>fish'</td>
<td>sp.'</td>
<td></td>
</tr>
<tr>
<td>wankara</td>
<td>wankara</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>'male'</td>
<td>'boy'</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>jathaa</td>
<td>jathaa</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>'another'</td>
<td>'different'</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>dangkaa</td>
<td>dangkaa</td>
<td>dangkaa</td>
<td></td>
<td></td>
</tr>
<tr>
<td>'human'</td>
<td>'person'</td>
<td>'man'</td>
<td></td>
<td></td>
</tr>
<tr>
<td>warngiida</td>
<td>warngiida</td>
<td>warngiida</td>
<td>'common'</td>
<td></td>
</tr>
<tr>
<td>'a'</td>
<td>'one'</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>certain</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

In addition, all nominals denoting extended bodies allow the part-whole construction.

Figure 4-4: Some nominal lexemes and their functions within the NP

The polyfunctionality of *K* lexemes is systematic rather than random: only the above ten functional combinations are attested out of a theoretically possible $5! = 120$. 
Many lexemes, for example, double as entities and qualifiers, e.g. *maku* 'woman: female', *jambarnda* 'hollow log: hollow', *balumbanda* 'westerner: western'. And many double as entity and generics, e.g. *thungalda* 'tree: thing'. *dangkaa* 'man: human being'. There are also about 100 that can only function as qualifiers, e.g. *jungarra* 'big' and others discussed in 4.4.3.3. and a half dozen that can only function as numbers, such as *kiyarrnga* 'two'. But there are no lexemes that double as determiners and generics, or qualifiers and generics, for example.

There are clear semantic reasons for these restrictions and multiple possibilities. The absence of lexemes that can be both determiners and generics is due to the inherent unsuitability of generic terms, which denote a large class of entities, for identifying individuals, which is the semantic function of determiners.

Given the strict restrictions on polyfunctionality, and the semantic rationale often evident, it may eventually be possible to construct a set of minor lexical categories each with its distinctive set of functional possibilities, and to isolate their shared semantic characteristics.

An obvious example would be to set up an 'adjective' subclass, which could be defined as just those nominals that can only occur in qualifier function.

The grammatical ramifications of such a subclassification, however, would not extend beyond the description of NP structure: all subclasses have identical morphological possibilities. Moreover, there are many facts that cannot easily be related to the semantics: why is it, for instance, that *maku* 'woman' is used to denote the quality 'female', but that *wurraka* 'boy' rather than *bithiinda* 'man' is used for 'male'?

For the moment, therefore, I will assume that the specification of which function(s) a nominal can perform is left to the relevant lexical entry: the formulation of rules of systematic polyfunctionality is a task for the future.

4.4.3 Modifier types

Because few NPs contain nominals in every function, and because many nominals are multi-functional, the identification of 'determiners' and 'qualifiers' in particular relies on certain decisive phrases that are either fully expanded, or contain unifunctional words like *kiyarrnga* 'two' that 'fix' the position of the other nominals. The following discussion of functional possibilities is based on such
crucial NPs, but for reasons of space and variety many examples that I give will not be decisive in the above sense.

4.4.3.1 Determiners

Determiners make explicit the identifiability or otherwise of a NP. In K, NPs lacking a determiner may be definite or indefinite according to the linguistic context: *kiyarrngka dangkaa*, for example, may mean 'two men' or 'the two men'.

'Definite' and 'indefinite' are highly simplistic labels, summarizing complex assumptions by the speaker about both his own ability to identify the referent, and the ability of his interlocutor. In discussing the use of determiners, therefore, I shall supplement these labels by more explicit representations of the speaker's assumptions.

The following may function as determiners. In (a) to (e) the identity of the referent is known to the speaker, in (f) to (h) it is not. (More than one may occur in the one NP, e.g. *dathina riya dangkaa* 'that man in the east', *dathina niida dangkaa* 'that same man'.)

(a) the demonstratives *dathina* 'that' and *danda* 'this', as in *danda kiyarrngka wumburungka* 'these two spears'. These determiners are used when it is assumed that the hearer can identify the referent by its demonstrated position in space ('spatial determiner') or because it is an important established participant ('discourse determiner'). See 4.2.2.1 and 4.2.2.2 for examples.

(b) the compass locationals *bada* 'west', etc., and the derived 'from' forms such as *bathinda* 'coming from the west', as in *bada dangkaa* 'the man in the west' and *bathinda dangkaa* 'the man coming from the west'. See 4.2.2.1.

(c) the pronouns, as in *niya jungarra dangkaa* [he big man] 'the big man' and *ngarra kunawalada* [we-DU children] 'we two children'. Here it is assumed that the hearer can identify the referent either because it is established (3rd person) or because it is a participant in the speech act (1st, 2nd person). A sentence example is:

4-105 ngada bala-thu niwan-ju naljirndirri-wu, marrwa-wu niya
1:NOM hit-FUT him-PROP scrub turkey-PROP near-PROP he-NOM
rabi-ju
get up-FUT

I'll shoot him, the scrub turkey, he'll fly up nearby.
Note that on this analysis the pronoun in a phrase like the above is not just apposed ('we, the children') but helps identify which children are being talked about.

(d) possessive pronouns, and attributive NPs bearing the ablative or genitive of possession. These assume that the hearer can identify the referent by knowing who the possessor is, and which entity belongs to the possessor. In thabuju-karra kiyarrnga maku [big brother-GEN two wife], for example, the speaker is assumed to know who big brother is, and who big brother's two wives are, and is therefore assumed capable of identifying the two referents.

Because the possessor must be readily identifiable, proper names or kin terms are more likely to appear in the adnominal phrase, but common nouns are possible in the right context.

Adnominal locatives, as in nguku wuruman-urru [water billy-ASSOC] 'the water in the billy', could also be treated as determiners; certainly they are always definite. However, all examples in my corpus are postposed, making the position test impossible.

(e) the noun adjective niida 'the same', as in niida dangkaa 'the same man', and in (4-106). Here the speaker assumes that the speaker can identify the referent, because it is identical to something that has just been talked about.

4-106 rar-umban-ji dul-k-i niid-a warngiid-a mungkiji
south-ORIG-LOC country-LOC same-NOM one-NOM own(NOM)
kardu kala-th
Fa-in-law(NOM) cut-ACT
(After talking about the responsibilities of the father-in-law): In the south land (i.e. on Bentinck Island) the same one own father-in-law performed the circumcision.

Within my corpus niida only appears in nominative NPs. Elsewhere the determiner niwan-id- (Declension 6) is used. (Formally this comprises the 3sg possessive pronoun stem plus the SAME clitic (-id-) (6.7.4.1)). An example is niwan-ii-i banki-ya [3sgPOSS-SAME-LOC pool-LOC] 'in the same pool'.

(f) the noun/adjectives iathaa 'different, other' and iangkaa 'some, some other', as in (4-107). Here the hearer is not expected to identify the referent completely, but merely to be aware of his non-identity with an established participant.
(They) speared (at Kajurku) with marand spears, with mawurraji spears, (but they) became blunt. Other men picked (them) up and sharpened them, (but they) became blunt (again).

Jathaa ....X..., Jathaa ....Y... means 'one/some .... another/other ....', as in Text 1. Line 15.

Jangkaa is also used to mean 'someone. I don't know who'. when no information about the referent's identity is sought:

I heard someone walking around.

(g) the noun/adjective warniida 'one, a certain'. Here the speaker is indifferent to the identity of the referent, merely stating 'there is one X. It doesn't matter who X is.'

One man ran away southward from the initiation ground. He ran, and inadvertently caused his mother to be killed (in punishment for his cowardice).

(h) the interrogative pronouns ngaaka 'who/what/which' and its derivatives, and jiina 'where' and its derivatives. Here the speaker declares his own ignorance of the referent's identity, and asks the listener to enlighten him if possible, e.g. ngaaka kiyarrngka dangkaa 'which two men'.

Note that in Kayardild, unlike in many Australian languages (e.g. Dyirbal (Dixon 1972) and Ngiyambaa (Donaldson 1979)), interrogatives are not used as indefinite pronouns. For this, the noun/adjective jangkaa is used (see above).
4.4.3.2 Numbers

Kayardild makes use of the following number words:

- warirra: nothing
- warniida: one
- kiyarrngka: two
- burldamurra: three
- mirndinda: four
- muthaa: many

The word for three may be reduplicated: *burldamurra-burldamurra* 'quite a few'.

Counting is not a traditional activity in Kaiadilt society; in fact, the counting of turtle eggs was, and still is, tabooed. The only time I heard a higher number used was in a discussion of how many wives a man had; the expression *kiyarrngka marlida* 'two hands' was used for 'ten'.

4-110 A: ngumban-da kanthathu jinamulu-nurru maku-nurru?
2sgPOSS-NOM father(NOM) how many-ASSOC wife-ASSOC

R: kiyarrng-ka marl-d
two-NOM hand-NOM

A: How many wives did your father have? R: Ten.

The approximate quantification of larger groups is accomplished by part-whole expressions using collective nominals. *Ngankirra* is translated as 'mob', it simply implies aggregation without specifying the internal composition of the group, and is thus appropriate for naming a pile of different fish, a group of people from different tribes, and so on. *Mumurra* is also a 'big mob', but is always human. *Ngurrngaa* is a *iungarra mumurra* [big mumurrl, as in (4-111). *Jardiya* refers to a complete group, usually united by lineage or locality, as in *rarumbanda jardi* 'the south mob' (see Text 2, Line 84).

4-111 ngurrnga-mirra warna-ja bandingka-y
big mob-INTENS dislike-ACT Bentinck-ACT

*There are plenty of people (here) who don’t like Bentinck Island.*

---

13 The oft-repeated assertion that Aboriginal languages lack number systems extending beyond three or four is challenged in Harris (1982) who mentions a series of monomorphemic numbers up to at least 50 in Gurindji, and quinary systems, indefinitely extendable upwards, in Anindilyakwa, Nunggubuyu and Gumatj. In Gumatj, for example, phrase final *rulu* is used as a base 5 exponent; other numbers are multiplied when simply juxtaposed and added when joined by *ga* 'and': thus *dambumirri ga wanggany rulu* is (5 + 115 = 135). Some South Australian languages have no cardinals beyond five but birth order names up to 'tenth' (Schebeck 1973). Apart from the single example cited, I have found no evidence of such systems in Kayardild.
4.4.3.3 Qualifiers

These narrow down the potential reference of the head by naming a property or quality possessed by it.

Most commonly, qualifiers are adjectives, as defined in 4.4.2.2. These give:

**Dimension and shape.** e.g. jungarra 'big', kunyaa 'small', bardubardu 'low'. damurra and narri 'short', dingkarra 'long', narrkanarrka 'deep', barndibarndi 'shallow', and dakalda 'round'.

**Physical property.** e.g. bardanda 'withered', balkaji 'thin, scrawny', mankerra 'hefty', dawurna 'bitter, salty', kunku 'raw', burungka 'cooked', bukaa 'rotten, dead', kurirra 'ripe, cooked, dead', marndu 'dead (fish)', dirralda 'slippery, smooth', kururrji 'curly', kurrbulka 'green, easily worked (wood)', kurrukurru 'smooth, shiny'.

**Colour.** distinguishing two primary hues (balarra 'white' and ngumu 'black, blue') and two secondary hues using reduplicated forms: kandukandu [blood-REDUP] 'red, yellow' and kulawula 'orange' (though this is formally a reduplication, there is no word kula-).

**Age.** e.g. dawurlda 'new', kalanginda 'old'. More often, age is expressed by stage-of-life nouns in entity function, such as marnganda 'girl with fully developed breasts' or makalmakalda 'old woman'.

**Value** adjectives include mirraa 'good', birdiya 'bad', ngulmuwa 'secret/sacred/dangerous', yulkaanda 'perfect, eternal, as it should be'. Junku, 'right (hand)' can also mean 'right, correct, straight'.

**Human propensity** is normally expressed not by adjectives but by entity nouns, e.g. wungunduwungundu 'thief', kamuthali 'garrulous, drunken person'.

**Corporeal** adjectives include jirdaa 'hungry, greedy', bardakawarri 'hungry', ngawarri 'thirsty', kurndubarraka 'dry-throated', nelbirdiya [head-bad] 'deranged, drunk', mibulkuru 'sleepy', nguru 'lame', ngithalkuru 'hot' and bayiwuru 'wild, angry'. Note also balinda 'exposed by circumcision (glans penis), naked'.

Four qualifiers express ownership or non-ownership: mungkiji and mawun-da, 'own', and makin-da and dangkanaban-da 'someone else's'. The members of each pair are roughly synonymous, but there are subtle differences. Mungkiji tends to be used when stressing an emotional association (e.g. ngijinda mungkiji
kunawuna 'my own child', ngijinda mungkiji dulka 'my own country' (that I love).

Mawun-da stresses ownership or rights: nyingka kuriju mawunku makuuru 'you should keep your eyes on your own wife'. Mankin-da is always used with territory or hordal affiliations: '(territory) belonging to someone else' or 'foreign' are equally apt translations. Dangkanaban-da (formally person-ABL) is a general term for 'someone else's', and covers all sorts of ownership, from land to body-parts.

Qualifiers may also be nominalizations (8.2), e.g. biya-n-kuru dangka-a [paddle-N-PROP] 'the man who has to paddle', bayi-wirdi-n-da dangka-a [angry-stay-N-NOM man-NOM] 'trouble maker'.

Attributive NPs bearing an adnominal case, and possessive pronouns, may also function as qualifiers: kiyarrngka mala-wan-da yakuri-ya [two sea-ORIG fish] 'two fish from the sea', jatha-a niwan-da nid-a [other his name] 'another of his names'. Embedded NPs inflected for an adnominal case tend to be postposed, e.g. jatha-a dangka-a natha-wan-da bartha-wan-da [other-NOM man-NOM camp-ORIG-NOM base-ORIG-NOM] 'another man from the base camp'.

4.4.3.4 Generic nouns

Many NPs in K include both a specific noun/adjective and one or more 'generic' NPs naming a class of entities, or a use to which they can be put. (4-112) to (4-114) are examples: (4-112) includes the 'class' generic wanku 'elasmobranch fish', (4-113) includes the 'use' generic wuran-da 'food', and (4-114) includes both the 'class' generic yarbuda 'non-marine non-human vertebrate ('game')' and the 'use' generic wuranda 'food':

4-112 dathin-a dangka-a niya wumburung-kuru raa-ja
that-NOM man-NOM he:NOM spear-PROP spear-ACT
wanku-ya kulkiji-y
elasmobranch-MLOC shark-MLOC
That man speared a shark with the spear.

4-113 dathin-a jardi-wuthin-da badi-ja jul-i wuran-ki
that-NOM mob-PLENTY-NOM carry-ACT bone-MLOC food-MLOC
All those (ants) are carrying a bone.

4-114 mutha-a yarbud-a wuran-da kaarrku, wanikarr,
many-NOM game-NOM food-NOM seagull(NOM) pelican(NOM)
jirrkur-iid-a kada thaa-th, warmarra-y, [ngudi-jurrka][101]
north-CONT-NOM again return-ACT wind-LOC throw-SIMUL:COBL
Lots of game, food, seagulls, pelicans are heading north again in the wind, which is throwing (them along).
Identifying a head noun is problematic. Either order is possible, although it is commoner for generics to come first. More importantly, either can appear alone, in contrast to the necessity that numbers and qualifiers be accompanied by a head. (4-112), for example, could be rephrased as niya raaja wankuya or niya raaja kulkiyija. And because the entity being discussed is included in the range of reference of both nominals, it is impossible to say which nominal controls reference in relative clauses (a test used by Hale (1981b) to identify the head in part-whole constructions). Because of these difficulties there is little point in identifying a head, and I will consider such constructions as appositions. Some support for this comes from the behaviour of generic-specific constructions under object-prefixation to nominalized verbs. Recall that this normally applies only to single words (3.6.3.3), and that NPs comprising a qualifier or number plus a head must be converted into a single word by compounding before they can be prefixed. With generic-specific constructions, by contrast, each word may be individually prefixed, e.g. wanku-raa-n-da kulkiyi-raa-n-da 'spearer of elasmobranches, of sharks'.

The generic nature of certain K nominals is explicitly acknowledged by speakers. Yarbuda, for instance, was translated for me as "all the snake, bird, lizard". Generic nouns plus qualifiers are often used in defining or describing species, and in naming assortments of different species (e.g. a catch of different fish). In discussing such matters. Kayardild speakers use the meta-terms warngiida nida 'one/common name' or jungarra nida 'big name' for generic terms, and kunyaa nida 'small name' for specific terms. as in:

```
4-115 bi-l-wan-da warngiid-a nid, kunbulk
3-PL-POSS-NOM one-NOM name(NOM) large sea animal(NOM)  
jatha-a nid-a kunya-a, bijarrb, bang-a, yakarr, other-NOM name-NOM small-NOM dugong(NOM) turtle-NOM porpoise(NOM)  
kanithu
whale(NOM)  
They have a common name, kunbulk. The other names are small ones: dugong, turtle, porpoise, whale.  
```

Some generic nominals recur at different taxonomic levels. with different meanings. The word wuranda is particularly complex. It functions sometimes as a class generic meaning 'animate'. as in (4-116) and the phrase ngaaka wuranda 'what sort (of animate being)': here it contrasts with thungala ' (inanimate) thing' (4-117). (cf ngaaka thungala 'what sort of thing').

```
4-116 ngada dangka-a wuran-d, ngada diya-nangku ngumban-ju  
I:NOM human-NOM being-NOM I:NOM eat—NEGFUT you-MPROP  
i'm a human being, I won't eat you.  
```
What sort of stone (is this)? It's a stone fist axe.

But it may also function as a 'use' generic, meaning 'food'. In this function it may combine with the various 'class' terms given below (see also (4-114)).

'Class' generics divide the animal kingdom into dangkaa 'humans', yarbuda 'birds and reptiles', yakuriya 'bony fish', wanku 'elasmobranch fish - sharks and rays', kunbulka 'large sea animals - turtles, dugongs and cetaceans'.

The plant kingdom is divided into karnda 'grasses and seaweeds' and thungalda 'trees'. No generic terms for 'plant food' exist, perhaps reflecting the relative unimportance of plant food in the Kayardild diet. There are, however, the phrases miburlda wuranda [eye food] 'fruit' and nalda wuranda [head food] 'edible root'.

Both yarbuda and thungalda may also function as 'use' generics, respectively classifying objects as harmful and useful. In this 'use' function, yarbuda may refer to harmful insects such as spiders and scorpions, and also to cyclones, dirra yarbuda [cloud yarbuda]. (This 'harmful object' use probably results from the inclusion of 'snakes' within the reference of yarbuda). Thungalda, as a use generic, may classify domesticated animals such as horses, goats and sheep: one Bentinck Islander received the conception name ngumuwa thungalda [black thing] in honour of a black goat on Sweers Island. These examples clearly illustrate the distinction between 'use' and 'class' functions: in the former, yarbuda refers to animates and thungalda to inanimates, while in the latter yarbuda may also refer to inanimates (e.g. a cyclone) and thungalda to animates (e.g. a goat).

Sometimes entities are treated as halfway between two generics, as in (4-118) where 'seaweed' karnda is described as wuranda thungalda 'food thing' — it is food for dugong but a mere thing for humans:

For the purposes of definition, speakers further subdivide these into kalanda yarbuda 'flying game; i.e. birds, bats and flying foxes', barrinda yarbuda 'crawling game, i.e. snakes' and rajurrinda yarbuda 'walking game', i.e. lizards and goannas.

This is a contrast with most Australian languages which do have a generic for plant food, usually a cognate of mayi. Lardil, too, lacks a generic for vegetable food, but its auxiliary language Damin has one, mill - possibly cognate with mayi or an alternative form like Warlpirl miyi. Interestingly, there is one compound verb in Lardil that may preserve the form. Mi(i)-wu means 'have responsibility for, look after (OBJ:child)'; a plausible etymology is 'food-give' (wuu - is 'give').
They're calling out that it's shallow and there are dugong, grazing on that food thing seaweed.

4.4.3.5 Part-whole NPs

In these a 'part' nominal is juxtaposed with a 'whole' nominal. These constructions are used when one entity is thought of as an inseparable or inalienable part of, an alternate manifestation of, or a subset of, the other. The orders part-whole and whole-part are equally likely. As with generic-specific constructions, there are no syntactic reasons for considering one nominal to be the head, and it is better to treat them as apposed nominals. Another similarity with generic-specific constructions is that each word may be prefixed to a nominalized verb, as in *kandu-diya-n-da dangka-diya-n-da* [blood-eat-N-NOM person-eat-N-NOM] 'eater of people's blood' (Text 1, Line 16).

There are several semantic subtypes:

(a) **body parts**, as in *dangkaa thukanda* [man chin/beard] 'man's chin/beard'. *ngida wamburra* 'tree trunk'. Excretions and eggs are also included here, e.g. *bangaa kuru* 'turtle egg(s)'. Severed body parts take the GENitive, e.g. *wanku-karra daman-da* [shark-GEN tooth-NOM] except where the species of their former possessors is at issue, e.g. *wanku-wa daman-da* [shark-NOM tooth-NOM] 'shark tooth'. With human body parts the possessor may instead take a possessive pronoun or a genitive noun/adjective, even when the part is not detached (3.3.8.2. 4.1.2.1).

16Two tests could be used to isolate a 'semantic' head:

(a) Scope of numerals. Does *kiyarngka barthaa dangkaa* [two track man] mean 'two tracks, of a man' or 'tracks of two men'? I did not investigate this in the field and cannot answer this.

(b) Semantic consequences of omitting one nominal. *ngada balatha dangkaya nali* [hit man head] 'I hit the man's head' is interpreted as roughly synonymous with *ngada balatha dangkaya* 'I hit the man', while *ngada balatha nali* [hit head] would be interpreted as 'I hit (a detached) head', even if 'he' is well established in the discourse. This argument suggests that the 'inalienable possessor' or 'whole' is semantic head with body part constructions.

With 'track' constructions, on the other hand, the omissibility argument suggests the 'part' (the track) as semantic head: *ngada kurrija bangaya barthaya* [saw turtle track] is a more explicit version of *ngada kurrija barthaya* 'I saw a track', but is a totally different proposition to *ngada kurrija bangaya* 'I saw (a) turtle'. And with 'composite' constructions like *ngada kurrija kawukaya jardiyaliya* 'I saw a bundle of fighting sticks', either nominal can be omitted: 'I saw a bundle' and 'I saw fighting sticks' are both synonymous with the part-whole version.

It is thus impossible to make a single generalization about whether the 'part' or the 'whole' is 'semantic head': this depends on the subtype of the construction. Much more work is needed before the exact semantic relationships can be delineated.
Part-whole body part constructions within the NP must not be confused with the 'body-part as instrument' and 'body-part as locus of effect' constructions (6.4), where part and whole, although agreeing in (relational) case, are represented by distinct NP constituents.

(b) tracks, as in *jara* *barthaa* ‘foot track’ and *barthaa bangaa* ‘track turtle’, and the wakes of fish, as in *yakuriya dakarnda* ‘fish wake’.

(c) language, names, voice, and characteristic sounds, e.g. *waydbala kangka* [whiteman language] ‘the white man’s language’: *banga-a wangarr-a* [turtle-NOM song-NOM] ‘the song/sound of turtles’: *dangka-a nid-a* [person-NOM name-NOM] ‘a person’s name’: *mutha-mirra kang-ka dangka-a* [many-INTENS language-NOM person-NOM] ‘many sounds of people’: *niya thawurr-a* [3sgNOM throat-NOM] ‘his voice (quality)’.

(d) spirits, as in *dangkaa ngabaya* ‘person spirit’.


(f) component substance, as in *malbaa birrka* ‘grass string’ and *kamarra dangkaa* ‘stone man (Kajurku)’.

(g) composition of bundles and packages, e.g. *kawuka jardiyali* [bundle(NOM) fighting-stick(NOM)] ‘a bundle of fighting sticks’.

(h) human groups and their members, as in *jardiya kunawuna* [mob child] ‘a mob of children’.

(i) groups and their subsets. These contain a pronoun referring to the whole group, and one or more entity nouns referring to subsets of the whole:

4-119 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’).

4-120 dathln-a maku-wa bithiin-da bi-l-da warra-j  
that-NOM woman-NOM man-NOM 3-PL-NOM go-ACT  
Those men and women are going.

4. 4. 3. 6 Entity

This function may be discharged by

(a) a single nominal word. e.g. *waduwa* ‘smoke’ in 4-82 ‘the smoke is following me’.

(b) by two or more nominals referring to disjoint entities. Where these entities are seen as belonging together, they are simply apposed:
4-121 niya kurrka-tha barruntha-ya wuran-ki nguku-γ
he:NOM take-ACT yesterday-LOC food-MLOC water-MLOC
Yesterday he took (with him) food and water.

4-122 wumburu-nurrru wangal-nurrru bi-l-d
spear-ASSOC boomerang-ASSOC they-PLU-NOM
They have spears and boomerangs with them.

With many such pairs the order is conventionalized: karndiya dunda [wife husband]
but not dunda karndiya, makuwa bithiinda [woman man] but not bithiinda maku, and
so forth. But as (4-121) illustrates, the component words are separately inflected.

Under certain conditions, nominal words are linked by the conjunction bana ‘and’. This is only used when accumulation is being stressed, or when the
conjuncts are seen as alternative rather than co-occurrent. See 6.7.5¹⁷

4.4.4 NP-splitting

NP-splitting obeys precise rules and has a clear semantic rationale. It
always involves a single modifier being split off: split NPs always straddle a verb.

(a) when qualifiers are to convey a restrictive meaning: the speaker
assumes that several entities suit the label offered by the entity nominal, and
emphasizes that the qualifier helps find the right referent. In the examples below,
one or some tokens of the type designated by the noun is selected, using the
focussed attribute, from a larger set of tokens.

4-123 malba-a kaba-tha buke-a!
grass-NOM find-ACT dead-NOM
Find some grass which is dead!

4-124 ngada jungarra-wu yakuri-wu diya-ju dathin-ku
I:NOM big-MPROP fish-MPROP eat-FUT that-MPROP
I want to eat that big fish.

4-125 dan-da kunya-a walbu-wa nga-ku-l-da kurrka-ni
this-NOM small-NOM raft-NOM 1-INC-PLU-NOM take-NEGIMP
jungarra kurrka-tha walbu, dan-da mutha-a dangka-walad
big(NOM) take-IMP raft(NOM) here-NOM many-NOM person-LOT(NOM)
Don’t let’s take this small raft! (Let’s) take the big raft,
there are lots of people here.

(b) when emphasizing the degree or number of the adjectival attribute. Selection

¹⁷For a detailed discussion of types of nominal conjunction in Arrernte, see Wilkins (1984).
is not involved: in neither of the following examples is the existence of a larger set of tokens implied. (For an example where the qualifier follows the verb see 9-118).

4-126 ngada jungarra-wu karna-ju kaburrba-wu
   I:NOM big-MPROP light-FUT fire-MPROP
   I want to light a big fire.

4-127 ngada kiyarrng-ku kala-thu wumburung-ku mirra-wu
   I:NOM two-MPROP cut-FUT spear-MPROP good-MPROP
   I want to cut out two good spears.

4.4.5 'Afterthought' apposition of NPs
   This involves successive restriction of reference: the speaker may begin with a more general referring expression, decide the hearer has not yet identified the referent successfully, then give a more specific expression. The first NP is typically very general (a pronoun or generic noun), the second more specific:

4-128 mutha-ya wuran-ki bi-l-da dalwani-ja barrngka-y
   much-MLOC food-MLOC they-PL-NOM dig up-ACT lily root-MLOC
   They dug up a lot of food, lily roots.

4-129 niya dathin-a dangka-a kamarri-ja thalardin-d
   he:NOM that-NOM man-NOM ask-IMP old man-NOM
   Ask him, that man, the old man!
CHAPTER 5

VERBALS

5.1 Introduction

The morphological class of verbals includes three functional types: verbs proper, which function as predications (e.g. *raaja* 'spear'), adverbials, which only occur together with a main verb (e.g. *bakilia* 'all S do, do to all O'), and verbal cases, which function like cases, attaching to each subconstituent of a NP. Despite their functional differences, these three types have identical possibilities for inflection and verb-verb derivation.

All verbals, regardless of function, belong to either of two conjugations, 'dental' or 'palatal' (5.2.1). Conjugation membership is largely determined phonologically (5.2.4).

We begin this chapter by discussing the structure of the verbal word (5.1.2); then, in 5.2 the form and function of verbal inflections is presented. 5.3 attempts a reconstruction of the proto Tangkic system of verb inflections; I argue that all but the imperative and desiderative derive historically from nominalizations inflected for case. We then turn to the various verb-verb (5.4) and nominal-verb (5.5) derivations, certain nominal suffixes that may follow the verb inflection (5.6), and verbal reduplication (5.7). 'Preverbal particles', which precede the verb and give temporal or directional information, are dealt with in (5.8), and nominal prefixation in (5.9). We close the chapter by examining four kinds of 'verbal complexes': action chains, adverbial complexes, motion complexes and aspectual complexes.
5.1.1 Interaction with modal and complementizing case, preverbal particles, and clitics

To a greater extent than in most languages, the signalling of tense, aspect and mood in K integrates a number of interdependent systems. Supplemeting the many distinctions coded by verbal inflection is the set of six modal cases (2.4.3, Chapter 7): although in the majority of cases these could be considered to show a sort of concord with the verbal inflections, there are nonetheless many examples of their 'independent' use (7.1.3). Aspectual distinctions can be expressed by nominalizing the verb (5.2.3.13), by preverbal particles, or by aspectual complexes: persistence may also be expressed using the 'SAME' clitic (6.7.4.1). And 'insubordinated' clauses (main clauses bearing a complementizing case) may be used to express certain evidential categories (9.4).

As we discuss the use of verbal inflections, therefore, the reader should not forget that these interact constantly with other subsystems of the grammar: I shall cross-reference these where appropriate.

5.1.2 Structure of the verbal word

Verbal words comprise a root, with or without derivational suffixes, followed by a 'final inflection' signalling tense, aspect, mood and polarity. Under certain circumstances the final inflection may be followed by (a) one of the two nominal suffixes -yarrada 'other' or -wanda 'ORIGIN' or (b) a complementizing case (2.4.6). I have no examples of (a) and (b) together and do not know if this is possible.

5-1 Root + (SufDER)^2 + Final Inflection + Nominal suffix/ Complementizing Case

Of the three verb-verb derivations (5.4), the only two that can co-occur are the CAUSative -Tharrma- and the RECIProcal -NTHu-, attested only in the word wirrka-jarrma-thu-tha [dance-CAUS-RECIP-ACT] 'tickle each other (lit. 'make each other dance').
5.2 Final inflections

5.2.1 Structure of the final inflection: thematic plus termination

Final inflections can be analysed into a 'thematic', signalling conjugation and/or polarity, and a 'termination', signalling tense/mood/aspect. The affirmative and negative future forms of the verbs *raa* 'spear' and *bala* 'hit', which represent the two conjugations, will illustrate (5-1); the proposed point of segmentation is marked by a period, since their status as independent morphemes is not clear (5.2.2).

\[ \text{FUTURE} \quad \text{NEGATIVE FUTURE} \]

\[
\begin{align*}
\text{'spear'} & \quad raa-i.u(ru) & & raa-nang.ku(ru) \\
\text{'hit'} & \quad bala-th.u(ru) & & bala-nang.ku(ru)
\end{align*}
\]

Figure 5-1: Future and negative future forms, illustrating segmentation into thematic plus final

As with nominal case inflections, the terminations have protected forms, found before complementizing case suffixes, and unprotected forms, found elsewhere. Segments only appearing in the protected forms are given in brackets.

The alternation between palatal −/− and dental −th− theometrics in positive inflections is pervasive, and entirely conditioned by conjugation membership. All negatives but one, on the other hand, have the same thematic, −nang−, regardless of conjugation. The remaining one, −THarri−, is based on the positive thematic plus privative −warri−.

For economy, I will cite positive terms using a conjugation-neutral variable −TH−: the positive future form just presented would thus be given as −THu(ru)−.

The APPRehensive final maintains the palatal/dental alternation, but with a nasal rather than a stop: *raa-ny.arra* [spear-APPRI]. bala-nh.arra [hit-APPRI]; this will be represented as −NHarra−.

Two inflections cannot be segmented in this way: the desiderative (−da for both conjugations) and the nominalizer, (−n− for both conjugations).

Verbs will be cited in their ACTual forms, with suffixal −THa−.
5.2.2 Final inflections: forms

5-2 gives the forms of all final inflections.

All verb inflections but the desiderative have terminations with cognate case suffixes: these are given, for reference, in column 4 (the cognacy of the PaST and ALMOST inflections with the COSequential, and of the Apprehensive with the UTILitive, will be established by comparative evidence, in 5.3).

<table>
<thead>
<tr>
<th>Function</th>
<th>Positive Form</th>
<th>Negative Form</th>
<th>Cognate Case</th>
</tr>
</thead>
<tbody>
<tr>
<td>IMPerative</td>
<td>-TH.a</td>
<td>-na</td>
<td>NOM (-Ca)</td>
</tr>
<tr>
<td>ACTual</td>
<td>-TH.a</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>NEGative ACTual</td>
<td>-</td>
<td>-TH.arri</td>
<td>PRIVative</td>
</tr>
<tr>
<td>SUPPOSitional/IMMEDIATE</td>
<td>-TH.i</td>
<td>-nang.ki</td>
<td>LOCative</td>
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<tr>
<td>FUTURE</td>
<td>-TH.u(ru)</td>
<td>-nang.ku(ru)</td>
<td>PROPrietive</td>
</tr>
<tr>
<td>PAST</td>
<td>-TH.arra</td>
<td>-</td>
<td>CONSequential</td>
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<tr>
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<tr>
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<td>-</td>
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</tr>
<tr>
<td>DESIDERative</td>
<td>-da</td>
<td>-</td>
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</tr>
<tr>
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<td>-TH.inja</td>
<td>-nang.inja</td>
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<td>-</td>
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<td>-THiri(ng)</td>
<td>-</td>
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<td>-</td>
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</tr>
<tr>
<td>RESUltative</td>
<td>-THirri-n-</td>
<td>-</td>
<td>None</td>
</tr>
</tbody>
</table>

Figure 5-2: Forms of final verb inflections, together with cognate case suffixes

Not only are the basic forms cognate, but there are also striking similarities in allomorphy, sequence restrictions and sequence portmanteaux:

(a) Just as PROPrietive (-kur) is usually -(k)u word-finally, -(k)uu before a Complementizing or Associating OBLique and -(k)uru before a Complementizing LOCAtive, FUTURE -THuru is -THu word-finally. THuu before COBL or AOBL, and THuru before CLOC.

(b) the nominal OBLique cannot be followed by any case suffix. Similarly the
HORTative inflections, whose termination is cognate with the OBLique, may not be followed by a complementizing case (9.1.6).

(c) the nominal LOCative (−kiya) can only be followed by the OBLique, giving the LOC+OBL portmanteau −kurrka (3.2.3). Similarly the IMMEDIATE −THi, whose ending is cognate with the LOCative, cannot be followed by CLOC, but it can be followed by COBL, giving the portmanteau −THurrka (9.1.5.1).

Many generalizations are therefore captured by a synchronic analysis which treats verb finals as thematics plus case inflections. Unfortunately, however, it is impossible to do this consistently.

Firstly, the desiderative −da cannot be so analysed, even though it is part of the same paradigmatic series. Secondly, verb terminations sometimes show splits not found in the corresponding nominal: to the nominal CONsequent case (−ngarrba) there correspond two verb terminations: PRECONDITION −TH.arrba and PAST −TH.arra. Thirdly, the meanings of the verb inflections are sometimes difficult to relate synchronically to the corresponding nominal case: the nominal OBLique case, for example, is almost entirely syntactic, and cannot be linked synchronically to the HORTative meaning of the corresponding verb final. (Though a diachronic explanation is possible – 7.4.1.3.)

How these problems might be reconciled with a THEMATIC-plus-case analysis is discussed in 7.1.1. But for the present, all verb inflections will be treated as monomorphemic.

5.2.3 Final Verb Inflections: Function

Unusually for Australian languages (cf Dixon 1980:381), most K verb inflections can appear both in subordinate and main clauses: in general the subordinate use is historically prior (7.4). In this chapter the focus is on main clause functions: the function of these inflections in subordinate clauses is discussed in 9.

5.2.3.1 Imperative −THa / −na

This expresses a command to perform (positive) or refrain from (negative) an action. The subject is optionally omitted when second person (any number) but is obligatory with first inclusives.

Objects take the nominative, except that pronominal objects may take either the NOMInative or the LOCative (cf 2.4.3).
5-2 (ningka) kurrka-tha / kurrka-na wangalk!

you:NOM take-IMP take-NEGIMP boomerang(NOM)

(You) take/don't take the boomerang!

5-3 nga-ku-l-da kurri-j! / nga-ku-l-da kurri-n!

1-INC-PLU-NOM look-IMP 1-INC-PLU-NOM look-IMP

Let's look/let's not look!

5-4 duura-tha ngad / ngijin-ji

poke-IMP 1sgNOM 1sgPOSS-LOC

Poke me!

5-5 duura-na ngad / ngijin-ji

poke-NEGIMP 1sgNOM 1sgPOSS-LOC

Don't poke me!

5.2.3.2 ACTUAL -THa / -THarri

This is used for actions that the speaker knows to be taking or to have taken place (pos.), or that the speaker knows not to be taking or not to have taken place (neg.).

5-6 jungarra bawa-tha warrngal-d

big(NOM) blow-ACT wind-NOM

The wind's blowing strong.

5-7 jirrkra-xrnga-maru-tha kurrka-tha kunawuna-ya barrngka-y, north-BOUND-V.D-ACT take-ACT child-MLOC waterlily-MLOC

kurndaji jirrkur-ung-ka mirrayala-th, nalkardarrawuru sandhlll(NOM) north-ALL-NOM make-ACT (name)

Nalkardarrawuru took the baby waterlilies to the beach to the north (Bentinck Island, from Fowler Island), and made a sandhill way to the north.

5-8 ngada kala-tharri wangalk-i

I:NOM cut-NEGACT boomerang-MLOC

I haven't made a boomerang.

5-9 nlya baa-jarri wadu-y

3sgNOM bite-NEGACT smoke-MLOC

He isn't smoking.

The ACTual inflection is the unmarked choice in narrative. It stresses that the action described has been 'instantiated' (Hale 1976), and is not primarily concerned with locating the action in time. Time NPs (e.g. barrunthaya 'yesterday') or the preverb yuuda 'already' (5.8.1) may be used for greater temporal precision.

To stress the pastness of an action, the PaST inflection is chosen
(5.2.3.6): to stress its completion, a resultative or consequential nominalization (8.2): to stress its ongoing nature, a plain nominalization (5.2.3.13)\(^1\).

5.2.3.3 Suppositional -THi (archaic)

This is only attested in three examples on Wurm's tapes, and I never heard it used during my field trips, although older speakers acknowledged the taped sentences as correct.

The sole positive example involves a tentative suggestion:

5-10 **ningka kurri-ji, [kurri-juru-ya ngarnal]**
   you:NOM see-SUPP see-FUT-CLOC white cockatoo(NOM)
   If you go and have a look, you might see some white cockatoos.

The negative examples involve hypothetical actions that should have been carried out, but were not. The first clause of (5-11) is unmarked for complementizing case: the second clause of (5-11), and (5-12), take complementizing obliques.

The complementizing case appears in (5-11) because of the odd pivot sequence [subject - object] (9.2). In (5-12) it suggests an ellipsed main clause command predicate (9.4).

5-11 **barruntha-ya dali-nangkiya nyingk, [ngijuwa yesterday-LOC come-NEG Supp you:NOM lsgSUBJ:COBL**
   wuu-nangkurrka wujari-wu-nangkurrk] COBL
give-NEG Supp:COBL meat-GIFT-NEG Supp:COBL
   If you had come yesterday, I would have given you some meat.

5-12 **[ngijuwa dali-nangkurrk]**
   lsgSUBJ:COBL come-NEG Supp:COBL
   I should have come. (I was told to).

5.2.3.4 IMMEDIATE -THi

This is formally identical with the suppositional, and equally rare. The two could be merged on formal grounds, but a decision either way would be tentative with such a small corpus.

Historically, they derive from different sources: the SUPpositional from the pT 'irrealis imperative' (5-4), the IMMEDIATE from the pT 'simultaneous' construction (5-5).

\(^1\) On formal grounds one could merge the positive ACTual and postive IMPerative into a single 'plain' or 'unmarked' inflection, as Hale (1981a) does for Lardil. But I have chosen to distinguish the two, for two reasons: (a) IMPerative and ACTual inflections have different negative counterparts (b) They select different modal cases.
The IMMEDIATE stresses that the action described is occurring just at the moment of speech:

5-13 burri-ji burri-ji wadu burri-ji
come out-IMMED come out-IMMED smoke(NOM) come out-IMMED
(Rubbing firesticks together:) It’s coming out now, smoke’s coming out.

It selects the modal LOCative:

5-14 ngaakarran-ji kunawuna-ya nyingka bala-thi?
whose-MLOC child-MLOC you:NOM hit-IMMED
Whose child are you hitting?

The IMMEDIATE is fairly rare in main clauses but far commoner in subordinate clauses (9.1.5.1).

5.2.3.5 FUTURE -THRU / -nangku(ru)

This has a wide range of meanings:

(a) Expectation / futurity:

5-15 niya bukawa-thu mungkiji-wu dulk-u
3sgNOM die-FUT own-MPROP country-MPROP
He will die in his own country.

5-16 ngada ngudi-nangku wangalk-u
I:NOM throw—NEGFUT boomerang-MPROP
I won’t throw the boomerang.

(b) Prescription. The speaker prescribes (POS) or forbids (NEG) some action. Agentless passives are frequent.

5-17 ngurrwarra-wan-da yaluri wungi-i-nangku
fishtrap-ORIG-NOM fish(NOM) steal—DT—NEGFUT
Fish from fish traps must not be stolen.

5-18 kunya-aku kunawuna buru-nangku
small-NOM child(NOM) take—NEGFUT
Small children must not touch (it).

Prescriptions that have been disobeyed are expressed with the FUTURE plus the Counterfactual maraka (6.7.2.1).

(c) Ability (Pos.) / Inability (Neg.).

5-19 dali-j ngada kantharrkuru ngudi-nangku banga-walath-u
come-IMP I:NOM alone(NOM) throw—NEGFUT turtle-LOT-MPROP
Come! I can’t turn all these turtles over on my own.
As these examples illustrate, the FUTure most often selects the modal PROPrietary case. Where, however, an ability or inability is attributed to an actual, past situation, the modal LOCative is used (7.1.3). *Maraka* plus FUTure constructions can also take the modal LOCative when describing actions that could have happened in the past (6.7.2.1).

(d) *Repeated actions in the past*. This is occasionally used as a narrative device. See Text 2, Lines 32-5.

(e) *Jussives and purpose clauses*. These only occur as finite subordinate clauses, and are discussed in 9.3.9.

5.2.3.6 PaST -THarra

As noted in 5.2.3.2, past events are most often coded with the ACTual verb inflection. This emphasizes the reality of the event described. The PaST inflection, on the other hand, is used specifically when the speaker wishes to emphasize the *pastness* of the action. It always takes the modal ABLAtive.

Because the choice is one of emphasis, many English sentences in the past may be translated with either ACTual or PaST inflections:

5-20 *ngada yakuri-na jungarrba-na raa-jarr /*
   I:NOM fish-MABL big-MABL spear-PST

   *ngada yakuri-ya jungarrba-ya raa-j*
   I:NOM fish-MLOC big-MLOC spear-ACT

   *I speared a fish.*

The PaST is most likely to be chosen over the ACTual when describing actions that have been left off (5-21), that are no longer performed (5-22), or whose effects haven't persisted (5-23):

5-21 *dangka-walad-a jani-jarra kunawuna-wuru*
   person-LOT-NOM search-PST child-PROP

   Many people searched for the children. (Further explained to me as 'had a go but couldn't find 'em.')

5-22 *nga-l-da kala-tharra rawalan-ku*
   1-PLU-NOM cut-PST baler shell-PROP

   *We used to cut (things) with baler shells.*

5-23 *ngada nguku-na dali-jarra-tharr#, [bilarri-jarra-nth]*
   I:NOM water-MABL come-CAUS-PST spill-PST-COBL

   *I brought some water, but (someone) spilt (it).*

The PaST may also function as a non-future irrealis. It is common in questions
(5-24) and may give hypothetical preconditions (5-25)²:

5-24 kunawuna barji-jarra ngambu-rung-kina?
child(NOM) fall-PST well-ALL-MABL
Did the child fall in the well?

5-25 ngada kurri-jarra bukaji-na dii-n-kina, ngada raa-ju
I:NOM see-PST seahawk-MABL sit-N-MABL I:NOM spear-FUT
If I had seen a sea-hawk landing, I'd have speared it.

In subordinate clauses the ACTual is not available: ALL past actions take the PaST inflection (9.3.1).

5.2.3.7 ALMOST -nangarra
This is used with actions that almost happened at some point in the past. These are usually undesirable (5-26, 9-84), but may also be a desirable course of action that the subject is known not to have carried out (5-27). The essential thing is that the event was expected to happen, but didn’t. The ALMOST inflection selects the modal ABLative.

5-26 bulkurdudu ngijin-jina baa-nangarra kulthurr-ina
crocodile(NOM) lsgPOSS-MABL bite-ALMOST shin-MABL
A crocodile almost bit me on the leg.

5-27 niya budii-nangarr, [warirra-ntha barji-n-marri-nja
3sgNOM run-ALMOST nothing-COBli fall-N-PRIV-COBli
niwan-jinaa-nth]COBL
3sg-MABL-COBli
(Of a man crushed by a falling tree:)
He just about got away, then nothing would have happened, it wouldn’t have fallen on him.

As this last example illustrates, failed positives take the ALMOST inflection, while failed negatives (not falling didn’t happen) take a PRIVative nominalization, again with the modal ABLative.

²I originally took this as the primary function of -Tharra, which is accordingly glossed 'IRRealis' in several manuscripts that have been circulated. Subsequent fieldwork has shown the past use to be far more predominant.
5.2.3.8 PRECONDITION -THarrba

This expresses a state or action that precedes another action; depending on context it will translate as 'if' or 'when'. It only occurs in 'Finite Subordinate Clauses' (9), and its time reference is always 'relative' (i.e. prior to the time in the main clause - Bull (1960)) never 'absolute'. With future main clauses, for example, its time reference is future relative to the speech event, but past relative to that of the main clause.

Palatal conjugation forms optionally lenite from -jarrba to -yarrba, as in 5-30 (see also 9-46). Usually, precondition clauses take the modal ablative (e.g. 5-28), which appears in its protected form -(k)i)naba. But I have one example (4.4.3.4) of it taking the CONSequential, which could here be considered a very marginal modal case.

I argue in 7.4.1.3 that proto Tangkic allowed either the ABLative or CONSequential in such constructions: Yukulta preserves the first alternative, Lardil the second, while K prefers the first but allows the second.

5-28 jatha-a dangka-a ngakan-kinaba wungi-jarrb, dul-marra dangka-a other-NOM man-NOM sandbank-MABL steal-PRECON country-UTIL man-NOM jul-iya barrki-j bone-MLOC chop-ACT

If another man stole (one's) sandbank, the boss of that country would chop some bones (in a spell of vengeance).

5-29 nyingka jungarra kunawuna wirdi-jarrb, nyingka you:NOM big(NOM) child(NOM) become-PRECON you:NOM kujiji-wu kala-thu spearhead-MPROP cut-FUT

When you are a big boy you will be able to carve spearheads.

5-30 ngada yakuri-ngarrba ra-yarrb, ngada wuu-ju ngumban-ju I:NOM fish-CONS spear-PRECON I:NOM give-FUT you-MPROP

If I spear a fish I will give it to you.

An identical inflection is used in certain types of nominalization (8.3).

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3 There is a clear symmetry between PRECONDITION -THarrba, will the full modal ABLative -kinaba, and the PaST -THarra, with the reduced modal ABLative -kina. This may reflect the obligatorily subordinate nature of PRECONDITION clauses (cf more systematic developments in Lardil - Appendix E.3).
5.2.3.9 DESiderative -da

This expresses the speaker’s desire that some event take place. It takes the modal OBLique.

5-31 dan-inja nga-1-da jalji-nja wirdi-d
here-MOBL 1-PLU-NOM shade-MOBL stay-DES
We should stay here in the shade.

5-32 nga-ku-lu-wan-mar-da mu-rui-nj, nguku-marra-nth,  
1-INC-PLU-POSS-V.D-DES baler shell-MOBL water-UTIL-MOBL

diya-n-inj
drink-N-MOBL
(They) should give us the baler shells, for water, for drinking.

5-33 dathin-a dangka-a dal-d, dunbu-wa marral-d, dali-jarra-th!
that-NOM man-NOM come-DES deaf-NOM ear-NOM come-CAUS-IMP

That man should come, he’s deaf, bring him over!

‘Indirect jussives’, where the request is transmitted via a third person. also take the DESiderative (see 9.2.6.1 for more examples):

5-34 dathin-a maku wara-th, buru-da ngurrumanji-nj
that-NOM woman(NOM) send-IMP get-DES bag-MOBL

Send word to that woman, that she should bring the bags.

The DESiderative may also be used for hypothetical future events. desirable or not:

5-35 nga-ku-lu-wan-inja jungarra-ntha ngimi-nja dal-d,  
1-INC-PLU-POSS-MOBL big-MOBL night-MOBL come-MOBL

nga-ku-lu-wan-inja bakiin-inja ra-d
1-INC-PLU-POSS-MOBL all-MOBL spear-DES

If he comes upon us in the dead of night he will spear us all.

5-36 [ngijuwa ngudi-da wangalk]™, dathin-a ri-in-da  
lagSUBJ-COBL throw-DES boomerang(NOM) there-NOM east-PROM-NOM

thaa-d
return-DES

If I throw the boomerang, it will return there from the east.

5.2.3.10 HORTative -THinja / -nanginja

This expresses a desire that someone should cause a state of affairs to occur (pos.) or not to occur (neg.). It may substitute for an imperative when kin relationships prevent one speaking directly to the hearer, as in (5-37). It takes the modal OBLique:
5-37 wakatha nguku-ntha yalawu-jinj
sister(NOM) water-MOBL fetch-HORT
Sister should fetch some water.

5-38 wirdi-jinj-da dathin-a dukurduku binthu
stay-HORT-SAME that-NOM moist(NOM) foreskin(NOM)
Let those moist foreskins wait a while yet (before burying them)

5-39 wirrka-nanginja dathin-a kunawuna ngijin-inja wumburung-inj
play-NEGHORT that-NOM child(NOM) my-MOBL spear-MOBL
That child shouldn't play with my spear.

5-40 niya jalji-maru-th, warrku-ntha wirdi-nanginj
3sgNOM shade-V.D-IMP sun-MOBL stay-NEGHORT
Put him in the shade, (he) shouldn't stay in the sun.

HORTatives derive from subordinate purpose clauses in pT (7.4.1.3). I have two examples which could be interpreted as purpose subordinate clauses, although HORTative interpretations are also possible:

5-41 murruku wuu-j, dathin-inja dangka-ntha raa-jinj
woomera(NOM) give-IMP that-MOBL man-MOBL spear-HORT
(a) Give me the woomera, so I can spear that man!
(b) Give me the woomera, let me spear that man!

5-42 wuu-ja ngijin-ji, wadu-ntha baa-jinj
give-IMP me-LOC smoke-MOBL bite-HORT
(a) Give me (the tobacco), so I can have a smoke.
(b) Give me the tobacco, let me have a smoke.

5.2.3.11 APPRehensive -NHarra
This expresses the undesirability of an event, and the need to avert it.
There is usually an implied injunction that the hearer be careful.

5-43 warrkur-inja daman-da dara-a-nyarr
dugong hide-MOBL tooth-NOM break-DT-APPR
(Careful, you) might crack your teeth on the dugong hide.

5-44 nyingka ba-yii-nyarra kulkiji-iwa-nharr
you:NOM bite-DT-APPR shark-V.I.ALL-APPR
(Watch out,) you might get bitten by a shark.

Note that the 'undesirable event' need not be particularly grave:

5-45 natha-wu bada-wu thaa-thu, warrku barji-nyarr
camp-MPROP west-MPROP return-FUT sun(NOM) fall-APPR
We'll go back to our camp, the sun might set (on us).

Apprehensive clauses may also be subordinated to a clause setting out the
preemptive action: here the most fitting English translation is with 'lest', 'otherwise' or 'or else'. Examples of this are in 9.2.6.3.

Apprehensive clauses may select the OBLique, PROPrieti ve or LOCative modal cases, depending whether one wishes to stress one's fear, the probability of the event happening, or that it has already begun. See 7.1.3 for discussion and examples.

5.2.3.12 DIRECted -THiri(ng-)

Like the formally related nominal ALLative, the DIRECted has a final /ng/ that only appears when protected by a following suffix (e.g. a complementizing case). The unprotected form may drop final /i/ at the end of a breath-group, again like the allative.

The DIRECted is falling out of use: it is common on Wurm's 1960 tapes but I only heard a few examples, from old speakers, on my field trips.

Most commonly this inflection indicates that an action is, broadly speaking, 'directed towards' the speaker. This may involve direction of motion, as in (5-46): more frequently, there is the added implication that the action is just beginning (5-47) or just entering the speaker's awareness (5-48).

It selects the ALLative modal case.

5-46 dathin-a dangka-an-da warra-jir, diya-jir wuran-kir
that-NOM man-NOM north-FROM-NOM go-DIREC eat-DIREC food-MALL
That man came (to the camp) from the north and started eating.

5-47 dathin-a jirrka-an-da bi-l-da wirrka-jir warra-jir
there-NOM north-FROM-NOM 3-PLU-NOM dance-DIREC go-DIREC
There from the north they are coming on dancing now.

5-48 A: niya jina-a, dali-n-marri
3sgNOM where-NOM come-N-PRIV
B: niya dathin-a ri-in-da dali-jir
3sgNOM there-NOM east-FROM-NOM come-DIREC
A: Where is he, he hasn't come.
B: There he comes from the east now.

This inflection is also used, again with the Modal ALLative, where the subjects are numerous and scattered (5-49), or there is a single subject extended in space (5-50, 5-51).
There are lots of cockatoos feeding around here.

There’s a man lying beside the tree, on the grass.

The paddle is lying there on the raft.

These sentences parallel the ‘extensive’ and ‘perlative’ use of the relational allative (3.3.7.2), emphasizing the close link between the ‘DIREcted’ construction, on the one hand, and the allative relational case on the other. This would be readily explained by a ‘VP-distribution rule’ copying the ALLative onto verb and NPs – see 7.1.1.

A form that could be analysed as the DIRECted appears in ‘movement purpose’ clauses – see 8.6.

Nominalized verbs serve a number of functions. With prefixed nominals they mark habitual actors or instruments; they may function as participle-like second predicates, and they may supply the gerundive complements of perception verbs. These are all discussed in 8.2.

In addition, nominalized verbs mark ongoing uncompleted actions. In this function they govern an ‘associating oblique’ (2.4.5) but zero modal case:

You are bothering my child.

(They) are searching for the child’s footprints.

Privative nominalizations in -n-marry may be used to negate those verb inflections lacking a special negative counterpart (8.4.2.2).
5.2.3.14 Resultative nominalization -Thirri-n-

These denote completed actions.

Like plain nominalizations they are morphologically nominal. They may derive lexical nominalizations like dara-thirri-n-da [break-RES-N-NOM] 'one who has been broken, circumcized man', or may function as participle-like predicators in nominalized clauses: here they have an ergative argument structure. Such nominalized clauses may among other things function as a de facto main clause 'completive' category. Examples and discussion are in 8.4.3.

Resultative nominalizations belong to the 'palatalizing declension' (3.2). e.g. dara-thirri-n-ji [break-RES-N-LOC].

Since plain nominalizations do not palatalize following suffixes (e.g. kali-n-ki [jump-N-LOC]) one could argue that a single morpheme, -Thirrin-, is involved, and that this is not related to nominalizing -n-. But there are so many parallels with the plain nominalization that I prefer to analyse it as Resultative -Thirri- plus nominalizer -n-, and attribute the palatalization to the phonological environment. (A precedent here is the INDIVidualizer suffix -(i)n-, which palatalizes after some stems but not others - see 3.6.1.1).

The Resultative lacks other Tangkic cognates and may therefore be a Kayardild innovation. But the form -Thirri- is widespread in Australia, sometimes as a 'having' nominal suffix, sometimes as a verbal 'reflexive' suffix (Dixon 1976). Either is a plausible source for the Kayardild resultative function.

5.2.4 Conjugation classes

All verbals belong to either the dental or the palatal conjugation class.

Conjugation membership is largely conditioned phonologically: in the palatal conjugation are all verb stems ending in a long vowel (with one exception: thaatha 'return'), or in /i/: in the dental conjugation are all verb stems ending in short /u/.

Only verb stems in short final /a/ are not phonologically committed to one conjugation class. and here other factors determine conjugation membership.

One factor is the presence of derivational suffixes. Thus detransitivized verbs always join the palatal conjugation, and the INCHoative noun-verb derivational suffix -wa-tha recruits into the dental conjugation. All derived palatal conjugation verbs are intransitive, but derived dental conjugation verbs may be either transitive (e.g. CAUSatives and FACTitives) or intransitive (e.g. INCHoatives).
Among monomorphemic verbs there is a weak correlation with transitivity: those in the palatal conjugation are mostly intransitive (but there are exceptions, e.g. diya-ja 'eat'). while those in the dental conjugation are equally likely to be transitive or intransitive (see below).

These facts are illustrated in 5-3.

### Palatal conjugation

**Stem ending in long vowel, e.g.:**
- baa-ja 'bite', yulae-ja 'fear'
- wuu-ja 'give', kuujuu-ja 'swim'
- dli-ja 'sit', yulli-ja 'try'

**Stem ending in /i/, e.g.:**
- ngudi-ja 'throw'

**Stem ending in /a/:**
- Intransitive, e.g.: warra-ja 'go'
- Transitive, e.g.: diya-ja 'eat'
- Detransitivized, e.g.: kala-a-ja 'cut-DT'

### Dental conjugation

**Stem ending in long vowel (one verb only):**
- thaa-tha 'return'

**Stem ending in /u/, e.g.:**
- yuulu-tha 'go on ahead'
- barrbi-ru-tha 'raise'

**Stem ending in /a/:**
- Intransitive, e.g.: barama-tha 'snore'
- burrma-tha 'duck'
- Transitive, e.g.: wara-tha 'send'
- kala-tha 'cut'
- Inchoative, e.g.: birdi-wa-tha 'go bad'
- ngumu-wa-tha 'go black'

**Figure 5-3: Conjugation membership**

This partition of all verbs into two conjugation classes, with membership conditioned largely phonologically, partly by derivation, and partly lexically, undoubtedly goes back to proto-Tangkic. Yukulta and Yangkal are essentially identical to K in this respect: Lardil has lost the conjugation class distinction and now has a merged set of final inflections with some forms drawn from the old palatal conjugation (e.g. the negative indicative -jarri) and others from the dental conjugation (e.g. the future -thur).

Conjugation markers, and conjugation membership, play a key part in Dixon's (1980) arguments for genetic unity among Australian languages, so a comparison with the Tangkic pattern will be instructive. We find that neither markers nor membership bear any resemblance to the seven
conjugation classes Dixon reconstructs for 'proto-Australian'.

Pama-Nyungan languages with two conjugations typically preserve two conjugation markers from the list of seven Dixon proposes (-∅-, -y-, -ng-, -m-, -n-, -l-, and -rr-). The two classes in Dyirbal, for instance, are labelled -y- and -l- conjugations owing to the recurrence in them of these markers. But none of the above seven markers occur as thematics in the Tangkic languages: neither /th/ nor /j/ can be easily related to them.

Conjugation membership in Tangkic is no more enlightening. Wherever this is determined on phonological grounds alone, we would expect no correlation with the pA (or pPN) conjugation class membership: any that may have existed would have been restructured according to phonological criteria. Only among dental conjugation verbs ending in /a/, where conjugation membership does not depend entirely on the form of the stem, might we expect class membership from an earlier stage to be preserved. But no pan-Australian cognates are found in this group.

So it appears the two conjugation classes cannot presently be explained as residues from a simplified version of the pA seven-class system. Below I offer an alternative account of their origin: the pA (or pPN) system of finite verb inflections was all but lost by proto-Tangkic, and was replaced by nominalizations inflected for case. The two thematics -th- and -/- are phonologically conditioned alternants of an old nominalizer -(NH)TH-, with reflexes in many Pama-Nyungan languages.

5.3 Final inflections: a comparative note

5.3.1 Cross-Tangkic comparison of final inflections

5-4 and 5-5 compare final inflections across the Tangkic languages, plus those I reconstruct for proto Tangkic: these are justified where necessary in the notes below. Conjugation-sensitive thematics in Yukulta, Yangkaal and K are written with the variable /-TH-. Data on Yangkaal is incomplete: gaps are shown by a question mark.

Notes to table:
(a) The Yukulta imperative is -ka with transitive verbs and -ja or -tha with intransitives, depending on their conjugation.

---

4 As pointed out in 1.2, many Australianists, myself included, would maintain that Dixon's 'proto-Australian' is really 'proto Pama Nyungan'. However, to avoid misrepresenting Dixon's work, I will in this section continue to refer to 'proto Australian', by which the reader should understand 'proto Australian, according to Dixon, or proto Pama Nyungan, according to O'Grady, Hale and others.
<table>
<thead>
<tr>
<th>Affirmative</th>
<th>Negative</th>
<th>Language</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>ka (tr)</td>
<td>na</td>
<td>Yuk</td>
<td>Imperative</td>
</tr>
<tr>
<td>THa (intr)</td>
<td>na</td>
<td>K, Yangk</td>
<td>Imperative</td>
</tr>
<tr>
<td>THa</td>
<td>na</td>
<td>Lardil</td>
<td>Imperative</td>
</tr>
<tr>
<td>*ka (tr)</td>
<td>*na</td>
<td>*pT</td>
<td>Imperative</td>
</tr>
<tr>
<td>*THa (intr)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| ki (tr)    | Yuka     | Irrealis imperative, Polite imperative |
| THi (intr) | --       | Polite Hortative |
| ki         | --       | Imperative (exact nature unknown) |
| THi        | nangki   | K Suppositional |
| *ki (tr)   | nangki   | *pT Polite imperative |
| *THi (intr)| nangki   | *pT Polite imperative |

| THa        | THarri   | Yuk      | Indicative |
| THa        | THarri   | K, Yangk | Actual     |
| tha " φ    | jarri    | Lardil   | Plain      |
| *THa       | *THarri  | *pT      | Actual     |

| da         | nada     | Yuk      | Irrealis Desiderative |
| da         | --       | K        | Desiderative          |
| ?          | ?        | Yangk    | Sequential Imperative |
| rr         | --       | Lardil   |                       |
| *da        | *nada    | *pT      | Irrealis Desiderative |

| THurlu     | nangkulu | Yuk      | Realis Desiderative |
| THu((r)u)  | nangku((r)u) | K | Future |
| Thu        | nangku   | Yangk    | Future |
| thu(r)     | nengku(r) | Lardil   | Future |
| *THurlu    | *nangkulu | *pT | Realis Desiderative |

Figure 5-4: Reconstruction of proto Tangkic Verb Inflections I
<table>
<thead>
<tr>
<th>Affirmative</th>
<th>Negative</th>
<th>Language</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>THi, THurrka</td>
<td>?</td>
<td>Yuk¹</td>
<td>Simultaneous</td>
</tr>
<tr>
<td>THi, THurrka</td>
<td>---</td>
<td>K</td>
<td>Immediate</td>
</tr>
<tr>
<td>?</td>
<td>?</td>
<td>Yangk</td>
<td>Simultaneous</td>
</tr>
<tr>
<td>jirr</td>
<td>---</td>
<td>Lardil</td>
<td></td>
</tr>
<tr>
<td>*THi, *THurrka</td>
<td>---</td>
<td>*pT</td>
<td>Simultaneous</td>
</tr>
</tbody>
</table>

| THarrba     | ---      | Yuk      | 'Participle' |
| THarrba     | ---      | K        | Precondition |
| Tharra¹     | nangarra¹ | K        | Past, Almost |
| Tharrba     | ?        | Yangk    |              |
| tharr(ba)ᵏ | nerr     | Lardil   | Marked Non Future |
| *THarrba    | nangarrba¹ | pT      | Precondition |

| nymarra     | ---      | Yukⁿ      | Negative Purposive |
| NHarra      | ---      | Kⁿ        | Apprehensive      |
| nymarra     | ---      | Yangk     | Apprehensive      |
| nyemurr     | ---      | Lardil    | Apprehensive      |
| *NHmarra    | ---      | *pTⁿ      | Negative Purposive |

| Thinja      | ---      | Yuk      | Purpose       |
| Thinja      | nanginja | K        | Hortative     |
| *Thinja     | nanginja | *pT      | Purpose       |

| Thirlung    | Yuk      | Movement Purpose |
| Thiring-    | K        | Movement Purpose, DIRECTed |
| ?           | Lardil, Yangk |
| *Thirlung-  | pT       | Movement Purpose |

*Figure 5-5:* Reconstruction of proto Tangkic final inflections
(b) The indicative form seems to have been completely generalized to positive imperatives in all but Yukulta, which preserves the pA/pPN imperative inflection -ka.

(c) In Yukulta this inflection may be omitted in generic statements, leaving the bare stem (Keen 1983:221).

(d) Yangkaal forms are only attested in the palatal conjugation.

(e) In Lardil -tha has only been retained with monosyllabic roots. Compare kurri-∅ 'see (PLAIN)' and ne-tha 'throw-PLAIN'.

(f) In Lardil, this is used for sequential imperatives: Matha kiin nguka, kurdama-rr 'take this water and drink (it)'. This is a specialization of the purposive function which is one meaning of the K desiderative (9.3.9). The change from pT *-da to Lardil -rr is regular - cf pT *yarbuda 'bird, snake', Lardil yarburr.

(g) In Yukulta this is used for 'realis desideratives', expressing a desire the speaker expects to fulfil, while in K, Yangkarl and Lardil this has evolved a future meaning - a natural semantic shift.

(h) In K, Yangkarl and Lardil this suffix is reduced in main clauses. In subordinate clauses, where the verb inflection is protected by a following case inflection, fuller forms appear (5.2.1, Appendix E.3).

(i) In Yukulta and K this is THurrka when the combination THi + DAT would be expected: urrka is an allomorph of the suppletive (kurrka), a portmanteau used in LOC + DATive sequences (Yuk) or LOC + OBL sequences (K). In Lardil the simple form -THi has been lost but -THurrka is reflected in -jirr (see Appendix E.4).

(j) In K this suffix has split into two: the PRECondition -THarrba, restricted to subordinate clauses, and and the PAST -THarra, used in main and subordinate clauses. (Cf jungarrba - jungarra 'big').

(k) In Lardil the unprotected form is -tharr, but when the clause containing it is construed with a main clause object the historically full form -tharrba is restored (Appendix E.4).

(l) The negative form ∗-nangarra, though not attested in any modern tongue, is postulated through analogy with the affirmative form. But -nangarra may be an innovation in Kayardild, by analogy with PaST -THarra.
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(m) All Yukulta examples are from the palatal conjugation. It is not known whether the dental conjugation form would be nhmarra or nymarra.

(n) If the proto Tangkic form were conjugation sensitive, with forms nhmarra and nymarra, K preserves evidence of this. Alternatively, K could have begun with a form -nyarra after simplification of a single inherited form -nymarra, then introduced a distinct dental conjugation form by analogy with other verb inflections.

5.3.2 Internal reconstruction from proto-Tangkic forms

If we now display the reconstructed proto-Tangkic forms alongside independently reconstructed case suffixes (5-6), further internal reconstruction is possible. The imperative and desiderative inflections do not fit this pattern, and are omitted.

<table>
<thead>
<tr>
<th>Inflection</th>
<th>PT form</th>
<th>PT case suffix</th>
<th>Proposed analysis into thematic + case-like final</th>
</tr>
</thead>
<tbody>
<tr>
<td>Affirmative indicative</td>
<td>THa</td>
<td>a (NOM)</td>
<td>TH-a</td>
</tr>
<tr>
<td>Future</td>
<td>THurlu</td>
<td>urlu (PROP)</td>
<td>TH-urlu</td>
</tr>
<tr>
<td>Contemporaneous</td>
<td>THi</td>
<td>i (LOC)</td>
<td>TH-i</td>
</tr>
<tr>
<td>PRECONDITION</td>
<td>THarrba</td>
<td>arrba (CONS)</td>
<td>TH-arrba</td>
</tr>
<tr>
<td>Apprehensive</td>
<td>NTHmarra</td>
<td>marra (UTIL)</td>
<td>TH-marra</td>
</tr>
<tr>
<td>Purposive Complement</td>
<td>THirlu(ng)</td>
<td>irlu (ALL)</td>
<td>TH-irlu(ng)</td>
</tr>
<tr>
<td>Negative Indicative</td>
<td>THarri</td>
<td>arri (PRIV)</td>
<td>TH-arri</td>
</tr>
<tr>
<td>Negative Imperative</td>
<td>na</td>
<td>0 (NOM)</td>
<td>na(ng) + 0</td>
</tr>
<tr>
<td>Negative Future</td>
<td>nangkurlu</td>
<td>kurlu (PROP)</td>
<td>nang-kurlu</td>
</tr>
<tr>
<td>Almost</td>
<td>nangarrba</td>
<td>ngarrba (CONS)</td>
<td>nang-arrba</td>
</tr>
</tbody>
</table>

Figure 5-6: Proto Tangkic verb inflections as thematic plus case suffix
Notes:

(a) An appropriate allomorph is given: with thematic -TH- that found in Yukulta and K after final laminal stops: with thematic -nang- that found after stem final /ng/. See 3.2 on case allomorphy in K.

(b) In K the consequential suffix ngarrba is invariable. But its Lardil reflex. the 'Marked Non-Future Objective', though canonically -ngarr(ba), has a number of allomorphs. Relevant here, it is -arr(ba) after stops, e.g. yak-a 'fish', yak-arr 'fish-MNFOBJ'.

(c) Assimilation of laminal stops to nasals before /m/ is obligatory in all Tangkic languages. So /-NHmarra/ is the form we would expect from adding the 'UTILITY' suffix marra to -TH-. My 'reconstruction' here is intended to show the elements from which -NHmarra derives: -TH-marra may never have been an actual form.

(d) Loss of exposed final /ng/ occurs elsewhere in the Tangkic languages. For example the ALLative is -kiring- in K when protected by another suffix: dathin-kiring-kina [that-ALL-MABL] 'to that (prior modality)'. But exposed final /ng/ is lost: ngarn-kiri [beach-ALL].

If we assume that *-nang- was originally a negative or privative nominalization. there are good reasons why negative imperatives should inherit its uninflected form. In many Australian languages 'don't VI' is rendered by a nominalized verb plus the privative, followed by the imperative of a verb of desisting. as in the following example from the Warburton Ranges dialect of the Western Desert language (Douglas 1964:100; see also Dixon (1972:112) on Dyirbal. Warlpiri and Kattang):

5-54 yinka-ntja-maal-pa kanmarra-rri
    sing-N-PRIV-0 be quiet-IMP

Don't sing, be quiet (lit. 'not singing be quiet').

In Yukulta. the most conservative Tangkic language. negative imperatives are often accompanied by the verb wirdija 'stay' in imperative form: (Koen 1972:217)

5Kroskrity (1984) describes a similar phenomenon in Arizona Tewa, where subordinate and negative clauses are formally similar. He suggests that the original marking of negatives involved the structure 'Not [Clause (Subord.)], Clause (Aff.)'. Subsequently, ellipsis of the affirmative clause allowed negative clauses to be 'insubordinated', to use a term introduced in Chapter 7.
Stop, don’t cry!

Once this construction becomes established the ‘desist’ verb can be omitted and the former negative nominalization becomes specialized as a negative imperative.

5.3.3 Origin of final inflections as nominalizations inflected for case

The above reconstruction suggests that most final verbal inflections originated as nominalizations inflected for case. The modern thematic -TH- would have formed affirmative nominalizations, and the modern thematic -na(ng)- would have formed negative or privative nominalizations. Supporting this hypothesis are a number of arguments:

(i) In most Australian languages, only nominalized or other non-finite verbs can inflect for case. For example, in Djapu (Morphy 1983:131-9), Ngarluma (Simpson 1983:28), and Warumungu (Evans 1982:62-3; Simpson & Heath MS 4.5.2), nominalized forms of the verb, and its nominal arguments, may inflect for a variety of cases, showing different relations between main clause and complement. But it is unacceptable for finite verb forms to inflect for case.

A possible exception is Pitta Pitta (Blake 1979:218-9), where local cases, used in a temporal sense, may follow what appears to be the PAST inflection:

Stop (here) until I return.

Blake notes, however, that -ka in these constructions should not necessarily be identified with -ka ‘PAST’.

In proto Tangkic, as in these languages, most verb types deriving from nominalizations inflected for case were restricted to subordinate clauses. Their main clause use evolved later (7.4.2.3). If the -TH- and -na(ng)- thematics were originally nominalizations, this would explain why they could host the case inflections discussed above, and also why further case inflections – the ‘complementizing case’ discussed in Chapter 9 – are allowed. Significantly, the K desiderative, which does not derive from a nominalization, does not allow further case inflection (9.1.6).
(ii) This hypothesis also fits in with the account given in 7.4 of how modal case evolved. Most modal cases are related to the case-like final component of some pT verb inflection. This is what we would expect of complement clauses with case markers both on the nominalized verb and its arguments.

(iii) The only final verb inflection reconstructable for pT which has a pA cognate is the imperative -ka. The disappearance of pA conjugations, and the emergence of a new conjugation split, for the most part phonologically conditioned, suggests a radical historical change along the lines argued for here: inherited verb inflections were lost, and replaced by new ones based on nominalizations.

Many Australian languages contain cognates of the pT nominalizer *-TH-. In Adnyamathanha, participles and formally identical ‘affixes of contemporary action’ are formed by adding -ndha- or -tha- to the verb stem (Tunbridge 1983). In various Western Desert dialects, e.g. Yankunytjatjara (Goddard 1983) and Manjiljarra (Clendon 1983) there is a nominizer -nya-. In Warumungu the ‘infinitive’ is -(n)j)V- (Evans 1982); in Warlpiri the infinitive is -ninja, -rninja or -nja according to conjugation (Hale 1974). The preceding are all single laminal languages; the place of articulation of the laminals will vary between dental, alveolar and palatal depending on the adjacent vowel, setting a precedent for the phonologically conditioned conjugation classes in pT. Eastern Arrernte has a nominizer -nytje- ~ -tie-; in Western Arrernte the -tie- form has been generalized (David Wilkins, p.c.). In Yuulngu, exemplified below by the Djapu dialect, the nominizer is -na-, -nha- or -nya- depending on conjugation class. In Kalkatungu (Blake 1979b) there is a formative -nyia- in the habitual, purposive and continuing verbal suffixes. The purposive, -nyia-ya, can be analysed into -nyia- plus the dative case -aya (Blake op cit. p 56). These reflexes suggest a proto form *-NHTH(a)-, with allomorphs depending on conjugation class. Simplification to -TH(a)-, as has occurred in pT, is also attested in Western Arrernte and in some conjugations in Adnyamathanha.

It is significant that all these languages are spoken in or around central Australia, apart from the outlying Yuulngu enclave (whose nearest affinities are said to be with the Desert languages). Kalkatungu, and the Tangkic group. In an informal survey of various east coast languages – Yidiny, Dyirrbal, Guugu
Yimidhirr, Wargamay, Nyawaygi and Gumbayngir - I was unable to find a single cognate. With a more systematic survey the nominalizer -NHTHA- may emerge as the shared innovation of an intermediate-level subgroup embracing Western Desert, Adnyamathanha, Warlpiri, Warumungu, Yuulngu, Kalkatungu and the Tangkic languages. Alternatively, one could argue that -NHTHA- was diffused, though such morphemes are not good candidates for diffusion.

Reflexes of the putative 'negative nominalizer' *-nang- are harder to find. The only remotely plausible cognate is the Warumungu 'negative' -mana-, which derives negative imperatives from the infinitive form of the verb; but unlike pT *-nang- this does not take further case inflection.

5.3.4 Reconstruction of final inflections: summary

The evidence assembled above suggests that all pT verb inflections, except the imperative -ka, the irrealis imperative -ki and the desiderative -da, derived from nominalizations inflected for case. For positive nominalizations the nominalizer was -TH-, with widespread cognates in the central and western Pama-Nyungan languages. For negative nominalizations it was -na(ng)-, whose provenance remains a mystery.

This reconstruction is based on very restricted evidence: on morphology alone, and verb morphology at that. Before we can understand the wider causes of these changes, we must place the verbal suffixes in a broad syntactic perspective. This will be done in 7.4, where I argue that the above verb inflections were originally limited to subordinate clauses, in which a complementizing case appeared on both the nominalized verb and its nominal arguments. These complementizers coded relative tense/mood between clauses: simultaneity with the LOCative, anteriority with the CONSequential, and so on. Later, the complementized clauses were 'insubordinated' (i.e. reinterpreted as main clauses) and the complementizing cases came to code absolute rather than relative tense.

The scenario presented here and in Chapter 7 leaves us with a rather puzzling proto language: rich in interclausal relations, but poor in its stock of main clause tense/mood categories. Indeed, McConvell (1981) effectively proposes that one reason for the subsequent insubordination was to enrich the inventory of main clause categories. One possible explanation for this is that the proto
language, or its predecessor, was wholly or partly pidginized, leading to a drastic simplification of the verbal inflections: these were then replaced by case-inflected nominalized verbs. This would account for the almost total lack of pA verb inflections (only the imperative -ka is cognate with the set of inflections Dixon reconstructs), and the disappearance of the pA conjugation system. It would also jibe with the other arguments about subgrouping given in 1.2.

Unfortunately, however, very little is known about pidginization between Australian languages, as against between Indo-European and non-European ones, and until more is known about this it is hard to assess how plausible the changes suggested above really are.

5.4 Derivations: verb-verb

These come between the stem and the final inflection.

The conjugation they recruit into is shown by the following ACTual suffix. For instance the DeTransitivizing suffix (-yii-), which always derives palatal conjugation verbs, will be represented as (-yii-ja). And the INCHoative, which always derives dental conjugation verbs, will be represented as -wa-tha.

5.4.1 DeTransitivizer (-yii-ja)

5.4.1.1 Form

Stems ending in a long vowel (which are all in the palatal conjugation) shorten this and add /-yii-/.

<table>
<thead>
<tr>
<th>Basic form</th>
<th>Detransitivized form</th>
</tr>
</thead>
<tbody>
<tr>
<td>baal-ja</td>
<td>'bite'</td>
</tr>
<tr>
<td>buul-ja</td>
<td>'pull'</td>
</tr>
<tr>
<td>marraa-ja</td>
<td>'show'</td>
</tr>
<tr>
<td>kuluu-ja</td>
<td>'scratch'</td>
</tr>
</tbody>
</table>

Non-initial uyii sequences resulting from this derivation optionally simplify to ii.

e.g. kuluyiija → kuliija.

The remaining palatal conjugation stems lengthen the final vowel:

<table>
<thead>
<tr>
<th>Basic form</th>
<th>Detransitivized form</th>
</tr>
</thead>
<tbody>
<tr>
<td>diya-ja</td>
<td>'eat'</td>
</tr>
<tr>
<td>kurri-ja</td>
<td>'see'</td>
</tr>
</tbody>
</table>

Dental conjugation stems ending in /a/ lengthen this and join the palatal conjugation:
Basic form | Detransitivized form
---|---
raba-tha | raba-a-ja
kala-tha | kala-a-ja

Simple stems ending in /u/ add -yii- to the stem: the resultant /uyii/ sequence optionally reduces to /ii/:

Basic form | Detransitivized form
---|---
buru-tha | buru-yii-ja ~ bur-ii-ja

With complex stems in final /u/ (e.g. those containing the FACTitive -maru- \(-ru- \text{ or } -lu-) or verbal cases in final /u/ (the verbal dative -maru-), this reduction is obligatory:

Basic form | Detransitivized form
---|---
kuru-lu-tha | kuru-l-ii-ja
barrbi-ru-tha | barrbi-r-ii-ja
-maru-tha | -mar-ii-ja

If the penultimate stem vowel is long, the replacing /i/ is short:

waalu-tha | waal-i-ja

Derived detransitive stems may feed other derivations, such as nominalization: cf diya-a-ja [eat-DT-ACT], diya-a-n-kuru [eat-DT-N-PROP] 'edible'. See 8.2.10.1.

5.4.1.2 Function

Detransitivized verbs may be used for:

(a) Passives (see 6.3.2 for full discussion):

5-57 wurdalji wadu-maru-th, diya-a-nyarra ngirrnguth-inj
meat(NOM) smoke-V.D-IMP eat-DT-APPR fly-OBL
Put the meat in the smoke, or it'll get eaten by flies.

(b) the inchoative use of verbs like 'break':

5-58 budubudu dara-a-j
boat(NOM) break-DT-ACT
(Our) boat broke down.

(c) Reflexives (see 6.3.3):

5-59 maraka nga-ku-rr-a marl-da kuri-i-ju
CTRFCT we-INC-DU-NOM hand-NOM wash-DT-FUT
We should have washed our hands.

(d) Actions whose execution adversely affects the actor ('middle' detransitivizations). Compare jawarrjawa-tha 'go walkabout (to evade retribution)', jawarrjawa-a-ja 'go walk about (and get oneself lost).
(e) The meanings of a number of detransitivized verbs have rather idiosyncratic extensions, in addition to their predictable passive or reflexive meanings: *dana-tha* 'leave, abandon' but *dana-a-ja* 'come last' (also 'be abandoned'); *marraa-ja* 'show': *marra-yii-ja* 'know' (also 'show oneself' or 'be shown'); *maa-ja* 'send message: (body part) betray telepathic presence through twitching' and *ma-yii-ja* '(turtle or dugong) betray location through the smooth water above its trajectory' (in local English. "spout").

Comparable derivations exist in Yukulta and Lardil.

In Yukulta, dental conjugations join the palatal conjugation as in K, but without stem lengthening, e.g. *bala-tha* 'hit', *bala-ja* 'stab one's head during funeral rites'. Keen gives no examples with palatal conjugation verbs, but my own work with Lizzie Daylight suggests the allomorphs *-yi-ja* after long vowels (*baa-ja* 'bite', *ba-yi-ja* 'bite oneself') and lengthening of stem-final /i/: *kurri-ja* 'look', *kurri-i-ja* 'look at oneself'. Keen's two descriptions of Yukulta describe the reflexive use only. But her M.A. thesis (1972:211) contains one example of a detransitivized verb used as a passive:

5-60 dathin=mangala=kurrkandi kurri kamu=kurringki bala-ja
that=if=we:DU:TR:PAST see and=we:DU:PAST hit-IND

*If we'd watched that fellow coming we'd have got beaten up.*

In Lardil, as in K, detransitivized verbs share reflexive and passive uses. Monosyllabic stems, which originally had long vowels, add */-yi-/* e.g. *be-tha* 'bite', *be-yi* 'bite-DT'; others lengthen the vowel e.g. *kurri* 'see', *kurrii* 'see-DT'. There is only one conjugation, so conjugation switching is not used.

These facts point to a proto Tangkic detransitive with forms as in K, except that conjugation switching was probably not accompanied by stem lengthening, and the form after long vowels was *-yi-* rather than *-yii-*. Originally this morpheme would have been confined to reflexive uses, although even in Yukulta it occasionally functions as a passive; widespread passive use would have developed in K and Lardil after they became accusative (cf McConvell 1981).

5.4.2 CAUSativer (-THarrma-tha)

Unlike the detransitivizing and reciprocal inflections, the CAUSative is not productive. It is limited to intransitive verbs (usually motion verbs), and adds a causative meaning:

<table>
<thead>
<tr>
<th>Basic verb</th>
<th>Causative form</th>
</tr>
</thead>
</table>

...
Somewhat irregular in meaning is ngaka-tharrma-tha 'mind OBJ for OBJ', derived from ngakatha 'wait for PROP'.

5-61 niya dathin-ki ngambirri ngaka-tharrma-tha ngijin-ji
he:NOM that-MLOC humpy-MLOC wait-CAUS-ACT me-MLOC
He’s minding the house for me.

Causative forms may feed other derivations such as nominalization: kandu-burri-jarrma-n-da [blood-emerge-CAUS-N-NOM] ‘short person (being who causes transgressors to bleed to death)’.

The syntax of causatives is discussed in 6.3.4.

This morpheme is also found in Yukulta, e.g. billwa-tha 'break (v.i.)', billwa-tharrma-tha 'burst (v.t.)', but not in Lardil. The K-Yukulta form possibly originates from a verb serial with karrma-tha 'grasp, grab'. Lardil has a functionally similar form -jbennge, e.g. yalali 'laugh', yalali-jbennge 'cause to laugh' (Hale, 1981:20). Neither source gives examples of causativized transitive verbs.

5.4.3 RECIPROcal {-NTHu-tha}

This is -nju-tha after /i/, -nthu-tha after long vowels, and -thu-tha after non-front short vowels:

<table>
<thead>
<tr>
<th>Basic form</th>
<th>reciprocal</th>
</tr>
</thead>
<tbody>
<tr>
<td>ngudi-ja 'throw'</td>
<td>ngudi-nju-tha</td>
</tr>
<tr>
<td>raa-ja 'spear'</td>
<td>raa-nthu-tha</td>
</tr>
<tr>
<td>bala-tha 'hit'</td>
<td>bala-thu-tha</td>
</tr>
</tbody>
</table>

It indicates reciprocal activity:
Don't you two throw stones at one another!

The syntax of reciprocal constructions is discussed in 6.3.1.

Reciprocation need not always be made to the original instigator. In the following sentence, the reciprocal morpheme implies that just as the speaker had been taught handcrafts by his father, so had his father been taught by his father:

I am a good craftsman, because a good craftsman fathered me and a good craftsman fathered him in turn.

The reciprocal morpheme is reduplicated in one word: wuu-ja 'give' but wu-thu-nthu-tha 'share around', in other words 'give multi-reciprocally'.

5. 5 Derivations: nominal-verb

Two productive derivations produce intransitive and transitive verbs from all sorts of nominals, and occasionally verb stems as well. There are also several non-productive derivations.

Nominal-verb derivational suffixes must be distinguished from Verbal Cases, which may be formally identical to them but have distinct syntactic properties. These differences were discussed in 3.4.

5. 5. 1 INCHoative -wa-tha

This derives verbs meaning 'become X'.

The initial stem may be a simple root. e.g. ngarrku 'strong'. ngarrkuwatha 'become strong: recover from illness': munguru 'knowledgeable'. mungurruwatha 'become knowledgeable, learn': mal-a 'sea'. malawatha 'become sea' (said of a flooded area): kamarra 'stone'. kamarrawatha 'turn to stone'. As these examples illustrate, the nominal may be a semantic adjective ('strong'), a nominal predicator ('knowledgeable'), or a semantic noun ('sea').

Compounds like nal-birdi [head-bad] 'mad' or bardaka-birdi [stomach-bad] (no independent meaning) also take the inchoative: nal-birdi-wa-tha 'get drunk, go mad'. bardaka-birdi-wa-tha 'yawn'. See 3.6.3.3 for a discussion of how compounds feed phrases into lexical derivations.
The INCHoative may also follow various adnominal case suffixes, such as the privative, proprietive or associative: bayi-warri-wa-tha [fight-PRIV-INCH] 'quieten down, become peaceful'; dulk-uru-wa-tha [dirt-PROP-INCH] 'get dirty', ja-nurru-wa-tha [track-ASSOC-INCH] 'get marked by footsteps (e.g. mud)'. The LOCative, too, may feed the INCHoative, as in kalarr-ii-wa-tha [open space-LOC-INCH] 'emerge into an open space, come out of hiding', dulk-ii-wa-tha [earth-LOC-INCH] 'be born' (literally 'come onto the earth'). This is formally identical to the verbal intransitive allative, but is lexical rather than phrasal (3.4). As far as I know, the LOCative is the only relational case that feeds the INCHoative.

Finally, watha may be used, without an inchoative meaning, to prepare borrowed words or onomatopaeics for verb inflection: English 'work' becomes wuku-wa-tha and nganyanganya-wa-tha means ‘whinge’ (nganyanganya never occurs as a free form).

5.5.2 FACtitive -lu-tha -ru-tha

These two forms are in complementary distribution, and express the same meaning: 'cause OBJ to be in state X'. They can also follow verb roots, giving the meaning 'cause OBJ to V'. They probably derive from the pT root marlu-tha 'put', whose K reflex maru-tha may causativize nominalized verbs (6.3.4). -lu-tha follows verb roots, and nominal stems in final apicals (/rr/, /l/ or /n/), which it replaces; -ru-tha occurs elsewhere.

Like the INCHoative, the FACtitive may apply to complex derived stems: bayi-warri-ru-tha [fight-PRIV-FAC] 'pacify', jilkiri-n-marrri-ru-tha [hiccup-N-PRIV-FAC] 'stop hiccups'.

When applied to verb stems the FACtitive usually indicates that the subject causes some other event, but with prior or remote rather than sustained contact (contrast this with the CAUSative above, where physical contact must be sustained). In (5-64), for example, the clumsy white man has no physical contact with the game - he merely makes a lot of noise. Likewise, with maka-lu-tha 'switch off' the subject gives a flick of the switch while the engine is running; with yurralutha 'lose' the act of neglect precedes the state of being lost; with dula-lu-tha 'fatten' some time elapses between eating and getting fat. The expression of causation is discussed more fully in 6.3.4.
Verbs

<table>
<thead>
<tr>
<th>Base</th>
<th>Factitive</th>
</tr>
</thead>
<tbody>
<tr>
<td>yurrja-tha 'get lost'</td>
<td>yurrja-lu-tha 'lose'</td>
</tr>
<tr>
<td>yulaa-ja 'be afraid'</td>
<td>yulaa-lu-tha 'frighten'</td>
</tr>
<tr>
<td>dulba-tha 'drown (v.i.)'</td>
<td>dulba-lu-tha 'drown (v.t.)'</td>
</tr>
<tr>
<td>dula-tha 'become fat'</td>
<td>dula-lu-tha 'fatten'</td>
</tr>
<tr>
<td>maka-tha 'rest'</td>
<td>maka-lu-tha 'stop (e.g. baby from crying), cause to rest, turn off (engine)'</td>
</tr>
</tbody>
</table>

Nominals

<table>
<thead>
<tr>
<th>Base</th>
<th>Factitive</th>
</tr>
</thead>
<tbody>
<tr>
<td>kurirr-a 'dead-NOM'</td>
<td>kuru-lu-tha 'kill'</td>
</tr>
<tr>
<td>damurr-a 'short-NOM'</td>
<td>damu-lu-tha 'shorten;'</td>
</tr>
<tr>
<td>kabin-da 'low tide'</td>
<td>kabi-lu-tha 'wait for low tide' (see 5.5.2.1)</td>
</tr>
<tr>
<td>warirra 'nothing'</td>
<td>warirra-ru-tha 'annihilate'</td>
</tr>
<tr>
<td>thathung-ka 'together'</td>
<td>thathu-ru-tha 'put together'</td>
</tr>
<tr>
<td>ngarrku 'strong'</td>
<td>ngarrku-ru-tha 'strengthen'</td>
</tr>
<tr>
<td>yalulu 'flame'</td>
<td>yalulu-ru-tha 'light (v.t.)'</td>
</tr>
</tbody>
</table>

Figure 5-7: Examples of factitive suffix

5-64 muldi-n-da jar-a dathin-a waydbala , mutha-a darri barji-j, bend-N-NOM foot-NOM that-NOM whiteman(NOM) many-NOM time(NOM) fall-ACT yulaa-lu-tha dathin-ki jardi-ya yarbuth-i fear-FAC-ACT that-MLOC mob-MLOC game-MLOC

That white man is clumsy, he’s always falling over, he scares all the game off.

5.5.2.1 FACtitive with meteorological verbs

A somewhat different use of the FACtitive is found with meteorological verbs. Here it can imply either

(a) that one set of meteorological conditions causes another:

5-65 bath-in-da jungarra wun-d, ngimi-ru-thiri wanjii-jir west-FROM-NOM big(NOM) cloud-NOM dark-FAC-INCEP go up-INCEP

A big cloud is coming up from the west, making it dark.

(b) that humans wait until some meteorological state is reached. Here the FACtitive expresses sequence rather than cause proper:

5-66 mutha-a biring-ka wambaji-ru-tha mala-y much-NOM lightning-NOM calm-FAC-ACT sea-ACT

All the lightning has made the sea calm.

5-67 dan-da nga-ku-rr-a wirdi-ja kabi-lu-th here-NOM 1-INC-DU-NOM stay-ACT low tide-FAC-ACT

Let’s wait here until low tide.
Let's wait here until it's fine, until there's no clouds, nothing, no rain.

The grammatical conflation of causal and merely temporal sequence occurs elsewhere in K - see 3.3.13 and 9.3.11.

5.5.3 DO -yala-tha

This suffix derives verbs meaning:

(a) Act/do (like an) X:

birdi 'bad'  
birdi-yala-tha 'act immorally'

thista 'sister, nurse'  
 thista-yala-tha 'look after, care for'

(b) Do as one typically does with an X:

karndi 'wife'  
karndi-yala-tha 'take as one's wife; commit adultery (with woman)'

dirrkuli 'husband'  
dirrkuli-yala-tha 'take as one's husband; elope with'

ngankirra 'pile'  
ngankirra-yala-tha 'share out (food)'

thangakara 'spear shaft'  
thangakara-yala-tha 'prepare spear shaft for spearhead'

(c) Do as one does in conditions X: The form malawarri-yala-tha [shallow-DO], for example, was used by a man who jumped out of a boat, on the mistaken assumption that the water around was shallow (9-69)

(d) With the stem mirra- 'good'. DO has a rather idiosyncratic, nearly factitive, meaning: mirra-yala-tha means 'make, make good, repair'; used adverbially it can mean 'do properly' (5-118).

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6 Another lexeme that includes a version of this formative is wurdiyalaaja 'go walkabout (usually along a beach)'. This may derive from wurdu 'corner' plus a detransitivized form of -yala-tha. Most walking around involves long treks along beaches, with frequent turning of 'corners' (small peninsulas).
The (abandoned) stone fish trap hasn't broken, nothing, maybe (the) Rock Cod (Being) fixed it up.

Three verbs comprising stem plus -la-tha or -dala-tha may involve irregular forms of this morpheme:

- **nid-a** 'name'
- **miid-a** 'louse'
- **miil-da** 'point'

- **ni-la-tha** 'name'
- **mii-la-tha** 'delouse'
- **mil-dala-tha** 'cut out, sharpen'

The father and mother name the child.

### 5.5.4 Minor nominal-verb derivations

These belong to small, semantically heterogeneous closed classes. Outside this section their formatives will not be glossed individually.

#### 5.5.4.1 -di-ja " -ji-ja 'maintain STANCE with body part'

This is -di-ja everywhere except after /rr/, where it is -ji-ja. It may derive from dii-ja 'sit'.

Verbs with this formative mostly denote body postures:

- **bungkal-da** 'knee'
- **mirn-da** 'trunk'
- **darr-a** 'leg'
- **yulmburr-a** 'long'

But the stance may also be more metaphorical, as in **miburl-di-ja** [eye-STANCE-ACT] 'stare fixedly at', and **marral-di-nju-tha** [ear-STANCE-RECIP-ACT] 'yarn to each other'. Note also **dirral-di-ja** [slippery-STANCE-ACT] 'slip, stumble'.

#### 5.5.4.2 -(w)i-ja 'deliberate action with body part'

This is -i-ja after /rr/, -wi-ja elsewhere. It may derive from **wuu-ja** 'give'.
or the reduced form \(-wu-ja\) " -\(wi-ja\) used in the verbal gift case (3.4.2.6)\(^7\).

\(ja-ra\) 'foot' \(ja-\(wi-ja\) 'run'
\(tharda-a\) 'shoulder' \(tharda-\(wi-ja\) 'swing one's shoulders'
\(darr-a\) 'leg' \(darr-i-ja\) 'stamp'
\(munirr-a\) 'breast' \(munirr-i-ja\) 'breast-feed OBJ'

5.6 Suffixation of nominal derivatives: \(-wa(a)n-da\) 'ORIGin' and \(-yarrad-a\) 'OTHER'

Two suffixes that usually apply to nominals may sometimes appear on verbals after the 'final' inflection for tense/aspect/mood/polarity.

ORIGin \(-wa(a)n-da\) is only attested with the verbal \(ngarii-ja\) 'precede, go before': and only with the ACTual suffix, which appears here as \(-ji\) rather than \(-ja\). It derives a nominal meaning 'the ones from before':

\[5-72\] yuthiji-waan-da yakuri-y, ngarii-ji-waan-d
first lot-ORIG-NOM fish-NOM before-ACT-ORIG-NOM

\(The\ first\ lot\ of\ fish,\ from\ before.\)

OTHER \(-yarrad-a\). used with nominals, means 'another token of the same type' (3.5.5). With verbs its meaning is similar: 'another performance of the same action':

\[5-73\] murruku warra-j, yakuri-ya bama-tha-yarrad, dunjurarr woomera(NOM) go-ACT fish-NOM smell-ACT-OTHER salmon(NOM)

\(He\ went\ along,\ war-like;\ then\ he\ smelled\ some\ fish\ again,\ salmon.\

Here the action is repeated by the same actor, and \(kada\) 'again' would be equally appropriate. But whereas \(kada\) implies identity of both actor and action, \(-yarrad-\) only requires that the actions be identical. Indeed, it may stress that different actors are performing the same action:

\[\]

\(^7\)Two \(-wi-ja\) verbs appear to preserve earlier meanings of body-part terms, now restricted to compounds.

\(Bal-da\) originally meant 'eyelash', a meaning preserved in the Yukulta cognate; it was then metaphorically extended to the fine 'strings' or underground roots of wild yams. This secondary meaning now predominates entirely in K; the original meaning is preserved in the compound \(bal-da\ miburl-da\) [\(balda\ eye\) 'eyelash'. What is relevant here is that the derived verb \(bal-wi-ja\) means 'blink'.

The second verb is \(jal-wi-ja\) 'poke one's tongue out', from which we may hypothesize that \(jal-da\) originally meant 'tongue' (cf PPN \(THalany\) 'tongue'). This then developed the secondary meaning, 'clitoris', preserved in Yangkaal. In K and L the meaning 'vagina' then developed by metonymy. Lardil has retained the original meaning in the compound \(jalda\ leman\) 'tongue' (\(leman\ = 'mouth\')). K evolved an augmented form \(jainganhangka\) (cf Yukulta \(jainganha\, Yangkaal\ jaingantha\); the origin of the augment \(-nganh(th)na(ng\) is a mystery.
[Some white men have been trespassing on K territory, fishing the place out, and have even built a shack for their visits. In revenge, some Bentinck men plan a raid:]

5-74 wungi-ji-yarrada bi-l-wan-ji thungal-i
steal-ACT-OTHER they-PLU-POSS-MLOC thing-MLOC
We're going to steal their things too.

[Discussing the Kaiadilt practice of removing the stingray's liver before cooking:]

5-75 dan-man-da dangka-a jirrma-ja-yarrad
here-ORIG-NOM person-NOM lift-ACT-OTHER
The people from here (the Lardil) lift it out too.

As (5-74) and (5-75) illustrate, the ACTual may be realized as either -ja or -ji before -yarrad-. This may reflect vowel harmony, with -ji after a preceding /i/ (as with wungi-), but I have insufficient examples to establish this.

The close link between domain of inflection and scope of predication is again illustrated here: the predication 'another one of the same type' is made of the action alone, and inflection is limited to the word representing the action: the verb.

5.7 Verbal reduplication

Verb stems are reduplicated as follows:

(a) all non-velar initials remain unaltered. e.g. jirrma-jirrma-ja [lift-REDUP]. dara-dara-tha [break-REDUP] or diya-diya-ja [eat-REDUP].

(b) stem-initial velar nasals become palatals on their second occurrence: ngarrauwa-nyarrauwa-tha [recover-REDUP]. ngarii-nyarii-ja [before-REDUP]. ngawi-nyawi-ja [breathe-REDUP] 'pant'.

Initial velar stops palatalize in some words but not in others:

<table>
<thead>
<tr>
<th>Palatalizing</th>
<th>Non-palatalizing</th>
</tr>
</thead>
<tbody>
<tr>
<td>kulma-julma-ja [pile up-REDUP]</td>
<td>kamburi-kamburi-ja [talk-REDUP]</td>
</tr>
<tr>
<td>karriya-jarriya-tha [churn up-REDUP]</td>
<td>kala-kala-tha [cut-REDUP]</td>
</tr>
<tr>
<td>kuu-juu-ja [bathe-REDUP]</td>
<td>kukalu-kukalu-tha [rebound-REDUP]</td>
</tr>
</tbody>
</table>

This choice appears to be lexically conditioned: I can find no phonological environment predicting which /k/-initial stems palatalize under reduplication. Both palatalizing and non-palatalizing groups contain all varieties of stem-final vowel, both conjugations, and disyllabic and trisyllabic stems.
Verbal reduplication indicates the multiple repetition of an action. This repetition may arise in several ways: a number of subjects may perform the same action, as in (5-76) and (5-77); an action involving the same single subject may repeat itself a number of times, as in (5-78); or the action may be inherently multiple, e.g. panting (ngawi-nyawi-ja) or digging in the sand to find eggs (kurdala-kurdala-tha [stab-REDUP]).

5-76 maku-wala jani-jani-ja niwan-ji
woman-LOT(NOM) search-REDUP-ACT him-MLOC
Many women searched for him.

5-77 dara-dara-tha raar-ja warirr
break-REDUP-ACT spear-ACT nothing
(They) speared (him) but (their spears) broke and broke again, nothing happened.

5-78 waldarra jabi-jabi-ja, kurrumbu bula-a-nangku
moon(NOM) shudder-REDUP-ACT barbed spear(NOM) pull-DT-NEGFUT
Moon shuddered and shuddered, but the spear could not be pulled out.

With one verbal, reduplication indicates increased extent: ngariija 'go first, before', ngariinyariija 'a long while before'.

5.8 Preverbal particles

Five preverbal particles give directional or temporal/aspectual qualification of the verb. Most can also occur in other clause positions, with slightly different meanings and morphological possibilities, as manner or time nominals. Their classification as 'preverbal particles' is thus a convenient summary of their commonest use rather than an absolute statement of their syntactic behaviour. Different preverbal particles also behave differently with respect to modal case. Two - kada 'again' and kiya 'halfway' - take modal case, except in the zero and instantiated modalities. Yuuda 'already' and buda 'later' escape modal case in preverbal position, but take it elsewhere. And minyi 'towards' always escapes modal case.
5.8.1 yuuda 'already'

This indicates that an action has already occurred or is already occurring:

5-79 nyijingka yuuda barji-j
you:NOM already fall-ACT
You have already fallen down.

5-80 yuuda kurri-ja ngad
PERF see-ACT I:NOM
I can already see (it).

In its preverbal use, yuuda does not inflect for modal case:

5-81 jatha-a danga-a yuuda jaa-jarra wida-na
other-NOM person-NOM already enter-PST hole-MABL
Someone else has already checked this hole (for fish).

The pre-verbal use is clearly a specialization of the more general meaning 'first', conveyed by positioning yuuda elsewhere in the clause:

5-82 ngijin-da ngamathu dana-tha yuud, yuulu-th, ngada jinka-j
my-NOM mother leave-ACT first lead-ACT I:NOM follow-ACT
My mother passed away first, she went ahead, I’ll follow her.

In its more general use, yuuda does take modal case. outside the zero and instantiated modalities:

5-83 yuuth-u jirrkara-wu kurri-ju nga-ku-l-d
first-MPROP north-MPROP look-FUT 1-INC-PLU-NOM
We’ll look in the north first.

5.8.2 kada 'again'

This indicates the repetition of an action by the same actor. In most instantiated clauses kada is uninflected:

5-84 dathin-a wirdi-j, bala-tha ni, warIRR, kaba-nangku, there-NOM stay-ACT hit-ACT he nothing find-NEG.FUT
kaba-tharri, kada wara-tha ru-lung-k, kaba-tharri, warIRR
find-NEG.ACT again send-ACT east-ALL-NOM find-NEG.ACT nothing
He stayed there and pounded the bait (to attract fish with its grease). Nothing, he couldn’t find anything, didn’t find anything. He sent it east again, found nothing.

However, I have one example with a modal locative; I have been unable to find any explanation for its appearance here.
I killed (the diver birds), and went and piled them up into the dinghy. Then I went back north another time.

In other modalities modal case always appears:

You will come back from the east again.

I hope they'll dance again tomorrow.

Kada may also appear outside preverbal position, with the verbal TRANSLative case, and the meaning ‘next time’.

My little brother fell out of a tree, and broke his calf. Why is he always playing in trees, (it'll happen) again next time.

5.8.3 ki-ya 'partway'

Used with a motion verb, this indicates that the expected trajectory was not completed ('halfway' in M.I.E.). It takes modal case. The modal oblique and ablative are slightly irregular: ki-inja and ki-ina.

With other words in stem-final /i/, the nominative and locative forms are not distinct. Kiya is used in modalities calling for the zero and locative modalities; one cannot know whether this is motivated by the lack of distinct forms (as with yakuri-ya 'fish'), or simply because it does not distinguish these modalities (like yuud-a 'already'). I arbitrarily gloss all such occurrences as NOMinative.

This is a lousy boomerang, it won't come back, it'll fall down halfway back.
5-90 ngada ki-ina thaa-tharr, kaba-tharri
   I:NOM partway-MABL return-PST find-NEG.ACT
   I came back partway, but still couldn’t find any (yams).

5-91 ki-ya dathin-a barnkaldi-j
   partway-NOM that-NOM sit down-ACT
   (They) sat down there, halfway here.

   This form has only been found preverbally in K. It may be related to Lardil kiwa ‘midsection’. But Roland Moodoonuthi suggested another etymology, wanting to relate it to the verb kiijatha ‘come close’.

5.8.4 buda ‘later’
   This indicates that the subject will repeat, later, an action being performed by someone else. In preverbal position it escapes modal case:

5-92 ngada buda warra-ju
   I:NOM behind go-FUT
   I’ll go later. (You go now).

   Buda also occurs elsewhere in the clause, meaning ‘following close behind’:

5-93 jirrkur-ung-ku kuujuu-ja thula-th, buda ngada
   north-ALL-PROP swim-ACT descend-ACT behind I:NOM
   bi-l-wan-ji bala-th, mun-kiya kurri-j
   3-PLU-POSS-MLOC hit-ACT bottom-MLOC see-ACT
   They swam down to the north, and following close behind I clubbed them all to death.

   Outside the preverbal slot, in modalities other than zero and instantiated, buda takes modal case:

5-94 buth-u ngada jinka-ju, ngada bala-thu bi-l-wan-ju
   behind-MPROP I:NOM follow-FUT I:NOM kill-FUT 3-PLU-POSS-MPROP
   I’ll follow behind and I’ll kill them.

5.8.5 minyi ‘towards’
   This indicates that an itinerary is reaching its end point:

5-95 minyi thaa-tha natha-ya bada-y
   towards return-ACT camp-LOC west-LOC
   So they came back to their west camp.

   Or that some spatially-oriented activity is reaching its goal:

   [Two men have been lining up their spears, which are now aimed and ready:]
They are finding each other’s mark now.

Minyi may also modify non-verbal locationals implying motion:

Catfish cut out (Makarrki, an estuary) on his way back from the east.

Minyi may also be used as a sentence particle, introducing the conclusion of a story (6.7.2.6) or compounded as a nominal semblative (3.6.3.4).

5.9 Nominal Prefixation

The prefixation of nominal stems to verb lexemes is a fairly productive way of enriching the K lexicon. Of some 510 verbs collected so far, about 260 are monomorphemic. 170 are derived by suffixation from nominals, locationals or verbals, and about 80 involve nominal prefixation.

Only three nominal prefixes have constant meanings and are relatively productive: birdin- ‘do unsuccessfully’, marin- ‘do to oneself, allow to happen to oneself’ and jil-/jil- ‘do repeatedly’. And two verb roots productively take many nominal prefixes: marutha ‘put’ and barrwaaja ‘block off’. These will be discussed in 5.9.2.

5.9.1 Non-productive types

Most examples of nominal-prefixation are semantically idiosyncratic: their meaning could not be inferred from their component parts, and the expression must be learned as a whole, e.g. jurra-buujja (message stick-pull) ‘make sign in sand’, yurr-baaaja (body-bite) ‘skite: effuse about’: bunju-wungija (nape of neck-steal) ‘steal behind someone’s back’: kirr-buyiija (nose-pull(DT)) ‘snore’.

They are also largely non-productive: few verbs, and few nominals, occur in

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8This tally excludes all detransitivized and reciprocal verbs.

9This proportion is far lower than in many languages to the west: Warlpiri, for instance, has no more than 115 simple verbs (after very thorough investigation by the Warlpiri Lexicography Project) but a richly productive system of ‘preverbs’ which combine with them (Nash 1982); Nyangumarda has about 100 simple verbs (O’Grady 1970), Warumungu about 50 (Simpson 1980) and Walmatjarri about 40 (Hudson 1978). In many eastern languages, by contrast, there are large numbers of monomorphemic verbs but few compounds. Yidiny, for example, has 25 ‘compound verbs’ out of about 320 verbal items (Dixon 1977:465-473); and Dyirbal, which has about 400 monomorphemic verbal roots, has ‘only a handful’ of compounds (Dixon 1980:280).
more than one or two such constructions, although body-part nominals are by far
the most prevalent. (Note that nominal prefixation to nominalized verbs is far more
productive – see 8.2). Among the prefixed elements are three ‘cranberry
morphs’. only found prefixed to a verb: bir- only occurs in bir-marutha [–put]
‘inadvertently do something that causes trouble for OBJ’, mirnirni- in
mirnirni-maaja [–send] ‘rub eyes’: and nginy- only in nginy-mariija [–put(DT)]
‘ask OBJ for PROP’. Three verb roots only occur with nominal prefixes: –ngulatha
in marral-ngulatha [ear–] ‘dream of OBJ’. –jawaaja in marral-jawaaja [ear–] 
eclipse (moon)’ and –balutha in ngij-balutha [fire–] ‘remove (food) from fire to
cool’. The verb daa-ja has an idiosyncratic meaning when prefixed: alone it
means ‘copulate with’. but ngarra-daaja [forehead–] means ‘nod (head)’.

Finally, there is wide variation in the grammatical relation that would obtain
between the verb and the prefixed nominal, were the latter an independent
argument. Even constructions using the same verb manifest different relations.
Thus buuja ‘pull’ may take body-part-as-instrument (a), a body-part-as-object (e)
or a location (g).

Classified by the grammatical relation of the prefixed nominal to the verb, the
following types are found:

(a) body-part of subject, used as instrument (6.4.3), as in darr-buuja
by placing her on one’s thigh’.

(b) body-part of subject executing (intransitive) action\(^{10}\), as in
(taboo relative) by lowering one’s gaze’, mibur-thaatha [eye-return] ‘flirtatiously
keep staring’, marral-durldija [ear-defecate] ‘forget’. A more metaphorical example
is kirdil-burrija [back-emerge] ‘recover from serious illness’, as in:

5-98 kada birjin-da ngada kurirr-ngarrba, ngada kirdil-burri-ja
again alive(NOM) I:NOM dead-CONS I:NOM back-emerge-ACT
walmu-kurrka-thirri-n-d, [midithin-inja thaari-jurrk]\(\text{COBL}\)
high-take-RES-N-NOM medicine-COBL bring back-IMMED:COBL
I am alive again after being dead, I recovered after being
carried up (towards death), because the medicine brought (me) back.

\(^{10}\)Reasons for distinguishing this syntactically from (a) are given in 6.4.2.
(c) body part affected by (reflexive) action: *nal-karrmaaja* [head-grasp(DT)] ‘lie with hands pillowing head’. *murnu-rayiija* [elbow-spear(DT)] ‘lie propped up on elbow’. *mar-ngudiija* [hand-throw(DT)] ‘wave away with hand’ (lit. ‘throw one’s hand away’). *tharda-karramaja* [shoulder-hold up(DT)] ‘wave arms’. *mar-kuriija* [hand-wash (DT)] ‘get mulgri’ (see 1.3.2).

(d) object: *wumburung-karramatha* [spear-hold up] ‘wave spear (showing a turtle has been caught)’. *mala-warngiilutha* [sea-make one] ‘mix salty water (with fresh)’. *nal-wulatha* [head-pull out] ‘pull out edible yams (from under water)’. *jurra-buuja* [message stick-pull] ‘draw signs in sand (by pulling stick through the sand)’. *marrjin-maanthutha* [messanger-send(RECIP)] ‘send messengers to one another’.

(e) affected body-part of object, as in *marral-kamburija* [ear-speak] ‘whisper to OBJ’. *ngarra-buuja* [forehead-drag] ‘drag (turtle) along sand by head’.

(f) destination, with -*marutha* constructions (see below).

(g) location (trajectory). In *mala-buuja* [sea-pull] ‘pull through the sea, row in open sea’.

(h) theme (the thing transferred). Which in an expanded construction would take the PROPriete - see 6.2.5: *ka-wuja* or *kang-uja* [speech-give] ‘converse with OBJ’. *kandu-marndija* [blood-deprive] ‘suck blood from OBJ’. *bayi-marndija* [harm-deprive] ‘remove danger from OBJ’ (e.g. take stinger out of stingray).

(i) Second predicate of manner on the subject. E.g. *wurr-ngudiija* [sharp-throw(DT)] ‘be born’; *bulwi-n-manjiliija* [be shy-N-elope] ‘elope shyly’ (said of relatively innocent young girl); *birdi-kalaaja* [bad-cut(DT)] used only in the expression *birdikalaaja kangka* ‘speak weakly or tiredly’.

(j) No grammatical relation: A large number of nominal prefixes cannot meaningfully occur in any grammatical relation to their host verb, at least in modern K. This may be for two reasons.

(i) Sometimes an extra predicate would be required, as with *bunju* ‘nape’ and *jardi* ‘back’, which add the meaning ‘do surreptitiously, do behind the affected person’s back’, as in *jardi-wungija* [back-steal] ‘steal from Y(V.ABL). unbeknown to Y’ and *bunju-kamburija* [nape-talk] ‘“backbite”, say bad things about OBJ in OBJ’s absence’. Although the directional metaphor expressed by the body part is obvious, it could not be directly expressed by a free NP.
Elsewhere the nominal has a meaning in the prefixed construction that is totally idiosyncratic, making correlation with a free NP impossible. Examples are kurirra-yurrbaaja 'skite blithely about', kurndu-kurrija 'scan carefully', and a number of verbs to which the prefix jil/jul- 'bone' adds the meaning 'keep doing' (see below).

As the above discussion shows, nominal prefixation may affect the argument structure and the transitivity of the verb, adding or removing arguments. Burrija 'emerge', for example, is intransitive, but the compound bayi-burrija may take an object (the person the fight is picked with) and an optional PROProprietive complement as well (the source of the dispute). Similarly kaaja 'shelter' is intransitive, but ngarrakaaja 'avoid OBJ by lowering gaze' is transitive. Marndija 'deprive of', on the other hand, subcategorizes three arguments (subject, object and indirect object), while the prefixed verbs kandumarndija 'suck blood from OBJ' and bayimarndija 'take the harmful element out of' are simple transitive verbs. These effects on the number of arguments are essentially unpredictable.

5.9.2 Productive types

The examples discussed so far have been highly idiosyncratic: their meanings, and the grammatical relations between their elements, must be stated in the lexicon, and no general combinatory principles can be formulated. We now turn to two verbs and three nominal prefixes, where the effects of prefixation are more predictable.

5.9.2.1 -marutha 'put'

This verb, whose free-form meaning is 'put', has already been encountered in our discussion of the 'verbal dative' (3.4.2.2), in which case it appears on every word of the phrase. Used as a nominal prefix, however, it is restricted to single words.

Since both may have the meaning 'cause to be at X', the two uses are often hard to distinguish. But the nominal-prefix meaning is usually more specialized, and is lost if the nominal word gives way to a whole phrase. Thus dul-marutha may be [ground-V.D], meaning 'to the ground, put on the

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11 Here K differs from Warlpiri, for example, where certain 'preverbs' regularly introduce an extra adjunct in the dative (Nash op cit.:183-4). Yidiny (Dixon op cit.:465) represents another type, in which compounds always have the same transitivity as the verbal root.
ground', or [ground-put], with the specialized meaning 'floor (in fight),
knock to the ground'. But ngarrku-marutha dul-marutha [hard-ground] can only have the more general Verbal Dative meaning: 'put on the hard
ground'.

Three main meanings are possible:

(a) 'cause OBJ to become at X'.

The intended destination may be geographical, as in kalarr-marutha [open
space-put] 'flush OBJ out, drive OBJ out in the open' or kabilji-marutha
[grave-put] 'lay OBJ in grave'.

Alternatively it may be a body-part. Here a reflexive reading is implied.
Examples are jardi-marutha [behind-put] 'put OBJ behind one's back', nal-marutha
[head-put] 'put OBJ on one's head', wajurr-marutha [armpit-put] 'put OBJ under
one's arm'. Kirdil-marutha [back-put] has a different semantic structure, meaning
'lean one's back against OBJ' rather than 'put OBJ against one's back'.

Two verbs of conation employ the 'destination' meaning rather metaphorically:
bardaka-marutha [stomach-put] 'think feelingly about OBJ, miss OBJ' (literally 'put
OBJ in one's stomach') and marral-marutha [ear-put] 'think intellectually about,
concentrate on' (literally 'put OBJ in one's ear'). The stomach and ear are for the
Kaiadilt, as for other Australian Aboriginal groups, the seats of feeling and
intelligence respectively.

(b) 'cause OBJ to be in state X'.

Here X is limited to predicate nominals and nominalized verbs, e.g.
mibul-marutha [asleep-put] 'put OBJ to sleep', rajurri-n-marutha [walk
around-N-put] 'cause to be able to walk'. The semantics of this type of causation
are compared to those of other causative constructions in 6.3.4.

(c) 'insultingly compare OBJ to kin X'.

This is used in reporting speech acts in which the addressee is compared to
relative X, with the implication that both share some reprehensible characteristic,
e.g. ngamathu-marutha [mother-put] 'insultingly compare OBJ to OBJ's mother'.
See also 3.6.3.4.
5.9.2.2 X-barrwaaja 'keep OBJ away from X'

The free verb *barrwaaja* is ditransitive, meaning 'block off OBJ (territory) from OBJ (people)'. The first object may be prefixed: *kalarr-barrwaaja* [open space-block] 'prevent OBJ from coming out into the open'. Usually the nominal prefix constructions are more metaphorical, as in *yirbirr-barrwaaja* [beloved-block] 'prevent OBJ from seeing OBJ's beloved' (said of a jealous old husband); *mibul-barrwaaja* [sleep-block] 'prevent from going to sleep' (e.g. by non-stop love-making).

5.9.2.3 *birdin-* 'fail to do V properly'

This prefix is clearly related to the adjective *birdi(ya) 'bad', perhaps with the individualizer suffix -*n- (3.6.1.1), which would mean 'bad one' (although there is no free form *birdin-da.*). *Birdin-* plus *raa* 'spear' gives *birdi-iaaja*, by LATERALIZATION (1.7.3.5).

*Birdin-* marks the unsuccessful performance of an action:

- *bala-tha* 'hit'
- *kurri-ja* 'see'
- *raa-ja* 'spear'
- *marri-ja* 'hear, listen'
- *ngudi-ja* 'throw'
- *warra-ja* 'go'
- *jinka-ja* 'follow'
- *dii-ja* 'sit down, land'

- *birdin-bala-tha* 'hit wrongly, weakly'
- *birdin-kurri-ja* 'look at without recognizing'
- *birdi-laa-ja* 'spear at and miss'
- *birdin-marri-ja* 'mishear'
- *birdin-ngudi-ja* 'throw askew'
- *birdin-marra-ja* 'go off track'
- *birdin-jinka-ja* 'follow wrong track'
- *birdin-dii-ja* 'land in wrong place (missile)'

5-99 ngada *birdin-ngudi-*j, *dirral-da* marl-d, *rirrk-uru* 
I:NOM fail-throw-ACT slippery-NOM hand-NOM grease-PRDP
I threw (it) off course, my hand was slippery, covered in grease.

5-100 *jirrkara-nyin-*da thula-th, *kurndungkali*, *birdin-jinka-ja* 
north-END-NOM descend-ACT place name(LOC) fail-follow-ACT
wayiri, *dangka-naban-*d. 
path(NOM) man-another-NOM

(We) went down at the north end (of the scrub), at Kurndungkali, we took the wrong track, another man's track.

5.9.2.4 jil- 'jil- 'keep doing' 

Most speakers vary between *jil-* and *jul-*, although some only have *jul-*: the latter appears to be the more basic form, with optional fronting after the palatal giving *jil-*.

This suffix indicates that an action persists without flagging: *bala-a-ja* [shoot-DT] 'be shot at', *jul-bala-a-ja* 'go on being shot at' (Text 3, Line 18).
The meaning of the prefixed verb is not always predictable from its elements: *buru-tha* 'take, grab', *jul-buru-tha* 'stay (at OBJ) all the time; keep doing' *kaba-tha* 'find', *jul-kaba-tha* 'hold tight; do fast, intensely' (5-123).

5-101 warngijj-in any duk-inла nga-ku-la jul-buru-tharr
one-MABL place-MABL 1-INC-PLU-NOM bone-take-PST

We stayed camped at the same place.

This prefix is probably related to *jul-da* 'bone', which recurs in a number of expressions involving intensity. The basic nominal may be used to mean 'absolutely', as in *julda warirra dukka* [bone nothing place] 'absolutely nowhere'; and the reduplicated *julajulda* means 'strong, proper'. However, *jul-da* cannot occur as a free nominal with the persistive meaning: *ngada julda basalja* [I bone shoot(DT)] means 'I was shot in the bone', not 'I kept getting shot at'.

5.9.2.5 marin- 'self'

The free form *marin-da* is the reflexive object pronoun, optionally used in reflexive constructions with detransitivized verbs (6.3.3); it can also serve as a nominal prefix.

With some verbs *marin-* merely forces a reflexive reading (recall that detransitivized verbs allow both passive and reflexive interpretations): *marin-barrki-i-ja* [self-chop-DT] 'slash one's skull (during mourning)', *marin-marri-i-ja* [self-hear-DT] 'listen to oneself (e.g. on tape recorder)'.

With other verbs, however, *marin-* gives a 'voluntary passive' meaning: *marin-kurrka-a-ja* [self-take-DT] was used of a girl who let herself be seduced ('taken'), and *marin-kurndi-i-ja* [self-tie-DT] of a woman who captured a python by letting it coil around her.

5.9.3 Idioms with free nominal arguments

A number of idiomatic constructions involve a verb and a body-part nominal. These often exhibit semantic similarities to the prefixed-nominal constructions given above, and may be the historical source of at least some of them. But in idioms the verb and nominal are separate words: they can be reordered (although the elements of the idiom remain contiguous), and the nominal is inflected for case. For example the idiom *bardaka kamburija* [stomach say] 'say to oneself, think without speaking' involves a nominal in the nominative case, and allows the alternative ordering *kamburija bardaka*. Comparable examples are *bardaka*
mirra-wa-tha [stomach good-INCH] ‘feel happy, feel glad’,
jara kuuja [foot bathe]
‘bathe one’s feet, cool feet in water’,
jara mutha-wa-tha [foot-NOM much-INCH]
‘feel edgy, shift about nervously on one’s feet’ and kirrka miburlda ngarrku-wa-tha
[nose eye strong-INCH] ‘set one’s face in a warlike expression’ (kirrka miburlda is
a nominal idiom meaning ‘face’).

I have collected three idioms where the nominal is in object function
(informants always cite these with the object in the nominative, but give them the
appropriate object case in full sentences): munda kurrija [bottom see] ‘finish off’
(5-93), miburlda duuratha [eye poke] ‘warn’ (9-42) and miburlda ngudija [eye
throw] ‘cast one’s eye’ (4-84).

5.10 The Verb Complex

A K clause may contain a number of verbal forms; following Dixon (1972:64
& 1977:252) I call this syntagm the ‘V(erb) C(omplex)’. All verbs of the VC must
agree in final inflection. But there is no constraint requiring them to have equal
transitivity: there may be a transitive and an intransitive verb in the one complex
(e.g. 5-111). What is important is not that each verb have identical argument
structures, but merely that they have non-conflicting argument structures: it is
acceptable for a NP to be an object of one verb in a clause but bear no
grammatical relation to its clausemate, but it is unacceptable for a NP to be
subject of verb A and object of verb B.

This contrasts with the stricter constraint found in many ergative
Australian languages (such as Dyirbal (Dixon 1972:64) and Yidiny (Dixon
1977:252)) requiring that all verbs and adverbs in a verb complex agree
in (surface) transitivity. If we accept Goddard’s (1982) argument that
such languages have three core cases, ergative (A), nominative (S) and
accusative (O), the reason is clear: if transitive and intransitive verbs
were mixed in a clause, they would assign conflicting cases (A and S, or
O and S) to their subject. In an accusative language like K, on the
other hand, there are no grounds for distinguishing A and S cases, these
being joined in a single ‘nominative’ case, so there can be no case
clash.

The various elements of the VC may be more or less tightly linked, both
syntactically and semantically; three types can be identified. I shall now examine
these, proceeding from the looser to the tighter.
5.10.1 Adverbial complexes

These comprise a verb and either an adverb or a verb used as an adverb, typically with some semantic modification. The entire complex is always spanned by a single intonation contour, and the adverb typically precedes the verb.

5.10.1.1 Lexical adverbs

Adverbs take normal verbal inflections but cannot be the sole verbal in a sentence. K has very few, and it is possible that a bigger corpus would see even these used as main verbs.

(a) **bakii-ja** ‘altogether’\(^ {12}\) means either ‘all S do (plural subject)’ or ‘S do with all his/her being’ (singular subject), or ‘do to all O’, but never ‘all A do’, which requires the particle **maarra** ‘all’ (6.7.2.7) or the nominalized form **bakii-n-da** ‘all’, which can modify nominals in any function.

5-102 bakii-ju nga-ku-l-da warra-ju
altogether-FUT 1-INC-PLU-NOM go-FUT
We'll all go.

5-103 ngaakawuru dathin-a kunawuna bakii-ja bayi-wuru-wa-th
why that-NOM child(NOM) altogether-ACT angry-PROP-INCH-ACT
Why is that child going completely wild?

5-104 bala-tha ngad , bakii-ja-da mun-kiya kurri-j
kill-ACT I:NOM altogether-ACT=SAME bottom-MLOC see-ACT
I killed them all off.

The verb **kuliya-tha** 'fill up, give lots of' may also function as an adverb, meaning 'lots of S do', 'do to lots of O':

5-105 kuliya-kuliya-n!
give much-REDUP-NEGIMP
Don't give (me) too much!

5-106 dali-ja kuliya-th
come-ACT fill-ACT
Lots of people are coming.

5-107 ngada raa-ja kuliya-tha bang-a-y
I:NOM spear-ACT fill-ACT turtle-MLOC
I speared lots of turtles.

\(^{12}\)The gloss follows K English, where 'altogether' means 'all S do' or 'do to all O' - an interesting case of substrate influence.
The apparent identification of S and O by bakiija and adverbal kuliyatha could be seen as a last residue of ergativity in K., and a reminder that 'accusative' and 'ergative' are merely ideal types which few if any languages exemplify purely. (It is interesting that Yidiny (Dixon 1977:252) has one transitive adverb lexeme gaymbin 'do to all of a set of objects' and another intransitive adverb warnggi-n 'do all around'. but none meaning 'all A do').

(b) Yulkalu-tha 'A do for good' (This is actually the factitive form of yulkaa-n-da 'eternal'). and yulkali-ja 'S do for good' (the detransitivized equivalent) are a possible instance of transitivity-sensitive adverbs, as the first is only attested with transitive and the second with intransitive main verbs:

5-108 ngada yulka-lu-tha dana-tha ngumban-ji
I:NOM eternal-FAC-ACT leave-ACT you-MLOC
I'm leaving you for good.

5-109 yakuri-ya yulka-l-ii-ja jaa-ja mijil-liwa-th
fish-LOC eternal-FAC-DT-ACT enter-ACT net-V.I.ALL-ACT
The fish swam into the net for good.

However I would maintain that they differ in more than 'transitivity'. Yulkalutha means, roughly 'SUBJ did something, intending to affect OBJ. OBJ was affected for good because of that', while yulkaliija means 'SUBJ did something. SUBJ was affected for good because of that'. (This would parallel the use of detransitivized verbal cases – see 3.4.2.4). To test this I need to try out sentences like ngada yulkaliija danatha niwanji, which I predict would be acceptable and would mean 'I left her for good, unfortunately for me'.)

A related verb. yulkinjali-ja\(^{13}\), means 'go to for good':

5-110 niya rar-umban-ji dulk-i yulkinjalii-j
he:NOM south-ORIG-LOC place-LOC go for good-ACT
He's gone south for good (to stay there)

(c) Babara-tha 'quickly, do straight away':

5-111 nyingka jinka-ja babara-tha ngumban-da kajakaj l
you:NOM follow-IMP quickly-IMP your-NOM daddy(NOM)
Quickly follow your daddy!

\(^{13}\)Etymology unclear, but possibly yulk-inja-l-ii-ja (eternal-OBL-FAC-DT-ACT). This would be an exception to the ban on other suffixes following the OBLique (3.2.3).
(d) kiyarr-marii-ja 'two do together'. Formally this is [two-put(DT)].

5-112 nga-ku-rr-a kiyarmarii-ja rabi-j, badi-j
I-INC-DU-NOM two do together-ACT get up-ACT carry-ACT
The two of us got up together and carried (it).

5.10.1.2 Apposed verbs functioning as adverbs:

The meagre stock of lexical adverbs is supplemented by a large number of constructions in which one verb takes on an adverial meaning when paired with another. For example ngarii-ja means 'be in front, lead' when used as a main verb:

5-113 ngijin-da kajakaja ngarii-j
my-NOM daddy(NOM) first-ACT
(Speaking of a file of people): My father is in front.

But it may also be used adverbially, meaning 'first'. As in English, the exact meaning depends on its position within the clause. Clause-finally, it can mean either 'be the first one to do' or 'do first in a series of actions':

5-114 ngada kurri-ja ngarii-j
I:NOM see-ACT first-ACT
I saw it first/ I was the first to see it.

5-115 nyingka diya-ja wuran-da ngarii-j, dana-a-ja ngada
you:NOM eat-IMP food-NOM first-IMP leave-DT-ACT I:NOM
nguku-wu-ju
water—VGIFT—FUT
You eat some food first, then I'll give you water.

Immediately before the verb it means 'do for the first time':

5-116 ngada kunya-a kunawuna ngarii-ja kurri-j
I:NOM small-NOM child(NOM) first-ACT see-ACT
I first saw it as a small boy.

Likewise danaaja. used as a main verb, is the detransitivized form of dana-tha 'leave'; hence 'be left (behind)'. But used adverbially it means 'be last, do last' or 'then' as in (5-115) above.

Mirrayalatha. as a main verb, means 'make', as in (5-117). or 'heal'.

5-117 ngada mirrayala-tha wangalk-i
I:NOM make-ACT boomerang-MLOC
I made a boomerang

As an adverb, it means 'do properly, well':
I: NOM do well-ACT hear-ACT language-MLOC
I can understand the language well.

Apart from ngariija above\(^{14}\), where semantically significant changes in word order are possible, the adverb immediately precedes the main verb: birdirutha waaja [spoil sing] 'sing wrongly', thaariija waaja [bring.back sing] 'sing back to life', kukurdurutha kamburiija [make.near speak] 'summon', ngadija kuluuja [wound dig] 'despoil (sacred place) by digging/mining there', birilutha karajja [make.fine burn] 'burn special fire to bring on fine weather':\(^{15}\)

5-119 nylnga dathin-ki dulk-i ngadi-ja kuluu-j,
you:NOM that-MLOC place-MLOC wound-ACT scratch-ACT
nylnga kalka-th
you:NOM sicken-ACT
You have despoiled that place by digging there, and you have fallen ill.

5-120 biri-u-tha karajja nga-ku-1-da yaluntha-y
calm-FAC-ACT burn-ACT 1-INC-PLU-NOM seaweed-MLOC
We burned seaweed to bring on the fine weather.

Many such constructions are somewhat idiomatic, with different main verbs selecting different apposed verbs to express what is essentially the same adverbial meaning. For example, the meaning 'do hard, intensely' is expressed by at least three different apposed main verbs: kurulu-tha 'kill' with verbs of impact, bulba-ja 'be full (of food)' with verbs of sound production, and jilkaba-tha 'seize, hold tight' with verbs of perception and communication:

5-121 ngada kurulu-tha bala-tha niwan-ji wangalk-ur
I:NOM dead-FAC-ACT hit-ACT him-MLOC boomerang-PROP
I hit him hard with the boomerang

(Note that this does not mean 'hit him fatally'; this literal meaning would require kurulutha to be in a separate clause.)

5-122 nylnga kamburi-j, bulba-ja wama-th!
you:NOM speak-IMP be.full-IMP shout-IMP
You speak, yell it out loud!

\(^{14}\)And possibly danajja - I lack data on this.
\(^{15}\)This last example is a possible exception to the 'non-conflicting relation principle'. The object of the main verb is the thing burned (e.g. seaweed), which cannot be the object of birilutha: if one existed (and none was given in sentence (5-120)), it would be something like 'wind'.

5-123 ngada jilkaba-tha kurri-j
I:NOM seize-ACT see-ACT
I'm looking hard.

Other verb+verb constructions are completely idiomatic: the apposed verb only has its particular adverbial meaning when paired with the one main verb:\[^16\]

<table>
<thead>
<tr>
<th>Adverbial complex</th>
<th>Literal meaning</th>
<th>Collocational meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>ngudija kamburiia</td>
<td>throw speak</td>
<td>refuse</td>
</tr>
<tr>
<td>julujuutha kamburiia</td>
<td>talk.a.lot speak</td>
<td>persuade</td>
</tr>
<tr>
<td>birrkaliija kamburiia</td>
<td>take.pity speak</td>
<td>console</td>
</tr>
<tr>
<td>junkuwatha kinaaja</td>
<td>meet tell</td>
<td>come clean, confess</td>
</tr>
<tr>
<td>yukija warraja</td>
<td>float go</td>
<td>stagger drunkenly</td>
</tr>
</tbody>
</table>

5.10.2 Motion complexes

These have a main verb followed directly by a motion verb, which expresses the motion either concurrent with or following the main action. The motion verb often undergoes some semantic specialization, with the directionality implied by the main verb use being relaxed. Word order is less free: with one attested exception (5-132), the verb complex is clause-final.

Thaa-tha, as a main verb, means 'return'. In motion complexes it means 'go and V, expecting to return'. So while the main verb use implies motion towards some reference point, the motion complex use allows it to be away from the reference point. This difference is illustrated by the following two minimal pairs of sentences. In (5-124) the verbs belong to different clauses, as shown by the independent intonation contours (indicated here by a comma): a literal meaning is forced. In (5-126) the two verbs are clausemates, but thaatha comes first: it acts as an adverbial supplying direction. In (5-125) and (5-127) thaatha is a clausemate and follows the main verb, giving the 'go and return' meaning.

5-124 niya kuujuu-j , thaa-th
he:NOM swim-ACT return-ACT
He had a swim, and came back.

\[^{16}\text{Functionally, these parallel the compound verbs in such languages as Walmatjarri (Hudson 1978:44 et seq.), e.g. turta-pung- [rise-hit] 'stand up'. The difference is that in Walmatjarri the juncture is morphological - two roots are compounded, giving a complex stem which takes a single set of inflections, while in K the juncture is syntactic: each verb of the complex inflects individually. An intermediate type is found in a number of Centralian languages, such as Diyari and Yankunytjatjara: in Diyari a number of verbs may be chained, but only the last may take derivational suffixes and inflections; the rest take participial inflections (Austin 1981a:98).}\]
5-125 niya kuujuu-ja thaa-th
he:NOM swim-ACT return-ACT
He’s gone for a swim (and will come back).

5-126 thaa-tha warra-j
return-ACT go-ACT
(He’s) on his way back.

5-127 warra-ja thaa-th!
go-IMP return-IMP
(You) go and come back!

In all my examples with V thaa-tha, the object immediately precedes the verb:

5-128 balmbi-wu thawal-u jani-ju thaa-thu
morrow-MPROP yam-PROP search-FUT return-FUT
Tomorrow we’ll go and look for yams.

5-129 wuran-inja ngalama-n-da thaa-n-d
food-AOBL get-N-NOM return-N-NOM
(They) are going to get food.

Such complexes are also used in describing short round trips\(^\text{17}\). In the following sentence the speaker describes how people used to paddle to the outlying island of Jawari. Because it lacked water, they would not camp there.

5-130 kuru-ya diya-ja thaa-th
egg-MLOC eat-ACT return-ACT
(They) used to go out (for the day) and eat (turtle) eggs.

In one instance thaa-tha has fused with the main verb: kabathaatha ‘go hunting for’ transparently derives by haplology from kabatha ‘find’ plus thaatha: the collocation would mean ‘go to find (and come back)’.

Warra-ja, used as a main verb, means ‘go (to)’ or ‘come (to)’\(^\text{18}\). As an associated motion verb it usually means ‘go come along while Ving’.

5-131 walmathi-da walmathi bath-in-d, burldi-burldi-ja warra-j,
high-SAME high west-FROM-NOM roll-REDUP-ACT go-ACT
burldi-ja birrk-i
roll-ACT string-MLOC
High up, moving from the west she (Kaarrku, the Seagull Being) came along, rolling string as she went.

\(^\text{17}\)It is possible that the ‘and will come back’ component is extended to mean that the activity is bounded in time (H. Koch, p.c.); this would fit all the examples given above.

\(^\text{18}\)There is no inherent direction in this verb. A more precise gloss would be ‘move along a trajectory’.
5-132 jiki-ja warra-ja karn-ki
light fire-ACT go-ACT grass-MLOC
(They) went along setting fire to the grass.

5-133 niwan-burri-yarrba yathuyii-ja warra-j, jungarra-ya dullk-i
3sg-emerge-PRECON laugh-ACT go-ACT big-LOC place
rulungka-riya wanjii-j, ra-yii-ja warra-j
eastward-east go.up-ACT spear-DT-ACT go-ACT

Having come out of it (the sea), (Kajurku) went along laughing,
came up heading east at that big (story) place, went along being
speared at.

Less frequently a purposive/sequential meaning is conveyed: 'go/come to V'.

5-134 ngakan-ku thaldi-ju warra-ju
sandbank-MPROP stand-FUT go-FUT
(They're) going to stand on the sandbank.

Dana-tha, as a main verb, means 'leave'. In a motion complex it means 'V as
one moves away from X' or 'V before one moves away':

5-135 bi-l-da ngilirr-i kurri-ja dana-th
3-PLU-NOM cave-MLOC look-ACT leave-ACT
They looked at the cave as they walked away from it.

5-136 dan-da jardi kurulu-tha mutha-ya yakuri-y, diya-a-nangku,
this-NOM mob kill-ACT many-MLOC fish-MLOC eat-DT-NEG.FUT
dathin-a narrkiri-ju dana-thu
that-NOM bury-FUT leave-FUT

These people killed lots of fish, more than could be eaten,
they'll bury them there before leaving.

There is also an adverbial complex kamburija danatha [say leave],
which means 'say as one's dying words' (see 9-15). Dana-tha is a
euphemism for 'die' (as is 'leave' in Mornington English).

Wara-tha 'send', used in a motion complex, has the opposite meaning to
dana-tha 'leave': V wara-tha means 'V OBJ as OBJ moves away'. or as Roland
Moodoonuthi put it 'you look and he's going'. An example is:

5-137 yan-d, nga-ku-lu-wan-ju kurri-ju wara-thu balung-ku
now-NOM we-INC-POSS-MPROP look-FUT send-FUT westward-PROP

Now (the short people) are looking out at us (from their hiding
places beneath the cliffs) as we go westwards.

Wurdiyalaa-ja 'walkabout' may be used in a motion complex to mean 'walk
about Ving (everywhere)'. See Text 3. Line 33.

Wanjii-ja 'go up' may be used in a motion complex without much change in
meaning: 'go/come up to V'.
The dugong) is coming behind from the south, coming up to graze.

It is easy to see how the motion verb could, with time, be morphologically fused onto the action verb, as has happened in kabathaa-tha, discussed above. This would give K a set of verbal suffixes showing 'associated motion', similar to those found in many Australian languages, such as Kaytej (Koch 1983b), Diyari (Austin 1981a), Adnyamathanha (Tunbridge 1983), Yidiny (Dixon 1977:219ff, where they are called 'coming/going aspectual affixes'), and Djingili (Chadwick 1975:23 & 33-4).

5.10.3 Aspectual complexes

In these, one of the four verbs wirdi-ja 'be, stay', dii-ja 'sit', karrngi-ja 'hold, grasp' and jirrma-ja 'pile up' follows a main verb, or a motion or adverbial complex, and assumes an aspectual meaning. Unlike motion complexes, aspectual complexes need not appear clause finally:

5-139 ngada warra-ja wirdi-ja wuran-kur , wuran-ki kaba-tharri
I:NOM go-ACT be-ACT food-PROP food-MLOC find—NEG.ACT
I was walking around all day looking for food, but didn't find any.

Wirdi-ja 'be, stay' shows durative aspect: X is engaged in some activity over a longish period of time:

[R.M. had just bought a car, and his proud young sons were sitting on the roof 'guarding' it:]

5-140 bi-rr-a karrngi-ja wirdi-j
3-DU-NOM hold-ACT be-ACT
They're guarding it.

V wirdi-ja is compatible with nominalizations showing uncompleted ongoing actions. All verbs in the complex are nominalized, conveying the meaning 'X is continuing to V a lot'. Note the chaining of a motion and an aspectual complex in the following example:

5-141 myingka kurri-n-da warra-n-da wirdi-n-d
you:NOM see-N-NOM go-N-NOM be-N-NOM
You're coming around to see (people) a lot.

Wirdi-ja frequently merges with preceding ACTual inflections, so that V-THa
wirdi-ja becomes V-THurdi-ja: kurri-ja wirdi-ja becomes kurrijurdija. Once again, time would probably see this periphrastic construction becoming a verbal suffix.

Dii-ja ‘sit’, used in an aspectual complex, shows that the subject continues one activity without changing to another (see also Text 2, Line 74):

5-142 wuu-ja yurda-ya muyinkalan-ki, yiiwi-ja dii-j, yurda-y, put-ACT inside-LOC dinghy-LOC lie-ACT sit-ACT inside-LOC warra-n-marri, barri-n-marri go-N-PRIV crawl-N-PRIV

(1) put (the turtles) inside the dinghy, and (they) just stayed lying there, without moving, without crawling around.

Karrngi-ja ‘hold, grasp’ shows that an activity persists for longer than one might wish or expect, possibly with a shade of disapproval:

5-143 niya diya-ja karrngi-j he:NOM eat-ACT grasp-ACT

He keeps eating, he’s eating all the time.

Jirrma-ja ‘pile up’ indicates that an activity is generously indulged in, in preparation for some coming situation:

5-144 yan-da kurirra narrkiri-i-j, ngabay ngabaya rundurr-ula-a-j now-NOM dead(NOM) bury-DT-ACT spirit(NOM) grave-V.ABL-DT-ACT nguku-y diya-ja jirrma-ja ngabay, ril-ung-ku warra-ju water-MLOC eat-ACT pile up-ACT spirit(NOM) east-ALL-PROP go-FUT

Now the dead person is buried, and his spirit leaves the grave; the spirit drinks plenty of water, for his journey eastward across the sea.

A man is ‘singing' himself into readiness for the hunt:

5-145 ngada thula-thu, wa-yii-ja jirrma-j, ngada thula-thu I:NOM go down-ACT sing-DT-ACT pile up-ACT I:NOM go down-FUT

I will go down (into the sea), I am singing myself into readiness, I will go down.

Fusion with the preceding verb may occur, so that diyaja jirrmaja can be pronounced diyajirrmaja.
6.1 Verbless clauses

K, like most Australian languages, has a main clause type in which the predicator is a nominal (henceforth, ‘nominal clauses’). No copula is needed, although the verb *wirdija* ‘be. stay. become’ may be used under certain conditions (6.1.8). Nominal clauses are used for equative, ascriptive and locational sentence types, and also for certain kinds of stative predication involving ‘nominal predicators’, which may take their own nominal arguments.

Most nominal clauses lack any marker of tense/modality. But locative and existential clauses allow this to be expressed, using modal case (6.1.3).

I shall assume that sentences of this type should be parsed into a subject and a (nominal) predicate\(^1\). Nominal clauses have a more limited thematic structure than verbal clauses: their subjects must be topics (except for existential clauses – see below), and display the full range of topic characteristics: definiteness (pronominal, or marked by the discourse deictic *dathina* ‘that’), anaphoric ellipsis, and treatment as topic for the purpose of assessing ‘odd topic’ sequences\(^2\).

\(^1\) An alternative approach would be to analyse them into a subject and a subject complement, with an optionally-deleted copula. This would bring out the similarities with other subject complements, and with second predicates in general, and would allow us to ‘derive’ nominal clauses from verbal ones by optional copula-deletion. Despite its elegance, this analysis has two drawbacks. Firstly, as argued in 6.1.8, the copula is often meaningful and copula-deletion would therefore be a meaning-changing transformation. Secondly, nominal predicators can take core arguments, while subject complements in verbal clauses cannot. For these reasons I reject the copula-deletion analysis, although certain generalizations are lost thereby – most importantly, *jungarra* in nominal clauses like *niya jungarra* ‘he (is) big’ is treated quite differently to *jungarra* in *niya wirdija jungarra* ‘he remains big’: as a ‘nominal predicate’ in the first clause and as a subject complement in the second.

\(^2\) Descriptions of other Australian languages usually parse these sentence types into ‘topic’ and ‘comment’ (Dixon 1977 on Yidiny, Keen 1983 on Yukulta, Morphy 1983 on Djaapu), or into ‘subject’ and ‘predicate’ (Austin 1981 on Diyari, Goddard 1983 on Yankunytjatjara). The former division is justified by the frequent appearance on the first constituent of ‘prominence markers’ (Djaapu), ‘stative markers’ (Yukulta) or deictic determiners (Yidiny), all characteristic of ‘topics’ in their respective languages. The latter division has not been specifically motivated in the grammars I have consulted.
6.1.1 Equative clauses

These equate the referents of subject and nominal predicate:

6-1 dathin-a dangka-a wurungathi
that-NOM man-NOM (name)
That man is Wurungathi.

6-2 niya dangka-a, dibidibi mildala-tha dathin-ki duk-i
he:NOM person-NOM rock cod(NOM) cut out-ACT that-MLOC place-MLOC
He was the one, rock cod cut out that place.

6.1.2 Ascriptive clauses

These ascribe a certain property to their subjects. The predicate may be an entity nominal (6-3) or full noun phrase (6-4), as with equatives, but also a (semantic) adjective (6-5) or a nominal taking an adnominal inflection, e.g. the ORIGin (6-6) or PRIVative (6-7). Other adnominal cases, coding possession and location, are discussed in 6.1.3. There is usually a pause between subject and predicate — note the subject-final truncation in (6-4)-(6-5).

6-3 dathin-a kunawun wungunduwungundu
that-NOM child(NOM) thief(NOM)
That child is a thief.

6-4 dathin-a kamarr mirra-warri wuran-d
that-NOM stone(NOM) good-PRIV(NOM) food-NOM
That stone fish is a no-good sort.

Wuranda is used here in its 'class' sense of 'animate creature', not 'food' — the Kaiadilt readily eat it.

6-5 dathin-a thawal-d kungku
that-NOM yam-NOM cooked(NOM)
That yam is cooked.

6-6 dathin-a yakuri-ya katharr-waan-d
that-NOM fish-NOM swamp-ORIG-NOM
That fish is a swamp fish.

6-7 dathin-a nguriw dun-marri
that-NOM teenage girl(NOM) spouse—PRIV(NOM)
That girl is unmarried/has no husband.

The subject is often omitted anaphorically:
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6-8 ___ kunya-warri, ___ jungarra dibidibi
small-PRIV big(NOM) rock cod(NOM)

It wasn't a small one, it was a big rock cod.

All ascriptive nominal clauses with adnominally-inflected predicates have corresponding attributives: kiyarrngka katharrwanda yakuriya 'two fish from the swamp', dunmarri nguriwa 'unmarried teenage girl' and so on.

6.1.3 Locational clauses

Under 'locational' I subsume locative and existential clauses: both relate two entities: a location (the place) and a locatee (the thing located), but differ in which is subject and which predicate.

6.1.3.1 Locative constructions

These involve a locatee as subject and a location as predicate (usually LOC, but ALLative if scattered or extended (3-54)):

6-9 dathin-a yarbud-a nal-iya kamarr-i
that-NOM snake-NOM head-LOC stone-LOC

The snake is on top of the stone.

Marked modalities may be signalled by the 'independent use' of modal case on the location (cf 7.1.3):

6-10 marrbi dan-ku natha-wu
might be here-MPROP camp-MPROP

Maybe (they'll stay) in this camp.

The topicality of the locatee may be indicated by the discourse deictic dathina, as in (6-9). Or the locatee/subject may be omitted, as in the subordinate clause of (6-12): where it also triggers 'odd pivot' complementizing case because of the object-subject pivot sequence (9.2).

6-11 ngada kaba-tharra kuru-na, [___ dan-kurrk]coq
I:NOM find-PST egg-MABL here-LOC:COBL

I found some eggs, (which are) here.

6.1.3.2 Existential constructions

These translate 'there are ... at place LOC', and have the same NOM:LOC/ALL case frame as locative constructions:

6-12 mutha-a mayaku mala-r
many-NOM crab(NOM) sea-ALL

There are many crabs around in the sea.
6-13 dathin-a ngarn-ki mutha-a dangka-walad
there-NOM beach-LOC many-NOM person-LOT(NOM)
There on the beach there are many people.

But with existentials the location is the topic, as revealed by the many clauses in which it has been anaphorically deleted, leaving only the NOMinative locatee:

6-14 mutha-a kalarrang-k
many-NOM mosquito-NOM
(There are) many mosquitoes (here).

Existentials may also mark the location with LOC, and the locatee with PROP:

6-15 dan-ki mijil-i mutha-wuru malji-wuru
this-LOC net-LOC many-PROP hole-PROP
There are many holes in this net.

The location may take modal case:

6-16 nyingka thaa-tharrba balmbi-nab, dathin-ku mijil-u
you:NOM return-PRECON tomorrow-MABL that-MPROP net-MPROP
mutha-wuru malji-wuru
many-PROP hole-PROP
When you return tomorrow, there will be many holes in that net.

Clauses of this type may be analysed in two ways. The location may be taken as a subject/topic which, exceptionally, takes LOC and its modal variants, or as a predicate topic in a subjectless sentence. Either way, this clause type is unusual.

6.1.4 Possessive constructions

These involve a subject possessee, and a possessor predicate containing a GEN or ABL NP, or a possessive pronoun:

6-17 ngada ngumban-ju ngalama-thu, nyingka ngijin-d!
I:NOM you-MPROP marry-FUT you:NOM my-NOM
I'm going to marry you, you're mine!

6-18 dan-da wumburung-ka ngijin-jina thabuj-ina
this-NOM spear-NOM my-MABL brother-MABL
This spear is my brother's.

6-19 dathin-a jar-a dangka-karran-d
that-NOM foot-NOM man-GEN-NOM
That footprint is a man's.

(See 3.3.8 for discussion of different types of possession).

3 On locative subjects see Lyons (1977:475-481).
6.1.5 Having constructions

These contain a subject denoting the possessor, usually human. Being topics, these are frequently omitted, e.g. 6-22. The possessee, a person, property or thing, takes ASSOCIative case when present 'on the spot', and the PROPrietive when more generally possessed (cf 3.3.10.2).

6-20 nyingka kuru-nurru
you:NOM egg-ASSOC(NOM)
You have some eggs (with you).

6-21 nyingka jangka-wuru maku-uru
you:NOM other-PROP woman-PROP
You've got another woman.

6-22 ___ balarr-u jul-u
white-PROP hair-PROP
(She) has white hair.

Where the possessee is only transiently present - a piece of fish about to be eaten, a dugong about to be shared out, a corroboree to be danced overnight (9-37) - a NOMinative:NOMinative frame is used.

6-23 kunya-wunya ngad, ngada jungarra-wu yakuri-wu diya-ju
dathin-ku
small—REDUP(NOM) I:NOM I:NOM big-MPROP fish-MPROP eat-FUT
That place Mardalk has a lot of stonefish.

NOM:NOM ‘having’ constructions are found in a few other Australian languages, where they may be formally indistinguishable from ascriptives. In Tiwi, for example, purrikikini pakilithipa [purrikikini:NOM initiand:NOM] may mean either 'P is an initiand' or 'P has an initiand', according to context (Osborne 1974:60-1).

‘Having’ constructions may also describe properties possessed by places:

6-24 mutha-wu kamarr-u dathin-a dulk , mardalk
many-PROP stone-PROP that-NOM place(NOM) ""
That place Mardalk has a lot of stonefish.

6-25 jirrkara mutha-wu diwal-u
north(NOM) many-PROP tree-PROP
(The) north (country) has a lot of trees.
6.1.6 Nominal predicates inflected for relational case

These involve the OBLique (6-26) or the ALLative (6-27). The allative in verbless clauses is only attested with the modal future.

6-26 nguku-ntha karndi-ya kunawun
water-OBL woman-NOM child(NOM)
The women and children (have to go) for water.

6-27 ngada dathin-kiring-ku kamarr-iring-ku
I:NOM that-ALL-MPROP stone-ALL-MPROP
I will (go) to that stone.

Although the verb warraja 'go' could be inserted in both these sentences, speakers do not deem it necessary for their grammaticality. With (6-26) at least, there would be some change in meaning: with no verb, the proposition outlines a general obligation of wives and children to fetch water; with warraja it would describe a single concrete situation.

The grammatical occurrence of these cases in verbless clauses is often treated as resulting from deletion of an underlying verb. Consider Morphy (1983:108): 'case-roles exist only in relation to verbs or adjective-predicates. For all types of "equational sentences" in which an NP is differentially case-marked, an underlying verbal structure has been posited.' And Dixon, on Dyirbal (1972:70), claims that sentences like bayi yara bagul barrgangu [the: NOM man: NOM the: PURP wallaby: PURP], though often heard, require a verb like 'go' for full grammaticality.

In K., however, no such syntactic constraint appears. Rather, the meaning of certain case suffixes includes a movement component, and provided that the meaning of 'movement' is expressed, whether by case suffix, verb, or both, the sentence is grammatical.

That peripheral (or 'semantic') case suffixes are logical predicators is even more evident with the 'verbal cases', which regularly occur with no main verb (3.4).
6.1.7 Nominal predicators

Many nominals in ascriptive clauses may govern quasi direct or indirect objects, or clausal complements. In this they resemble verbs.

Unlike verbs, however, they do not inflect for tense/mood/polarity. Nor is the use of modal case, found with nominal predicates in locative and existential clauses, acceptable with nominal predicates: we have ngada burdumbanyi niwanji [I ignorant him-LOC] for 'I do not know him' but not *ngada burdumbanyi-wu niwan-ju [I ignorant-MPROP him-MPROP] for 'I will not know him'. To express modality with nominal predicates, one must use a marked form of the verb wirdija 'be, remain' (6.1.8).

Nominal predicators typically describe epistemic or emotional states (translated by English stative verbs): mungurru 'know', burdumbanyi 'not know, be ignorant of', birrmurdami 'be sad, painfully aware', mulurra 'be jealous', bardakayulaanda 'be gut-scared'. mungurru and burdumbanyi may take apparent direct objects (6-28 & 6.2.4), mulurra and bardakayulaanda indirect objects (6-29, 6-30 & 6.2.3). Mungurru and birrmurdami may also take clausal complements (9.3.3).

6-28 dathin-ki kiyarrng-ki dangka-y ngada burdumbanyi
that-MLOC two-MLOC person-MLOC I:NOM ignorant (Nom)
I don't know those two men.

6-29 mulurra dathin-a dangka-a niwan-ju maku-uru-
jealous(NOM) that-NOM man-NOM his-PROP wife-PROP
That man is jealous over/suspicious of his wife.

6-30 ngada warra-ju, bardaka-yulaa-n-da niwan-ju dathin-ku dangka-wu
I:NOM go-PUT stomach-fear-N-NOM him-PROP that-PROP person-PROP
I'm going, I'm scared of that man.

Two other nominals take PROPrietive arguments: yulkaanda 'eternal'. yulkaanda + NP-PROP 'habitually inhabit': barrbarr 'weak'. barrbarr + NP-PROP 'weak with':

6-31 dan-da dangka-a dan-kur natha-wu yulkaa-n-d
this-NOM man-NOM here-PROP camp-PROP eternal-N-NOM
This man lives here all the time.

4Semantically, and in their choice of case, these resemble direct objects. But none of the usual syntactic tests for objecthood - behaviour in imperatives, or ability to feed the passive or reciprocal are possible. Similar comments apply to the 'indirect objects' of nominal predictors.
Pandanus wood is weak with holes.

"laden" and "full" take arguments in the ASSOCIative:

They have lots of food, the coolamons are laden with their food.

That billy-can is full of water.

Note the contrast between the temporary having expressed by the ASSOCIative case here, and the permanent, characteristic having expressed by the PROPrietary in 6-32. This correlates with other uses of these suffixes (see 3.3).

"good" takes a LOCative argument, with the meaning 'good at':

(He) is good at Kayardild, (speaks it) properly.

The 'copula' wirdiya

(a) The verb wirdiya 'stay, be at, remain' is optional and frequent in locative clauses. It is not a dummy copula however, but implies 'staying' , 'residing' or 'remaining'.

They are (staying) in the camp.

Many animals are staying there in their holes.

With the remaining verbless clause types, wirdiya only occurs in the unmarked modality where a 'pERSISTive' meaning ('is still') is intended, and is usually accompanied by the clitic -(i)da 'SAME' (6.7.4.1).

Is your mother still alive?
(b) In nominal clauses other than locational or existentials modal case cannot be used 'independently', and *wirdija* is the only way to express marked modalities:

6-39 *wa-warri wirdi-j*
    cry-PRIV be-IMP
    *Be quiet!*

6-40 *kunawuna bardaka-warri wirdi-jarr, bardaka-wuu-ja wuran-d!*
    child(NOM) stomach-PRIV be-PST stomach-give-IMP food-NOM
    *If the child is hungry, give him food!*

Here *wirdija* has no intrinsic meaning: it is just a bearer of tense/mood.\(^5\)

A limited exception involves the following formulaic request, built on the pattern 'I could have an X / could be Ving with an X, but have no X'. When a verb is present it takes the PaST with the modal ABLative, in the irrealis use of this combination:

6-42 *ngada warra-jarra kuwan-juru-ja, kuwan-marri.*
    I:NOM go-PST firestick-PROP-MABL firestick-PRIV
    kuwan-mu-j!
    firestick-VGIFT-IMP
    *I could be going along with a firestick, but have no firestick.*
    *Give (me) a firestick!*

Nominal clauses on this pattern use an independent Modal ABLative to signal the irrealis part:

6-43 *ngada nguku-uru-ja, ngawarri*
    I:NOM water-PROP-MABL thirsty(NOM)
    *I could have water, but instead I'm thirsty.*

(c) *Wirdija* may also be used with the meaning 'become'. It takes a subject complement which escapes modal case.

6-44 *mirra-a wirdi-ju*
    good-NOM become-FUT
    *(It)'ll get better.*

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\(^5\) In Lardil, the comparable verb *kuna* 'be (at)' appears in ascriptive clauses of marked tense/mood, as in 'if the child is hungry, then give him fish' (Klokeid 1976):

6-41 *mangarda kaburrjin kunaa-tharr, wutha yaka*
    child(NOM) hungry(NOM) be-MNFUT give fish(NOM)

Similarly Guugu Yimidhirr uses *wunaa* 'lie, exist' in marked tenses (Haviland 1979:117).
6-45 *ngarrku-wa jungarra dangka-a wirdi-ju dathin-a kunawun*

That boy will be a strong man when he grows up.

6-46 *yuujbanda bi-l-da wirdi-jarra ngarrku-wa dangka-a wirrka-a-n-ngarrb*

In the old days they became strong men after being initiated.

Note that *wirdija* here fills a functional gap: the INCHoative suffix -wa-tha which from nominals X derives verbs meaning 'become X', may apply only to lexemes, not NPs (2.1.2.1). To express 'become NP' this *wirdija* construction must be used.

Of the three uses of *wirdija* considered here - locative/persistive, bearer of tense/mood, and copula expressing 'becoming' - it could be described as a dummy in only the second. An analysis of the type Klokeid (1976) proposes for Lardil kunaa, in which the copula is present in 'underlying' structure but optionally deleted in clauses with unmarked tense, would be quite inappropriate, as it would fail to account for the distinct meaning *wirdija* has when it appears.

In Yukulta (Keen 1981:329) the only verbless clause types allowing *wirdija* are those involving location.

6.1.9 Comparison and quantification

Nominal predicates expressing degree contain *danda* 'this' plus a qualifying nominal:

6-47 *[dan-da walmu] [niwan-da wurrkin-d]*

*This is how high his back is.*

Resemblance is expressed by *maraka* 'CounterFACTual' (6.7.2.1), *warngiijida* [one-SAME] (6.7.4.1), or the semblative *minyi* (3.6.3.4):

6-48 *ngada warngiij-ida kinyin-da ngijin-da kajakaj*

*I've got the same body (physique) as my father.*

Possession of some attribute to a comparable degree is expressed by *maraka* with measure expressions, and by *thathungka* 'together' elsewhere:

6-49 *kiyarrng-ka wumburung-ka thathung-ka mirra-a*

*The two spears are equally good.*
Comparatives use nominal predicates. With the standard in the OBLique. In all my examples there follows an absolute predicate describing the standard.

6-51 dathin-a dangka-a ngarrku-wa dan-inja maku-nth, niya barrbarr
that-NOM man-NOM strong-NOM this-OBL woman-OBL 3sgNOM weak(NOM)

That man is stronger than this woman, she is weak.

To express the number of items possessed by someone, the possessor is given as the subject, then the number plus the type of item as the predicate:

6-52 ngijin-da kunawuna burldamnrr
my-NOM child(NOM) three(NOM)

I have three children.

This could in theory be parsed in two ways, with the division made after the first or the second word: 'Mine are three children' or 'My children are three'. But the first parsing is preferable, because it also accounts for clauses like the following (equally common):

6-53 kakuju! ngumban-da mutha-a yakuri-y!
uncle your-NOM many-NOM fish-NOM

Uncle! You've got a lot of fish! (Lit. 'yours are many fish').

6.2 Verbal clauses: basic argument structures

In this section, clause types will be characterized in terms of their main verb and the arguments it subcategorizes: subjects, objects, indirect objects, subject complements and object complements. 6-1 illustrates the permissible argument structures in K. A number of verbs also take finite subordinate clause complements, e.g. murnmurda-watha 'rejoice, be glad that S', kamburiya 'speak, say that S'; these are discussed in 9.3.

My criteria for identifying subcategorized functions were given in 2.3.1: three points made there are worth reviewing:

(a) **Objects and locations** often have identical case-marking: both take LOC alone in the instantiated modality, and MOD alone in marked modalities. They may be distinguished by: (i) Case-marking in zero modalities, where objects take the nominative and locations remain LOCative. Imperatives are a ready test here. (ii)
<table>
<thead>
<tr>
<th>Verb type</th>
<th>Case marking on arguments</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Impersonal</td>
<td>No arguments</td>
<td><em>wambajiwatha</em></td>
</tr>
<tr>
<td></td>
<td></td>
<td>'grow fine (weather)'</td>
</tr>
<tr>
<td>Intransitive</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Simple</td>
<td>Sub(NOM)</td>
<td><em>yiiwija</em></td>
</tr>
<tr>
<td>2. Subject</td>
<td>Sub(NOM) SComp(NOM)</td>
<td><em>ngaarrngiija</em></td>
</tr>
<tr>
<td>complement</td>
<td></td>
<td>'herald birth of SCOMP'</td>
</tr>
<tr>
<td>Middle</td>
<td>Sub(NOM) IObj PROP</td>
<td><em>janija</em></td>
</tr>
<tr>
<td></td>
<td></td>
<td>'search for'</td>
</tr>
<tr>
<td>Transitive</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Simple</td>
<td>Sub(NOM) Obj MOD</td>
<td><em>balatha</em></td>
</tr>
<tr>
<td>2. Cognate</td>
<td>Sub(NOM) Obj MOD</td>
<td><em>kamburiija</em></td>
</tr>
<tr>
<td>Object</td>
<td></td>
<td>'speak OBJ (language)'</td>
</tr>
<tr>
<td>3. Object</td>
<td>Sub(NOM) Obj MOD OComp MOD</td>
<td><em>kabatha</em></td>
</tr>
<tr>
<td>Complement</td>
<td></td>
<td>'find OBJ OComp'</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(e.g. 'find her asleep')</td>
</tr>
<tr>
<td>Ditransitive</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Object-theme</td>
<td>Sub(NOM) Obj MOD Location</td>
<td><em>wuuya</em></td>
</tr>
<tr>
<td></td>
<td>(LOC/MOD)</td>
<td>'put OBJ at Loc.'</td>
</tr>
<tr>
<td>2. IObj-theme</td>
<td>Sub(NOM) Obj MOD IObj PROP</td>
<td><em>wuuya</em></td>
</tr>
<tr>
<td></td>
<td></td>
<td>'give OBJ to IObj'</td>
</tr>
</tbody>
</table>

(Other argument frames of ditransitives are discussed in 6.2.5).

**Figure 6-1:** Basic Verbal Argument Structures in Kayardild
Objects, but not locations, can be topicalized by complementizing the clause \((9.5.2.1)\). (iii) Passivizability: objects but not locations are readily passivized. This last test is not foolproof - under certain conditions locations can be passivized \((6.3.2.3)\), and objects of certain verbs resist passivization.

Arguments labelled 'objects' have been so identified by the above tests.

(b) **Indirect objects** are defined more liberally here than in traditional grammar - they correspond better to the 'oblique objects' discussed in Kaplan & Bresnan (1982:196 et seq.) or the 'Term 3s' of Relational Grammar. As used here, the term covers the PROPrieteve second term of middle verbs like \textit{ngakath}a 'wait for IOBJ', and the PROPrieteve third term of three place verbs like \textit{kambur}ija 'talk to OBJ about IOBJ'. Indirect objects may take the PROPrieteve or LOCative (as with the verb \textit{wuuja} 'put OBJ at IOBJ'), but not all PROPrieteve or LOCative NPs are indirect objects. What is distinctive about indirect objects is that they participate in the argument alternations of 'promotion to object' and 'demotion of object to indirect object'; some indirect objects also feed the reciprocal. And like other core grammatical functions their meanings are not immediately evident from their case-marking, but depend on the subcategorizing verb.

(c) **Subject and object complements.** These are defined as subcategorized second predicates. Just about any verb can take a second predicate of manner on the subject, for example: these are adjuncts rather than complements \((6.4)\). But a smallish class of verbs, expressing alternate manifestation, equation or self-declaration, specifically subcategorize a second nominative argument \((6.2.2.2)\). With object complements the picture is less clear - see 6.2.4.3.

Derived verb forms with different numbers or arrangements of arguments are found in the passive \((6.3.2)\), reflexive \((6.3.3)\), causative \((6.3.4)\) and reciprocal \((6.3.1)\) constructions. Formally identical verbs may also govern different numbers of arguments, or set them in different case frames. For example, intransitive motion verbs may add objects, denoting 'affected locations'. The full range of alternate argument structures is discussed in 6.2.6.
6.2.1 Impersonal verbs

These all refer to celestial or meteorological processes, tides, etc. Most translate into English expressions with ‘ambient it’, such as malwiija ‘to flash (lightning)’, mumatha ‘to thunder’ and kalnaja ‘to dawn’. Many contain the INCHoative suffix, e.g. biril-wa-tha [calm-INCH] ‘grow calm’, or the DeTransitivized form of the FACtitive (6-54). Clauses containing these verbs lack any core NPs; the only NPs that can occur are temporal or locational adjuncts.

6-54 balmbi-wu warrngal-warri-r-i-ju, wambaji-wa-thu
tomorrow-MPROP wind-PRIV-FAC-DT-PUT clear-INCH-PUT

Tomorrow it will become calm and clear.

6.2.2 Intransitive verbs

6.2.2.1 Simple intransitive verbs

These describe (a) postures, as in yiiwiija ‘lie, sleep’, barnkaldiija ‘sit cross-legged’; (b) bodily processes as in kakija ‘vomit’, kulaaja ‘urinate’; (c) mental or emotional processes as in murnmurdawatha ‘rejoice’, kwalkulaaja ‘dream’, kanjuliiija ‘get angry’; (d) social activities, as in kamburija ‘talk’, wirrkaaja ‘dance, play’; (e) physical processes such as naaja ‘burn, smoulder’, muldija ‘bend’; (f) controlled or uncontrolled movements such as barrijija ‘crawl, move about’, dirraldija ‘stumble’, dubuldija ‘jump out of water (of fish)’, barijiija ‘fall’;

6-55 warrku-nurru nga-ku-l-da barrikaldi-j a jalji-y
sun-ASSOC 1-INC-PLU-NOM sit-ACT shade-LOC

At noon we sit in the shade.

6.2.2.2 Intransitive verbs taking a subject complement

These are few. So far I have only wirdija ‘become, remain’, ngaarrngija ‘(child) be presaged by (animal)’ and the near synonymous ngawijaliija ‘have SCOMP as conception totem’ (M.I.E. “sign for SCOMP”), kinaaja ‘declare oneself, show oneself to be (SCOMP)’, nguthaliyatha ‘pretend to be SCOMP’. mungurruwatha ‘know how to be SCOMP’. The verb in this argument type either links two manifestations of the same entity (e.g. the birth-totem animal is seen as consubstantial with the conceived child), or an entity and a property.

(After fighting his way across Bentinck Island through a shower of spears, Kajurku disappears into the sea. Some time later, his assailants sight a campfire on Sweers Island:)
6-56 (kajurku) birjin-ida kinaa-j
Kajurku alive-SAME declare-ACT
Kajurku was showing he was still alive.

6-57 jangka-a kunawuna ngaarrngi-ja yakuri-ɣ
other-NOM child(NOM) be presaged-ACT fish-NOM
(The conception of) another child would be presaged by a fish.

6-58 mungurru-wa-tha ngimi-ɣ ya niy
knowing-INCH-ACT night-NOM 3sgNOM
(He) knew how to be invisible (like the night).

6.2.3 Middle verbs
These take an indirect object in the PROPrieteive. They describe
(a) actions oriented into the future, such as janija ‘look for’ or ngakatha
‘wait for, on’ (but not kabathaatha ‘hun+, fish for, gather’, which is transitive).
(b) communications about entities, usually (perhaps always) absent, such as
kamburija ‘talk about’, waaja ‘sing about’.

6-59 bal-umban-ju kang-ku ngaka-th
west-ORIG-PROP word-PRQP wait-ACT
(They) are waiting on word from the west (before staging a corroboree).

6-60 barruntha-ya jani-ja thawal-u
yesterday-LOC search-ACT yam-PROP
Yesterday (we) looked for yams.

6-61 jardaka kamburi-ja kurirr-wu dangka-wu
crow(NOM) speak-ACT dead-PROP man-PROP
The crow speaks of dead men.

Although janija usually occurs in the SUBJ IOBJ frame, it also allows
a ‘cognate object’ naming the place searched:

6-62 jani-jarra dust-in-a niwan-juru
search-PST ground-MABL 3sg-PROP
(They) searched the ground for him.

Ngakatha and janija allow an alternate case frame in which the intentional
object takes the Verbal Purposive; as the latter is semantically
transparent is is best considered an adjunct. Ngakatha but not janija
allows a third option, the Verbal TRANSLative; its unacceptability with
janija is presumably due to the semantic incompatibility of the resigned
waiting normally expressed by the Verbal TRANSLative and the active
searching implied by janija.

Nominal predicates involving anticipation, such as mulurra ‘jealous of'.
suspicious of' and bardakayulaanda 'gut-scared of' likewise take indirect object-like PROPrietive arguments - see 6.1.7.

6.2.4 Transitive verbs

6.2.4.1 Simple transitive verbs

These describe processes of effect or transformation: (a) physical impact or transformation, e.g. balatha 'strike, kill', karnaja 'burn, cook'; (b) manufacture as in mirrayalatha 'make'; (c) transport as in badiia 'carry'; (d) movement that reaches a goal, thereby affecting it, as in warraja 'go to or trespass on a place'. daliia 'come through to, reach'; (e) socially significant act directed at some person e.g. kamburiia 'speak to', wamatha 'yell at', durumatha 'lie to', kinaaja 'inform'. ngarrakaaja 'avoid looking at' (e.g. mother-in-law). warnaja 'avoid, dislike'; (f) failed telic activities, e.g. ngayamaaja 'look at and fail to recognize'. walatha 'miss'; (g) controlled or uncontrolled perception or cognition as in kurriia 'see, look at', marriia 'listen to, hear, understand', marralngulatha 'dream (name for child)', bardakamarutha 'think about, miss', yulaaja 'fear, be scared of'. All these verbs take the affected or perceived entity as object.

In all but groups but (f) and (g), lexical decomposition would yield a cause predicate. (a), exemplified by 'kill', would contaiń 'SUBJ cause [OBJect become (dead)]'. (b), e.g. 'make', would be 'SUBJ cause [OBJect exist]'. (c), e.g. 'carry', would be 'SUBJ cause [OBJ move]'. (d) is more complicated, and is discussed in 6.2.6.1. (e), as exemplified by durumatha 'lie', would be 'SUBJ cause OBJ to mistakenly believe'. 'Failed telic' verbs contain a negative predicate embedded under a cause predicate. Walatha 'miss', for example, would be 'SUBJ want [X hit OBJ] & SUBJ cause [not [X hit OBJ]]'.

The presence of perception verbs, which do not contain a cause predicate, is logically inconsistent, but widespread in Australia.

6-63 dathin-a jardi-ya maku-y kamburi-ja / bala-th
that-NOM mob-NOM woman-MLOC speak-ACT

Those people are speaking to / hitting the woman.

6These representations are grossly oversimplified. In particular, it is SUBJ's actions, rather than SUBJ himself, which should be the first term in the CAUSE predicate. For discussion see Dowty (1979) and Foley & Van Valin (1984:52).
One avoids looking at one's mother in law, one's mother in law mustn't be looked at.

She'll miss (eating) fish (going to Mt Isa).

Also anomalous semantically is the presence of transitive verbs like kamburija 'speak to', yulaaja 'be afraid of' and yathuyija 'laugh at', which are middle in most languages, Australian or otherwise. In Yukulta, at least some of their cognates, such as kamburija 'speak to' and birlkaliija 'be sorry for' are middle, taking dative indirect objects. It is likely that when pre-Kayardild took middle constructions derived by an 'antipassive' as canonical (7.4.2.2), constructions with lexical middle verbs such as the above were reanalysed as derived antipassives, and transitive argument structures attributed to them by a sort of syntactic back formation. In another accusative Australian language, Martuthunira, a number of transitive verbs also derive from historic middle verbs, probably via a similar process (cf Dench 1983).

Transitive verbs with cognate objects

The verbs kamburija 'speak' and waaja 'sing' can take as objects either the medium (or 'cognate object' - Austin 1982), or the audience: cf rarumbanji kangki kamburija 'speaks the southern language(OBJ)' and ngijinji kamburija 'speaks to me(OBJ)', and wangarri waaja 'sings a song(OBJ)' and ngijinji waaja 'sings to me(OBJ)'. Although I never heard a spontaneous example, informants accepted made-up sentences with both types of object, such as:

Soon he will speak proper language to me.

For some of these, however, such as yulaaja 'fear' and yathuyija 'laugh at', the label 'transitive' must be qualified. Although their 'objects' take regular object case-marking, and are NOMinative in imperatives, they cannot be promoted via passivization. In Lardili, too, (Klokiel 1976:281-2) there are verbs like keell 'wait for' and wutha 'give to', which govern object-like case-marking but do not passivize. Such verbs, it appears, are only partly assimilated to the transitive pattern.
6.2.4.3 Transitive verbs taking an object complement

A number of transitive verbs, most notably perception verbs, take an optional object complement. These agree in case with the object:

6-67 malangarrba-ya ngada marri-ja dathin-ki dangka-\text{y} drunk-MLOC I:NOM hear-ACT that-MLOC man-MLOC
I heard that man drunk.

6-68 ngada kurri-ja niwan-ji mibulk-i / dii-n-ki
I:NOM see-ACT 3sg-MLOC asleep-MLOC sit-N-MLOC
I saw him asleep/sitting down.

Object complements of active clauses correspond to subject complements of passive clauses. And if the object is topicalized by complementizing the clause (6-69, see 9.5.2.1), the object complement still agrees with it in case, taking the nominative.

6-69 [dangka-a mibulk-a / dii-n-da ngijuwa kurri-jarra-nth]_{\text{COBL}}
man-NOM asleep-NOM sit-N-NOM lsgSUB:COBL see-PST-COBL
I saw the man (topic) asleep / sitting down.

6-70 dangka-a kurri-i-ja mibulk / dii-n-d
man-NOM see-DT-ACT asleep(NOM) sit-N-NOM
The man was seen asleep / sitting down.

Although these properties could all be explained by taking the object complement as part of the same NP constituent as the object, there are good arguments against this:

(a) object complements do not obey the normal ordering requirements of modifiers within an NP: they are frequently widely separated from their heads (6-67), or appear out of the normal order. In 6-76, for example, the object complement precedes the pronoun niwanji; were an attributive reading intended, the order would be niwanji kurumbali.

(b) manner and predicate nominals, which cannot be modifiers within ordinary NPs, may appear as object complements, e.g. mibulka 'asleep' in 6-68 to 6-69.

(c) semantically, object complements serve not as qualifiers (? 'the asleep man') but as secondary predicates, with meanings as discussed below.

I therefore assume that object complements are distinct constituents, and that their agreement with the object is accounted for by case linkage. (Similar arguments may be applied to second predicates on the subject - see 6.4).
The most important use of object complements is with perception verbs: the object complement makes a predication about how the object is at the moment of perception: there may be a further implication that more lasting knowledge about it was acquired in the process (6-71). The object complement may be an ordinary noun/adjective (6-71), a manner nominal or nominalized verb (6-67), or a nominalized clause containing a verb, plus NP arguments bearing AOBL (6-72; 8.4):

6-71 ngada barruntha-ya kurri-ja barrngka-warri-ya warirra-ya
I:NOM yesterday-MLOC see-ACT waterlily-PRIV-MLOC nothing-MLOC
jingka-y
swamp-MLOC
Yesterday I saw the swamp to have nothing, no waterlilies.

6-72 ngada kurri-jarra niwan-jina barrki-n-kina thungal-inaa-nth
I:NOM see-PST him-MABL chop-N-MABL tree—MABL—AOBL
I saw him chopping the tree.

Kabatha 'find' and danatha 'leave' are semantically similar. With kabatha the object complement is predicated of the object at the moment of being found: with danatha it describes the object after the subject left:

6-73 niya dangka-na kaba-tharra jalji-nurru-na yliwi-n-kina
3sgNOM person—MABL find-PST shade—ASSOC—MABL sleep-N-MABL
He found the person in the shade, sleeping.

6-74 dathin-a mangara dana-tha wambal-i mala-nurru-y
that-NOM cyclone(NOM) leave-ACT bush—MLOC sea—ASSOC—MLOC
The cyclone left the bush country submerged under the sea.

Kinaaja 'say. tell' allows a number of case frames (6.2.6.6). Relevant here, it may take an object complement, with the meaning 'declare OBJ to be OBJ COMP', as in:

6-75 niya dangka-durma-n-d, kinaa-ja nguman-ji warra-n-ki
3sgNOM person-lie-N-NOM say-ACT you—MLOC go-N—MLOC
He's a liar, he said you were going.

Kamburija 'speak. say' also allows this.

With many clauses it is hard to decide whether a true object complement (i.e. one subcategorized by the verb) is involved, or merely an adjunct second predicate on the object. Simpson (1983), discussing this problem in Warlpiri, concludes that the question is undecidable.
My own data on K is too scanty to resolve this question. With some verbs the interpretation of the NP depends idiosyncratically on the nature of the main verb, favouring the complement analysis. Thus 'eat' takes 'depictive' object complements describing the form in which the food is consumed (6-76), a meaning preserved in the corresponding passive (6-77):

6-76 kurumbal-i niwan-ji diya-j
    squeezed balls-MLOC 3sgNOM-MLOC eat-ACT
(We) eat it (the stingray) in the form of balls of squeezed flesh.

6-77 balkan-da diya-a-ju kurirr
    fish washed up by cold wind-NOM eat-DT-FUT dead(NOM)
Balkanda fish can be eaten dead.

With others, more than one interpretation is available. In 6-78, for example, 'slippery' is interpreted as a circumstantial: 'they lost the dugong, because it was slippery'. But with the same verb in other contexts the NP can be interpreted as a depictive (6-79):

6-78 bi-rr-a yurruma-n-ki wara-th
    3-DU-NOM slippery-N-MLOC send-ACT
They sent (the dugong) off slippery.

6-79 nga-1-da wara-tha niwan-ji dara-thirri-n-ji
    1—PLU-NOM send-ACT 3sg-MLOC break-RES-N-MLOC
We sent him away circumcized.

A great deal more work is needed on how far the interpretation of such NPs depends on the meaning of the verb, and how far it depends on more general context.

6.2.5 Ditransitive verbs

About a dozen verbs, expressing the transfer of goods or information, are ditransitive.

All of the verbs and frames discussed in this section express transfer of possession, rather than position. (The possession may be in a rather broad sense, as in (6-122), where the thing transferred is a rock 'belonging to' a sacred cave). For transfer of position verbs like thaarija 'take back to', kurrkatha 'take', dalijarrmatha 'bring' and badija 'carry',

---

8 I use ditransitive in the broad sense of having three arguments, rather than in the narrow sense of taking two direct objects.
the case marking is semantically predictable. The thing moved is object, the goal/destination takes the Verbal Dative, and the source of movement takes the Verbal ABLative, as in:

6-80 *dali-jarma-tha ngurrumanji dan-maru-tha ngarn-mula-th*

*come-CAUS-IMP bag(NOM) here-V.D-IMP beach-V.ABL-IMP*

*Bring the bags here from the beach!*

Ditransitive verbs allow up to five alternate case frames, if we include those involving verbal case. 6-2 summarizes these for the verb *wuuja*, 'give', which is the only verb allowing all five.

<table>
<thead>
<tr>
<th>Frame No.</th>
<th>Theme</th>
<th>Goal</th>
<th>Approx. meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Obj (MOD)</td>
<td>LOC (LOC/MOD)</td>
<td>Pass OBJ to LOC, put OBJ at/in LOC.</td>
</tr>
<tr>
<td>2</td>
<td>PROP</td>
<td>OBJ (MOD)</td>
<td>Give PROP (important gift or information) to OBJ; implies contractual exchange.</td>
</tr>
<tr>
<td>3</td>
<td>OBJ (MOD)</td>
<td>V.D.</td>
<td>Give OBJ/PROP for immediate benefit of V.D.; implies regular minor obligation.</td>
</tr>
<tr>
<td>4</td>
<td>PROP</td>
<td>V.D.</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>V.GIFT</td>
<td>OBJ</td>
<td>Give V.GIFT to OBJ out of kindness.</td>
</tr>
</tbody>
</table>

'Theme' is the thing transferred, 'goal' the place it is transferred to, or the human recipient.

Figure 6-2: Alternate case frames of the verb *wuuja* 'give'

6.2.5.1 Case frames of the verb *wuuja* 'give' and its hyponyms

I will now discuss these frames in more detail.

Frame (1) is used where the emphasis is on change of position alone: 'put' or 'pass' is usually the best translation (6-81, 6-82). It is also suitable for informal transfers between humans, as in (6-83): a fish head may change hands over a camp fire, but is hardly a suitable ritual gift.

6-81 *kaburrba-ya wuu-ja wuran-d, karna-ja coals-LOC put-IMP food-NOM cook-IMP*

*Put the food on the coals, cook it!*

6-82 *dathin-a marrwa-ya wuu-ja wumburung-ki*

*there-NOM near-LOC put-ACK spear-NOM*

*Put the spear close by over there!*
Frame (2) is used for important gifts made as part of a reciprocal contract. The PROPrietary stresses that the donor is initially in possession of some significant object, and is thereby in a position to enter a contract. 6-84, for example, discusses the infant betrothal ceremony: a mother gives the future son-in-law her daughter [PROP], thereby setting up a lifelong contract committing the man to frequent gifts of food in return for his wife:

6-84 ngamathu wuu-ja thawula-y darr-i kardu-uru
mother(NOM) give-ACT son in law-MLOC thigh-MLOC daughter-PROP
A mother would give her young daughter onto her son-in-law’s thigh.

6-85 is from the Nalkardarrawuru story, in which humans dig and dig for water, without success. Finally Nalkardarrawuru, the waterlily being, emerges from their dry well, and offers water to humankind, but only in exchange for their wives and daughters. Note the use of alternate case frames: Nalkardarrawuru’s call to ‘give me your wives and daughters’ uses the object-theme frame, since his demand is not, at that stage, in fulfilment of any ritual obligation: he is speaking from a position of power. But ‘and I will provide mankind with water’ takes the OBJECT-SOURCE frame, as it is offered as a fair gesture of reciprocation.

6-85 wuu-ja ngijin-ji kilwan-d, nguku-uru wuu-ja dangka-y
give-IMP me-LOC your(PL)-NOM water-PROP give-ACT person-MLOC
Hand over to me your (wives and daughters), (and I) will provide mankind with water.

Frames (3) & (4) are used when small gifts and favours are transferred as part of the regular network of obligations to kin: I have been unable to find a meaning difference between them.

6-86 wuu-ja wirrin-da ngijin-maru-th!
give-IMP money-NOM me-V.D-IMP
Give me money!

6-87 maku dun-maru-tha wuu-ja nguku-uru
woman(NOM) spouse-V.D-ACT give-ACT water-PROP
A woman gives water to her spouse.

Frame (5) is used with gifts made out of spontaneous kindness or solace, as in 6-88, said on finding a small boy found exhausted and hungry after being lost for several days:
Two transfer verbs take just one of the above case frames. *Yalawu-ja* 'obtain by scooping action: dig up water' takes frame (3), as in *yalawuja ngukuwa dunmaruthal* 'get water for (your) husband!'. *Wakaratha* 'share' takes frame 4: *wakaratha wurankuru ngijinmaruth!* 'share the food (PROP) with me (V.D)!'.

The remaining ditransitive verbs fall into two classes: verbs of information transfer, and verbs of dispossession.

6.2.5.2 Verbs of information transfer

The two chief verbs in this category are *kinaaja* 'tell' and *marraaja* 'show'. Between them they use three of the five frames dealt with above, with comparable meanings: they also have a distinct THEME-LOCative GOAL-OBJECT frame (6).

Frame (2) is used where a knowledgeable subject teaches the object-goal about the indirect object theme. The following command instructs the addressee to explain about the spear — how to use it, throw it etc (cf 6-93 below):

6-89 *marraa-ja ngijin-ji kurrumbu-uru*

Show me about the spear; teach me about the spear by showing me.

Other communication verbs like *kamburija* 'speak' and *waja* 'sing' have a similar meaning in this frame: 'speak to OBJ about PROP (some complex subject)': *waja* 'sing to OBJ (audience) about PROP (e.g. dugong hunting)'. (But *kinaaja*, in this frame, normally has a dispossession meaning — 6.2.5.3).

When in this frame, information transfer verbs can co-occur with *wuuja*, which may be regarded as superordinate to them (cf Dixon 1982, Ch.3), in a sort of adverbial complex (5.10.1). e.g. *marraaja wujuja ngijinji kurrumburu* (=6-89). When paired with *wuuja*, *kinaaja* can be used with the same sense:

6-90 *kinaa-ja wuu-ja ngijin-ji dathin-kuru dulku *

Tell me about that place.

Frame (3) is the unmarked choice with information transfer verbs. It merely implies that the subject presents the information to the recipient: *marraaja ngijinmaruth!* 'show it to me', *kinaaja ngijinmaruth!* 'tell it to me (pass on the gossip)'.

Frame (5), like (2), is typically used in an educational context:

6-91  *kinaa-ja kunawuna ngungu-u-j*

Tell the child the story!

6-92  *waa-ju ngada ngumban-ju kalangin-mu-ju wangarr-wu-ju*

I’ll sing you an old song.

The difference is that in (5) the information is the theme, whereas in (2) the information is about the theme.

Frame (6) is a special frame, limited to information transfer verbs. Here the theme takes the LOCative, and the goal is object. This is used where the information transferred is simple and spatial — typically it just involves pointing to or naming a location:

6-93  *marraa-ja dangka-a kurrumbu-y*

Show the man the spear (by pointing to it); show him where it is.

6-94  *[nying-ka ngaaka-ntha dangka-ntha kinaa-jarra-ntha bayi-naa-nth?]*

Who told you about the fight (where it was)?

(Here the goal-object has been topicalized by complementizing the clause — 9.5.2.1.).

6.2.5.3 Verbs of dispossession

These express the removal of PROP from the possession of OBJ. This is the only case frame available to verbs of this group, which includes the verbs *marndija* ‘deprive OBJ of PROP, cadge PROP off OBJ’, *nginymariija*, *daamiija* and *kamarrija*, all ‘ask OBJ for PROP’; and *kinybatha* ‘yell out to OBJ for PROP’:

6-95  *dathin-a dangka-a dangka-walath-iya marndi-ja yakuri-wur*

That man cadges fish off everyone.

6-96  *nying-ka kamarrí-ja ngumban-da duujin-da wumburung-kuru*

Ask your younger brother for the spear!

6-97  *namu nyinnga ngynamari-ja ngijin-ji dirradirra-wu*

Don’t you ask me for ochre!
The verb *barrwaaia* 'block off person (MOD) from country (MOD), as in Text 3 Line 40, may be analysable as having two objects. But I lack the crucial sentences (passives, imperatives) that would provide evidence for this. Another possible analysis is that the person blocked off is Object and the place is a locative adjunct.

### 6.2.6 Verbs with alternate argument structures

Several classes of verbs exhibit systematic polysemy, reflected in alternate argument structures, but not signalled by formal change in the verb. Those found with ditransitive verbs have just been discussed. Other classes involved are:

#### 6.2.6.1 Motion verbs

A number of basically intransitive motion verbs, such as *warraja* 'go', *daliia* 'come', and *burriia* 'emerge', though usually intransitive, may take an 'object of location'. Instead of the various motion cases that normally code destination. The object status of the location is shown by nominative marking in imperatives (6-98) and ready passivizability (6-99):

**6-98 thula-tha jingka-a**

_**Go down to the swamp!**_

**6-99 dan-da marnda-a ja-yii-jarri**

_This hole hasn't been entered (i.e. no-one has checked it for food)._ With *warraja* and *daliia* the transitive frame implies that some location was reached, with bad consequences - respectively 'go to a place one shouldn’t, trespass on' and 'get through to' (cf 6-137):

**6-100 ngimijida kungul-da dali-ja kunawuna-y**

_Early this morning the mosquitoes got to the child (through the smoke, net, etc.)_

*Warraja*, in a transitive frame, may also mean 'go away from':

**6-101 warra-ja ngijin-ji wuran-ki / wangalk-i**

_Get away from my food / from my boomerang._

*Burriia* 'emerge', used transitively, means 'ambush':

6-102 ngada burri-i-j, dangka-a burri-ja ngijin-ji
I:NOM emerge-DT-ACT man-NOM emerge-ACT me-MLOC
I was ambushed, a man ambushed me.

6.2.6.2 Emotion verbs

Yulaaja 'feel afraid' and yathuyiija 'laugh', normally intransitive, may take
objects referring to the entity causing these emotions:

6-103 namu yulaa-ja / yathuyii-ja ngad!
NEGAT fear-IMP laugh-IMP I:NOM
Don't be afraid of/laugh at me!

'Objects' of these verbs, however, may not be promoted by
passivization. Cf 6.2.4.1.

6.2.6.3 Wirrkaja

Wirrkaja may be an intransitive verb meaning 'play' or 'dance'. But it may
also be used transitively with the sense 'initiate (OBJ)', 'play with (OBJ)' or
'dance up (OBJ) (e.g. a storm)'. This verb is readily passivizable:

6-104 dan-ku darr-u dathin-a kunawun-a wirrka-a-ju
this-MPROP time-MPROP that-NOM child-NOM initiate-DT-FUT
This time that boy will be initiated.

6-105 dathin-a dangka-a warrmara-ntha wirrka-n-d
that-NOM man-NOM wind-AOBL dance-N-NOM
That man is dancing up a wind.

6.2.6.4 Adding 'anticipated' indirect objects

There is a productive alternation by which verbs of movement may add a
PROPrietary indirect object indicating the anticipated goal or purpose of the action:
thaldiija 'stand (v.i.): stand up for IOBJ': warraja 'go. walk: go about (looking)
for IOBJ'. Note also wirdija 'stay: hang around for IOBJ' (6-107).

6-106 ngada warra-ja wirdi-ja wuran-kur, wuran-ki kaba-tharri
I:NOM go-ACT stay-ACT food-PROP food-MLOC find-NEGACT
I walked around all day looking for food, but didn't find any.

A possible cognate of this verb is Nyangumarda wirrka- 'cut (meat)' (O'Grady 1960). This suggests the
following sequence of semantic changes:

Cut (meat) \rightarrow Cut (penis) \rightarrow \text{Initiate} \rightarrow \text{Dance, as at} \rightarrow \text{Play (v.i.)}
CIRCUMCISE (v.t.) INITIATION (v.i.)

It this is correct, then the transitive meaning is historically prior.
Perception verbs may likewise add a PROPREtive indirect object marking the anticipated object of perception:

6-108 ngada kurri-ja bulkurdudu-y
   I:NOM see-ACT crocodile-MLOC
   I saw/looked at the crocodile.

6-109 ngada kurri-ja bulkurdudu-uru
   I:NOM see-ACT crocodile-PROP
   I watched for a crocodile.

This is not simply an alternation between transitive and middle case frames (as in Warlpiri), for a cognate object giving the place scrutinized may also be present:

6-110 kurri-ja karrngi-ja dulk-a niwan-ju!
   see-IMP keep-IMP ground-NOM him-PROP
   Keep watching the ground for him!

It is the anticipated indirect object, however, rather than the cognate object, that feeds reciprocals:

6-111 bi-l-da kurri-nju-tha dulk-i
   3-PLU-NOM see-RECIP-ACT ground-MLOC
   (Of two people each looking for the other's tracks:) They searched the ground for each other.

PROPrietive Indirect OBJECTs promoted to OBJECTs

In two types of construction PROPrietive indirect objects may be promoted to object, although with rather different semantic effects.

Janila 'look for' normally takes an indirect object in the proprietive (eg 6-60). But if the act is viewed as abandoned without success, the thing searched for may appear as an object, presumably by analogy with transitive 'failed telic activity' verbs like ngayamaja 'fail to recognize OBJ' (6.2.4.1).
The verbs *kamburija* 'talk about IOBJ' and *waaja* 'sing about IOBJ', on the other hand, allow the person or thing talked about to appear as Object if they are affected in some way by the communicative act:

(The K believe they can feel in their stomach when someone is saying bad things about them behind their back):

6-114 dangka-a kamburi-ja ngijin-ji, ngada bardaka warrili-i-ji
person-NOM speak-ACT me-MLOC I:NOM stomach(NOM) feel strange-ACT

Someone is saying bad things about me; my stomach feels strange.

6-115 ngada kunya-na kunawuna-na waa-jarr, bardaka-jilari-wuru
I:NOM small-MABL child-MABL sing-PST stomach-ache-PROP

I sang the small child (better), (he) had a stomach ache.

6-116 bi-l-da waa-n-da dijarr-inj
3-PLU-NOM sing-N-NOM stingray pin-AOBL

They are singing the stingray pin (so it won’t hurt too much).

6.2.6.6 Speech act verbs

This semantic class presents the richest set of alternative argument structures. The full set of possibilities are presented in 6-3, using three out of a number of speech act verbs: although no single verb realizes them all, *kinaaja* makes use of eight, *kamburija* of five and *kamarrija* of three. Examples of frames (5) and (6) are given in Chapter 9; the remainder have been exemplified in 6.2.2 - 6.2.5.

Note that often the alternative argument structures of one Kayardild verb lexeme translate into several English lexemes.

Other speech act verbs with multiple argument structures are *durumatha* 'tell lies. lie to OBJ', *wamatha* 'yell. yell out at OBJ. yell out to (clause). yell out for IOBJ', *waaja* 'sing. sing OBJ. sing about IOBJ'. *daamija* 'ask OBJ what (WH-clause). ask OBJ for PROP'.

6.2.7 Accusativity and argument structure: some typological consequences

As shown above, a large number of K verb lexemes alternate between transitive and intransitive case frames. Other accusative Australian languages are comparably liberal, as shown by the following examples from Lardil and from Martuthunira (Ngayarda subgroup):
(1) simple intrans. Engage in communicative activity.
   *kamburija* 'talk, speak'
   *kinaaja* 'recount, tell stories'

(2) simple intrans. Say something about oneself
   plus subject complement
   *kinaaja* 'declare oneself SCOMP'

(3) simple trans
   (i) Communicate in medium
   *kamburija* 'speak OBJ (language)'
   (ii) Communicate to person
   *kamburija* 'speak to OBJ (person)'
   *kinaaja* 'inform OBJ (person)'
   *kamarrija* 'ask OBJ (person)'

(4) trans with object comp
    Say that OBJ is OCOMP
   *kinaaja* 'declare OBJ to be OCOMP'

(5) simple trans
    plus jussive clausal comp
    Communicate to person to do V
   *kamburija* 'say to OBJ to CLAUSE'
   *kinaaja* 'suggest to OBJ to CLAUSE'

(6) simple trans
    plus WH clausal comp
    Communicate to person about a question
   *kamarrija* 'ask OBJ about WH CLAUSE'
   *kinaaja* 'tell OBJ about WH CLAUSE'

(7) ditransitive
    (i) communicate OBJ (fact, story) to V.D (person)
    *kinaaja* 'tell OBJ to V.D (person)'
    (ii) tell OBJ about IOBJ
    *kinaaja* 'tell OBJ about IOBJ'
    (iii) communicate to OBJ (person) about (transfer of) IOBJ (to SUBJ)
    *kamarrija* 'ask OBJ for IOBJ'
In ergative Australian languages such as Dyirbal (Dixon 1972), Yidiny (Dixon 1977:206) Ngiyambaa (Donaldson 1980) and Diyari (Austin 1981a), on the other hand, such alternations in transitivity are not possible. A given verb lexeme is either transitive or intransitive, and alternations in transitivity must be accompanied by some formal marking, such as a change in verb conjugation.

Dixon (1980:378), basing his generalization on the ergative majority, comments: 'every verb in an Australian language is strictly transitive - occurring with subject (A) and object (O) NPs - or strictly intransitive - occurring just with a subject (S) core NP. It is usually a simple matter to determine transitivity.'

Verbs taking 'cognate objects' are a partial exception (Austin 1982). In Diyari, for example, six verbs take cognate objects: 'speak' (a language) 'dance' (a ceremony), 'lie', 'play' (a game), 'wear' (clothing) and 'be painted' (a pattern). Significantly, subjects remain in the S (intransitive subject) case, even though the extra NP behaves syntactically like an object.

Two other features of K grammar further stress the relative unimportance of transitivity as a syntactic category:

(a) As mentioned in 5.10, there is no requirement in K that all verbs in a 'verb complex' agree in transitivity. In such ergative languages as Dyirbal (Dixon 1972:64) and Yidiny (Dixon 1977:252), on the other hand, transitivity-agreement within verb-complexes is strictly required.

(b) A corollary of (a) is that Kayardild has no transitivity-sensitive adverbal forms. *Mirrayalatha* 'do well', for example, may be used with intransitives, as in *mirrayalatha wirrkaja* 'dance well', and with transitives, as in *mirrayalatha ngudija*
wangalki 'throw the boomerang well'. In ergative Yukulta, by contrast, adverbs have transitivity-specific forms: mirralaja wukuwa 'work well' vs wangalka mirralatha ngudi 'throw the boomerang well'. Similarly, the verbal ablative case is transitivity-sensitive in Yukulta but not in K^{10} (see 3.4.2.4).

These differences between accusative K and the various ergative Australian languages mentioned above can be explained if we accept Goddard’s (1982) argument that most so-called ergative languages in Australia actually have three core cases, ergative (A), nominative (S) and accusative (O) (cf Mel’cuk 1979).

If transitive and intransitive verbs were mixed in a clause, they would assign conflicting cases (usually A and S, but O and S in a syntactically ergative language like Dyirbal) to their subject. In an accusative language like K, on the other hand, there are no grounds for distinguishing A and S cases, these being joined in a single ‘nominative’ case, assigned to the subjects of transitive and intransitive verbs alike, so there can be no case clash.

With regard to lexical argument structures, one might propose that verb lexemes readily tolerate changes in case-assignment to non-subject arguments, but require that their subjects always be assigned the same case. In an accusative language the subjects of intransitive and transitive argument structures alike will be assigned the same case (nominative); in an ergative language, on the other hand, transitive and intransitive argument structures will assign their subjects different cases (A or ‘ergative’, and S or ‘nominative’, respectively).

Warlpiri (Hale 1982a) and Arrernte (Wilkins in prep.) have a productive pattern of adding dative arguments, which denote a goal or the ‘failed object’ of transitive verbs. Interestingly, even here the case of the subject is unchanged, remaining ergative. Cf Warlpiri luwa-rni ‘SUBJ (ERG) Shoot OBJ (ABS); SUBJ (ERG) shoot at IOBJ (DAT)’.

Two interesting implications emerge from the above discussion: (a) clausal transitivity is far more important as a syntactic category in ergative languages (b) ergative and accusative languages differ not only in their syntactic rules, but also in their patterns of regular verbal polysemy (or ‘lexical redundancy rules’).

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^{10}In this respect Lardil seems to be relatively conservative: the motion verbal cases are transitivity-sensitive (Hale 1981a).
Of course, this by no means exhausts the regular typological differences between ergative and accusative languages. All accusative languages in Australia, for example, have passives, which are rare in ergative languages; and all have some kind of object-focussing construction.

6.3 Verbal clauses: derived argument structures

6.3.1 Reciprocal clauses

These indicate reciprocal activity, where each participant is at once agent and patient. The RECIPocal verb form (5.4.3) is used, and the subject is a nominal referring to the whole set of participants:

6-117 burldi-nju-na  
ki-rr
throw missile-RECIP-NEG.IMP you-DU(NOM)

Don't you two throw stones at one another!

Although the two participants are merged in a single subject, leaving no overt patient, reciprocal clauses retain the transitivity of their corresponding non-reciprocals. This is demonstrated by the fact that involved body parts take modal case, as objects would:

6-118 dan-da  
maku-wala  
mirra-yala-thu-th ,  
darri-nju-thu
this-NOM woman-LOTS(NOM) good-DO-RECIP-ACT tread-RECIP-FUT

bardakawa
belly-MPROP

These women, they massage each other, they tread on each other's bellies (to induce labour).

Since body parts belonging to the subject would escape modal case, bardakawu must be construed with some object.

Clauses of this type provide evidence that whole and part in locus-of-effect on object constructions should be treated as two distinct NP constituents, i.e. as object and second predicate on object, rather than subconstituents of the same NP. A representation of 'tread on OBJs belly', for example, might be 'SUBJ tread on OBJ on belly (OCON)'. Reciprocalization then combines the objects of two clauses into a plural subject, leaving the object second predicate stranded.

Among morphologically ergative languages in Australia, Diyari (Austin 1981a) has an adversative passive; Guugu Yalanji has been said to have a passive construction but its analysis is problematic and it functions as an antipassive with some verbs (Blake 1977, Patz 1982).
Indirect objects of the middle verbs ngakatha 'wait for' and janija 'search for' feed the reciprocal:

6-119 ngaka-thu-tha / jani-nju-tha bi-rr
wait-RECIP-ACT search-RECIP-ACT 3-DU(NOM)
They are waiting/searching for each other.

So do the indirect objects of transitive verbs like kurrija 'look', set in a middle case frame (6.2.6.4).

6.3.2 Passive clauses

Passives involve (a) use of the detransitive verb form (5.4.1) (b) promotion of active object to passive subject (c) omission of the active subject, or demotion to an oblique NP in a variety of cases, as outlined below. A typical active/passive pair is:

6-120 dathin-a kulkiji baa-ju ngumban-ju
that-NOM shark(NOM) bite-FUT you-MPROP
That shark will bite you.

6-121 nying-ka ba-yii-ju dathin-kiwa-thu kulkiji-iwa-thu
you-NOM bite-DT-FUT that-V.I.ALL-FUT shark-V.I.ALL-FUT
You will be bitten by that shark.

(The intransitive allative verbal case is normal with demoted non-human agents.)

Other core arguments, such as PROPrietary indirect objects, are unaffected:

6-122 balarr-a dangka-a marndi-ja dathin-ki ngilirr-i kamarr-uru
white-NOM man-NOM divest-ACT that-MLOC cave-MLOC stone-PROP
The white man robbed that cave of its (sacred) stones.

6-123 dathin-a ngilirr-a marndi-i-ja kamarr-uru balarr-ina dangka-na
that-NOM cave-NOM divest-DT-ACT stone-PROP white-ABL man-ABL
That cave was robbed of its stones by the white man.

6.3.2.1 Use

Passives in Kayardild main clauses always stress the affect of the action upon the patient. This is usually bad, but may sometimes be good (Text 3. Line 28). I will refer to this as the 'happenstance' meaning. Passives are not primarily used to secure the identity of successive subjects in discourse - disjunction of topic and subject is readily tolerated in narrative (9.5). and non-subject pivots are allowed in finite subordinate clauses (9.2). Of course, the object-topic of a coordinated
sentence may be promoted to subject, via passivization, but only if a happenstance meaning is also present (9.5.1.2)\textsuperscript{12}:

(Rock Cod, after being caught, is cut up and eaten. Crane and Seagull, his captors, throw his liver onto the rocks, causing a perpetual fresh-water spring to gush forth.)

6-124 niwan-da rirrk, dana-tha niwan-ji, dathin-maru-th
his-NOM grease(NOM) leave-ACT 3sg-MLOC there-V.D-ACT
And his grease, (they) left it, put it there.
nguku-wuru wuu-ja dangka-y, thararr-a niya ngudi-i-j
water-PROP give-ACT person-MLOC liver-NOM 3sgNOM throw-DT-ACT
He endowed mankind with water, and his liver was thrown away.

Passivization is also used when an argument is agent of one verb and patient of another verb in the same (simple) clause, but again it is only attested with an adversative meaning:

6-125 kurul-ii-j, niwan-da kardu ngarii-j, ngamathu jawi-ja
kill-DT-ACT her-NOM son(NOM) first-ACT mother(NOM) run-ACT
kurdala-a-j, birmaru-th
spear-DT-ACT inadvertently cause trouble for-ACT
They were killed, her son first, (then) the mother was speared as she ran. (He) caused (her) death.

The only time passivization serves a purely syntactic function is in Non-Finite Subordinate Clauses, which require the pivot to be the subject - see 8.5.1.

6.3.2.2 Case-marking on demoted agents

Demoted subjects in finite passives clauses must be noun/adjectives: demoted pronominal subjects are restricted to resultative and passive nominalized clauses (8.4). The marking of demoted subjects varies as follows:

<table>
<thead>
<tr>
<th>demoted subject</th>
<th>case</th>
</tr>
</thead>
<tbody>
<tr>
<td>human</td>
<td>ABLative or OBLique</td>
</tr>
<tr>
<td>non-human animate</td>
<td>LOCative (MOD) / Verbal Intransitive ALLative</td>
</tr>
<tr>
<td>inanimate</td>
<td>LOCative (MOD)</td>
</tr>
</tbody>
</table>

\textsuperscript{12}This semantic specialization of passives is common in so-called 'topic-prominent languages'. Cf Li and Thompson (1976:467) 'among Topic Prominent languages ... passivization either does not occur at all (e.g. Lahu, Lisu), or appears as a marginal construction (e.g. Mandarin), or carries a special meaning (e.g. the 'adversity' passive of Japanese). As pointed out in 2.3, K is a language in which both subject and topic are prominent.
Demoted human agents normally take the ABLative (6-123). But the OBLique is also possible, particularly when the patient is allowing the agent to act upon him (e.g. when being given an injection):

6-126 ngada ra-yii-ju mun-da (a) balarr-inja maku-nth
   I:NOM spear-DT-FUT buttock-NOM
   white-OBL woman-OBL
(b) balarr-inm maku-na
   white-ABL woman-ABL

(a) and (b): I will be injected in the buttocks by the white woman.

Animate non-humans, the most common type of demoted agent, usually take the verbal intransitive allative, which agrees in final inflection with the main verb (see also 3.4.2.1):

6-127 yulmburr-a warrku bi-l-da ba-yii-ja kungul-iiwa-th
   long-NOM sun-NOM 3-PLU-NOM bite-DT-ACT mosquito-V.I.ALL-ACT
All day long they were bitten by mosquitoes.

6-128 nying-ka ra-yii-nyarra kurdalalng-kiiwa-nharr
   you-NOM spear-DT-APPR stingray-V.I.ALL-APPR
You might get stung by a stingray.

Often the nature of the action follows from the nature of the participants. The main verb may then be omitted:

(Of a pile of fish left unattended on the beach:)

6-129 baymbay yarbuth-ii-wa-th!
   WARNING bird-V.I.ALL-IMP
(They) might get (eaten) by the birds!

Alternatively, the demoted agent may take an appropriate modal case, as would a location or an object:

6-130 ngada ba-yii-ja wanku-y
   I:NOM bite-DT-ACT shark-MLOC
I was bitten by a shark

6-131 nying-ka ra-yii-nyarra kamarr-inj
   you-NOM spear-DT-APPR stone-MOBL
You might get stung by a stonefish.

I have been unable to find a meaning difference between these two alternatives.

‘Inanimate agents’ are set in a passive construction, with the same case as in the corresponding active.
Instruments take the INSTRumental or PROPrietive:

6-132 kungul-da jirndi-wuru / jirndi-nguni bala-a-j
mosquito-NOM branch-PROP branch-INSTR hit-DT-ACT
Mosquitoes were shooed away with branches.

6-133 yuubjan-da kala-ja narra-wu
olden days-NOM cut-DT-ACT shell knife-PROP
In the old days (things) were cut with shell knives.

And locations take the locative or a modal case:

6-134 dathin-a dangka-a wumburung-kiya niya ra-yii-
that-NOM man-NOM spear-LOC he(NOM) spear-DT-ACT
That man cut himself on a spear.

6-135 jangka-wu darr-u kamarr-u bala-a-ju
other-MPROP time-MPROP stone-MPROP hit-DT-FUT
Next time (you)'ll hit your head on a stone.

6-136 daman-da dara-a-nyarr warkurr-inj
tooth-NOM break-DT-APPR hide-MOBL
(You) might break your tooth on that dugong hide.

In Lardil, demoted agents of tensed passives take the genitive, or a possessive pronoun if pronominal; with untensed passives they take the 'objective' (Hale 1981:25 & 33), cognate with the Kayardild OBLique.

6.3.2.3 Promotion of locative arguments

Locations (usually secret/sacred) adversely affected by some action can be promoted to subject via the passive. These may be the local objects of certain motion verbs:

6-137 Wamakurl-d. Dathin-a dulk-a warra-a-jarri, birdi-ya dulk
(place) that-NOM place-NOM go-DT-NEGACT bad-NOM place(NOM)
Wamakurl-d. That place was never gone to, it’s a bad place.

Or they may just be local adjuncts, not subcategorized by the verb:

6-138 birdi-ya dulk, wirrka-a-nangku
bad-NOM place(NOM) play-DT-NEGPUT
It's a bad place, mustn't be played in.

6-139 jatha-ya dulk-i kamburi-j, kamburi-i-nangku dathin-a
other-LOC place-LOC speak-ACT speak-DT-NEGPUT that-NOM
dulk place(NOM)
(They) spoke in another place. That place mustn't be spoken in.
This shows the difficulty of formulating the passive rule purely in terms of grammatical functions. The essential thing is that the promoted NP be adversely affected in some way, and we are most likely to talk about objects being adversely affected. But if the scenario involves a location being adversely affected, then passivization is possible.

6.3.3 Reflexive clauses

Reflexive clauses use the DeTransitive verb form, which they share with passives. A sentence like (6-140) is therefore ambiguous between 'I hit myself with a club (e.g. in grief)' or 'I was hit with/ by a club':

6-140 ngada bala-a-ja karwa-wuru
I: NOM hit-DT-ACT club-PROP

Verbs with alternate arguments structures may be three ways ambiguous when detransitivized. Thus wayiija [sing-DT] may mean 'sing to oneself', 'sing one's own body part' (to strengthen it) or 'be magically sung' (e.g. initiatory stingray fin).

The part of the body at which the reflexive action is directed appears as a nominative NP (cf body part constructions. 6.4.2):

6-141 bala-a-j-bala-a-ja darr-iyarrng-ka niwan-d
hit-DT-ACT-hit-DT-ACT thigh-DU-NOM her-NOM
(Barrindindi) slapped her thighs (in lecherous anticipation).

6-142 miburl-da kurri-i-j , nal-da mirra-yala-a-j, kandukandu
eye-NOM look-DT-ACT head-NOM good-DO-DT-ACT red(NOM)
war-a wu-yii-j
mouth-NOM put-DT-ACT
"She always lookin herself in mirror, prettyin her head, always make up her lips".

6-143 tharda-a mardala-a-j , kurndung-ka birrmu wu-yii-j
shoulder-NOM paint-DT-ACT chest-NOM sternum(NOM) put-DT-ACT
barral-da yarbud / barral-uru yarbuth-uru
feather-NOM bird(NOM) / feather-PROP bird-PROP
(They) are painting their shoulders, and putting birdsdown on their chests.

Once again these constructions may also allow a passive interpretation, where semantically appropriate. (6-143), for example, could mean 'their shoulders are being painted, and birdsdown is put on their chests.'

This potential ambiguity may be resolved by adding the reflexive pronoun marinda 'self'. This inflects for modal case, like an object, except that the
NOMinative is used in the instantiated modality, instead of the expected LOCative.
See also (6-230).

6-144 niya marin-da mardala-a-j
he:NOM self-NOM paint-DT-ACT
He is painting himself up.

6-145 ngada mardala-a-da marin-inj
I:NOM paint-DT-DES self-MOBL
I want to paint myself up.

6-146 namu warra-ja mala-ngarrb, mala-ngarrba marin-inja bala-a-nyarr
NEGAT go-IMP beer-CONS beer-CONS self-MOBL shoot-DT-APPR
Don’t go around drunk, you might shoot yourself!

If a body part noun is present, it takes the nominative, agreeing with the subject, not the reflexive pronoun:

6-147 nal-da marin-inja kala-a-nyarr, [niwan-inja dun-inja
head-NOM self-MOBL cut-DT-APPR her-COBL husband-COBL
yuurrja-tharra-nth] COBL
get lost-PST-COBL
(She) might slash her head (in mourning), because her husband has been lost.

Marin- may also be prefixed to the verb – see 5.9.

6.3.4 Causativization

Intransitive verbs may be causativized with the CAUSative suffix -THarrma-tha (5.4.2), the FACTitive suffix (-lu-tha), or with -maru-tha ‘put’ following a predicate nominal or nominalized verb. From a basic intransitive clause meaning ‘SUBJ Vs’ is derived a transitive structure meaning ‘SUBJ makes OBJ V’ (sometimes extended metaphorically).

The choice of derivation depends on the basic verb meaning and the type of causation involved:

(i) The CAUSative suffix applies to controlled motion or stance verbs, where the causer acts directly upon the causee, remaining in physical contact throughout the induced process: thulatha ‘descend’. thulathamatha ‘take down’: dalija ‘come’. dalijarra matha ‘bring’: thalija ‘stand (intr.)’. thalijarrmatha ‘erect’: burrija ‘emerge’. burrijarrmatha ‘extract, suck out’: wirrkaja ‘dance’. wirrka jarr matha ‘tickles’: jawija ‘run’. jawijarrmatha ‘ride (horse)’ and, metaphorically, ‘cause to run away (wife)’.
It is likely that the CAUSative suffix derives from the free verb *karrmatha* 'hold, grasp'. This correlates well with the direct and sustained physical contact expressed by this construction.

(ii) The FACTitive is typically used with process verbs: *yulaaja* ‘be afraid’. *yulaalutha* ‘frighten’: *dulbatha* ‘sink (v.i.)’. *dulbalutha* ‘cause to sink. drown’; *dulatha* ‘grow fat’. *dulalutha* ‘make fat. cause to grow fat’: *maka-tha* ‘rest’, *maka-lu-tha* ‘permit to have a rest’ (also ‘switch off (engine)’). Typically the causal sequence is somewhat indirect. *Dulbalutha*, for example, was used in the context of a white man who kept shooting at some Kayardild women hiding behind some offshore reefs until they eventually drowned. The causal event may occur well before the caused event, as with *dula-lu-tha* ‘make fat’, where the eating does not lead immediately to corpulence. Or it may be spatially removed: *yulaalutha* was used of a man whose clumsy stumbling scared away all the game (5-64).

The FACTitive after a PRIVative nominalization is used to express negative causation (i.e. cause not to X): *warnamarrirutha* [go-N-PRIV-FAC] ‘prevent from going’. *jilkirinmarrirutha* [hiccup-N-PRIV-FAC] ‘stop from hiccuping’. *yiiwinmarrirutha* ‘stop from sleeping’:

6-149 *ngada jilkiri-n-marri-ru-tha ngijin-ji kunawuna-y*
I:NOM hiccup-N-PRIV-FAC-AGT my-MLOC child-MLOC
I stopped my child from hiccuping.

(iii) *-maru-tha* ‘put’ (5.9.2.1) is used with (positive) nominalized verbs and predicate nominals, with the meanings

(a) cause to be in a state, as in *yiiwi-n-maru-tha* [sleep-N-put-ACT] ‘put to sleep’ and the synonymous *mibul-maru-tha* ‘asleep-put-ACT’.

(b) cause to have the ability to perform an action, as with *rajurrija* ‘walk around. toddle’. *rajurrinmarutha* ‘enable to walk (e.g. young child)’ (6-150). *munirrija* ‘breastfeed’. *munirrinmarutha* ‘induce lactation’.
(c) where a human induces a controlled behaviour indirectly (through communication, pulling funny faces (6-151) and so on) rather than with direct physical contact: a verb describing this behaviour often shares the same clause (6-152).

Since nominalizations and predicate nominals represent states, and *marutha* means 'put', the etymology of this construction is thus 'put in the state of Ving'.

6-150 *yilda-a kunya-ya kunawuna-ya baa-ja bungkal-i, windsnake-NOM small-MLOC child(NOM) bite-ACT knee-MLOC
  *rajurri-n-maru-th walk-N-put-ACT
  *Windsnakes bite young children on the knee, making them able to walk.

6-151 *nyingka yathuyii-n-maru-tha ngijin-ji you:NOM laugh-N-put-ACT me-MLOC
  *You are making me laugh.

6-152 *niya kamburi-ja ngijin-ji budii-n-maru-th he:NOM say-ACT me-MLOC run-N-put-ACT
  *He told me to run. (Or: he made me run, telling me.)

There are grounds for viewing (ii) and (iii) as variants of the same construction. Both require that the causing event not be coterminous with the caused event. They are formally similar: like -*marutha*, the FACtitive probably derives from PT *marlutha*. Moreover, they are in complementary distribution within my corpus, with the FACtitive following verb roots, noun/adjectives, and PRIVative nominalized verbs, and -*marutha* following plain nominalized verbs and nominal predicators. What needs to be discovered is whether there exist minimal pairs that contrast a verb stem plus FACtitive with a nominalized verb plus *marutha*. Is there, for example, a verb *yulaa-n-maru-tha* [fear-N-put-ACT] alongside the attested *yulaalutha*? The existence of such pairs would falsify the complementary distribution analysis. At present my corpus is insufficient to decide either way.

The three types of causativization just described are all restricted to intransitive verbs. I heard no spontaneous examples with transitive or middle verbs, and attempts to elicit them met with bewilderment. Instead, finite subordinate 'purpose' clauses are used (9.3.9).
6.4 Second predicates on the subject and other nominative adjuncts

Apart from subjects, four types of NP may appear in the nominative in finite clauses. These are exemplified by the NPs underlined in the following sentences.

6-153 *nyingka ngarrku-wa dangka-a ri-lung-ku thaa-thu*
  you(NOM) strong-NOM man-NOM east-ALL-PROP return-PUT

*You will return east a strong man.*

6-154 *niya thaldi-jarra kurnthur-ina kantharrk*
  3sgNOM stand-PST sandbank-MABL alone(NOM)

*He stood on the sandbank alone.*

6-155 *jatha-a kunawuna ngaarrngi-ja bijarrb*
  other-NOM child(NOM) presage-ACT dugong(NOM)

*(The birth of) another child would be presaged by a dugong.*

6-156 *nyingka kalka-nharra bardak*
  you:NOM sick-APPR stomach(NOM)

*You might get sick in the stomach.*

6-157 *dijarra wuran-d, ra-yii-nyarra marl-d*
  nail(NOM) type-NOM spear-DT-APPR hand-NOM

*It's a nail fish, you might get spiked on the hand.*

6-158 *baa-ju daman-d*
  bite-PUT tooth-NOM

*(You) have to bite (it) with your teeth.*

(6-153) and (6-154) are genuine second predicates. An ascriptive NP, which could appear alone as a nominal clause (e.g. 'he is a strong man'), is incorporated within the main clause, and serves to give manner-type information about the subject. Semantically, it makes a predication about the subject that is only asserted to be true during the time of the main predicate. (6-153) and (6-154) are adjuncts: they can freely appear with most - perhaps all - types of verb, always adding the same meaning.

(6-155) is a subject complement: it has the same syntactic characteristics as adjunct second predicates on the subject, but is subcategorized by the main verb. Subject complements were discussed in 6.2.2.2.

(6-156) to (6-158) illustrate three types of adjunct, all in a 'part-whole' relation with the subject. (6-156) involves an uncontrolled intransitive verb. (6-157) a detransitivized verb, and (6-158) a transitive verb. Superficially, all three types are syntactically comparable: all escape modal case, appearing in the
NOMinative. But we shall see presently that they split into two types, semantically and syntactically.

The first type, with uncontrolled or detransitivized verbs, express the locus of effect on a body part: they pattern syntactically like true second predicates, remaining outside the VP and escaping 'associating' case. Semantically, they limit the main predication in space (giving the exact point of impact) rather than time. However, they are not true second predicates: they cannot occur alone in a nominal predicate construction. An attempt to dissect out a nominal predicate from 6-156, for example, would give the nonsensical *nyingka bardaka* 'you are a stomach'. Despite this semantic difference, their syntax exactly parallels true second predicates on the subject. I will refer to such body-part constructions as 'subject-construed' (SCON) to distinguish them from true second predicates on the subject (SSPRED).

The second type, with controlled verbs, express 'body part used as instrument'. These pattern syntactically like instrument NPs, and in fact allow a paraphrase with the PROPrietary: they are inside the VP, and take associating case.

Second predicates in K may modify either subject or object. Here we discuss all second predicates on the subject, and 'body part' NPs construed with the object. Second predicates on the object are discussed in 6.2.4.3 along with object complements.

The restriction on controllers of second predicates to subject and object is not unique to K: Nichols (1982) reports an identical constraint in Russian.

6.4.1 Second predicates of manner

The difference between attribution and 'manner' second predication is illustrated by the following pair of English sentences, where detachment of the modifier is the syntactic marker of secondary predication: (a) 'Gloomy Ivan returned home' and (b) 'Ivan returned home gloomy'. In (a), where the adjective functions attributively, Ivan's gloominess is implied to be more or less permanent and characteristic. But in (b), where the adjective functions as a 'second predicate', his gloominess is restricted to the time of his returning home. A further illustration of the difference between attributive and second predicate uses
is provided by the English sentence 'the slow dog ran fast' which is non-contradictory because the attributive and second predicate adjectives are predicated over different time periods.

In principle any noun/adjective can serve as a manner second predicate with any verb, since the characteristics predicated of the subject are independent of what action he is performing. Thus the subject of (6-159), said to have 'died thirsty', could equally well have 'fought thirsty', 'walked around thirsty', and so on.

6-159 ngawarri bukawa-th
   thirsty(NOM) die-ACT
   (He) died thirsty.

6-160 ngada kada ngumal-da yiiwi-ju
   I:NOM again single-NOM sleep-FUT
   I'll be sleeping by myself (as a single man) again.

Manner nominals can only occur as second predicates (usually on the subject, but also on the object - see 6.2.4.3). Among them are kantharrka/kantharrkuru 'alone, unaided, without interference', junkuyunku 'in revenge, towards each other' and others listed in 4.3.1.

6-161 niya kantharrkuru diya-ja mala-a
   he:NOM alone(NOM) eat-ACT beer-NOM
   He (always) drinks his beer on his own.

And predicate nominals, which basically function as nominal predicates in nominal clauses (6.1.7), may also function as second predicates:

6-162 mibulka kaba-a-j
   asleep(NOM) find-DT-ACT
   (He) was caught napping.

K has no 'object-to-subject raising' construction, as in English 'this water is good to drink'. Instead, K uses an agentless passive with a second predicate:

6-163 mirra-a dan-da nguku-wa kurdama-a-j
   good-NOM (SSPRED) this-NOM water-NOM drink-DT-ACT
   This water is good to drink (lit. 'is drunk well').

13 Example suggested by Peter Austin.
6.4.1.1 Second predicates are outside the VP

As (6-153) and (6-154) show, second predicates on the subject escape modal case. This, however, does not prove that they are outside the VP, since certain NPs within the VP (e.g. 'intentional objects') also escape modal case (7.3).

What does show their non-membership of the VP is their failure to take associating case in nominalized clauses: this appears on all NPs within the VP, including those that do not take modal case (7-20). (Recall that nominalized main clauses may express ongoing, uncompleted action.)

6-164 niya jimi-n-da kurumbal-inja kantharrkuru
3sgNOM squeeze-N-NOM stingray flesh-AOBL alone(NOM)
She is squeezing stingray flesh (into balls) on her own.

This test may be applied to several of the case functions, discussed in 3.3, whose status as relational or adnominal is not clear. Nominalizing the clause shows NPs with the ASSOCIative (marking 'temporary having'). PRIVative, and CONSEQUENTIAL to be second predicates on the subject, since they escape AOBL. But the PROPrieteive and UTILitive, which take AOBL, are shown to be within the VP.

6-165 niya kala-n-da thungal-inja narra-wuru-ntha/ narra-nurru
3sgNOM cut-N-NOM tree-AOBL knife-PROP-AOBL knife-ASSOC(-AOBL)
He is cutting the tree with a shell knife.
They are coming with wood for the fire.

We are going along without boomerangs because we forgot (them).

(Lit.: we, after forgetting, without boomerangs, are going along.)

Since the second predicate NP is a detached NP modifier, we may conclude that cases yielding second predicates yield NP modifiers, and are thus adnominal (in the relevant use). Thus, the ASSOCIative, PRIVative and CONSEQUENTIAL are adnominal but the UTILitive and PROPrietary are relational (in the uses given above).
6.4.2 ‘Body part as locus of effect’ constructions

These occur with the objects of transitive verbs and the subjects of passives, reflexives, and intransitive verbs denoting uncontrolled activity. There is considerable overlap with ‘part-whole’ possession within the NP (4.4.3.5), but some differences: severed body parts, for example, are not seen as inalienably possessed, but may occur as loci of effect (6-171).

With simple intransitives the nominative adjunct names the locus of effect upon the subject; with reflexives, the place where the subject directs his action:

6-168 ngada yarka bardaka / wirrwiririid-a barji-jarr
I:NOM down stomach(NOM) side-NOM fall-PST
I fell on my tummy/on my side.

6-169 nga-rr-a maraka kuri-i-ju marl-d
1-DU-NOM CTRFCT wash-DT-FUT hand-NOM
We should have washed our hands.

6-170 niya mardala-a-ja kirdil-d
3sgNOM rub-DT-ACT back-NOM
He is rubbing his back.

In passive constructions it gives the part of the body on which the action has its initial impact. These usually translate into English as ‘X was Ved in the (body part)/by the (body part)’ or ‘X had his (body part) Ved’:

6-171 marral-da ba-yii-ja dathin-a kunawun
ear-NOM bite-DT-ACT that-NOM child(NOM)
That boy had his ear bitten (off).

6-172 tharda-a bula-a-ja kiyarrng-ka bang-a
shoulder-NOM pull-DT-ACT two-NOM turtle-NOM
The two turtles were pulled (into the boat) by their forelegs.

These correspond to transitive sentences where the ‘body part as locus’ is construed with the object:

6-173 dathin-a dangka-a maku-ya tharda-ya buru-th, dathin-a
that-NOM man-NOM woman-MLOC shoulder-MLOC grasp-ACT that-NOM
maku-wa warra-nangku
woman-NOM go-NEGFUT
That man is grasping the woman by the shoulder, (but) that woman doesn’t want to go.

Like second predicates on the subject, adjuncts designating body-part loci escape associating case under nominalization:
Unlike second predicates, body-part-as-locus NPs may be construed with arguments other than Subject and Object, e.g. the ALLative NP in 3-51 'the tree fell onto his back/hit him in the back'.

6.4.3 'Body-part as instrument' constructions

With controlled non-reflexive verbs, both transitive and intransitive, the nominative adjunct gives the body part used to execute the action:

6-175 wajurr-a niya kurrka-th
  armpit-NOM 3sgNOM take-ACT
  She carried it around under her armpit.

6-176 mar-warri, warra-ja bardak
  hand-PRIV go-ACT stomach(NOM)
  (Of a worm): (It) has no legs, it moves with its stomach.

6-177 dathin-a kunawuna jalnganhang-ka burri-jiri ngijin-jir
  that-NOM child(NOM) tongue-NOM emerge-DIREC me-MALL
  That child is sticking out his tongue at me.

Note that the choice of interpretation between 'body part used as instrument' and 'body part as locus of effect' depends on the uncontrolled vs controlled nature of the verb, rather than its transitivity. *Warra* 'go' in (6-158), and *burrij* 'emerge', in (6-177), for example, are intransitive but controlled.

In contrast to 'body part as locus' constructions, body parts used as instruments can be paraphrased with the PROPrieteive case (this is less usual than NOM, but quite acceptable):

6-178 dathin-a yarbud-a barri-ja bardak / bardaka-wuru
  that-NOM snake-NOM crawl-ACT stomach(NOM) stomach-PROP
  That snake crawls on/with its stomach.

Again in contrast to the 'body-part as locus' constructions, body parts used as instruments take the associating OBLique in nominalized clauses, with or without the optional PROPrieteive just mentioned:

6-179 dathin-a yarbud-a barri-n-da bardaka-nth / bardaka-wuru-nth
  that-NOM snake-NOM crawl-N-NOM stomach-AOBL stomach-PROP-AOBL
  That snake is crawling on/with its stomach.
Turtles paddle with their shoulders.

From this we may infer that body part as instrument constructions, though superficially resembling body part as locus constructions in escaping modal case, have quite different syntax: the latter, like second predicates on the subject, lie outside the VP and escape associating case; the former, like the PROPrieteive instrument construction that may paraphrase them, lie inside the VP and attract associating case.

6.5 Questions

6.5.1 Polar (yes-no) questions

Most often these are formally identical with declaratives, except for a rising intonation contour centred on the questioned word:

6-181 nyingka marri-j?
you:NOM hear-ACT
Do you understand?

6-182 nyingka kurri-jarra dangka-walath-ina?
you:NOM see-PST person-MOB-MABL
Did you see some other people?

Additionally, the interrogative particle *kara* may be used:

6-183 kara nga-ku-rr-a yulii-ja jatha-a bang-a-
INTERROG 1—INC—DU—NOM try-ACT other-NOM turtle-NOM
yuuD, yulii-ja jatha-a bang-a-
already try-ACT other-NOM turtle-NOM
Will we try for another turtle? Good idea, let's try for another turtle.

6-184 kara nyingka marri-j ?
INTERROG you:NOM hear-ACT
Can you understand?

6.5.2 Information questions

These use an 'interrogative' word, referring to the entity or situation whose identification is being requested. Interrogative words contain one of three roots: *ngaaka* 'what/who', *jina- 'where/which' and *nginyinang- 'what (complaint)'. *Ngaaka* and *jina* combine with generic nouns, derivationals and/or nonce suffixes
to yield more specific interrogative words. All three types inflect for relational and/or modal case, or verbal categories, as appropriate.

Interrogative words in K always have interrogative force.

In this respect K differs from many other Australian languages (e.g. Dyirbal, Yidiny, Ngiyambaa), where such pronouns merely indicate a gap in the speaker's knowledge without being more specific. In such languages the one form is interpreted as interrogative (who) or indeterminate (someone) according to context.

Indeterminates in K are expressed not by interrogatives, but by the determiner jangkaa 'someone, I don't know who' (4-108) or by unqualified generics:

6-185 ngada marri-jarra dangka-na / thungal-ina rajurri-n-kina
   I: NOM hear-PST person-MABL thing-MABL walk around-N-MABL
   I heard someone/something moving around.

Interrogatives are normally fronted, but need not be (9-126).

6.5.2.1 Ngaaka 'what/who'

When in a core grammatical function, this normally combines with the following four generic nouns:

ngaaka dangkaa (+ 'person') 'who'
ngaaka wuranda (+ 'food') 'which animal/bird/fish/edible plant'
ngaaka thungalda (+ 'thing') 'which thing/artefact'
ngaaka nida (+ 'name') 'what name'

6-186 ngaaka dangka-a ri-ya thaldi-ja wirdi-j ?
   what(NOM) person-NOM east-NOM stand-ACT stay-ACT
   Who's that standing in the east?

6-187 nyingka ngaaka nid ?
   you(NOM) what(NOM) name(NOM)
   What's your name? (M.I.E. 'who your name?')

The 'class' generic nouns yakuriya 'fish (non-elasmobranch)', wanku 'elasmobranch fish (sharks and rays)', yarbuda 'birds and reptiles' and munbulka "big game" (turtles, dugong, porpoises and whales) do not combine directly with ngaaka: I have not heard ngaaka yakuriya etc.

The interrogative element may be reduplicated, signalling plurality. This is only attested with ngaaka dangkaa:
The compound indeterminates given above are all topics, and often appear in the nominative in ACTual clauses:

6-189 ngaaka thungal-da nyingka jani-j ?
what(NOM) thing-NOM you: NOM seek-ACT
What are you looking for ?

Where they take a non-nominative case, the greater topicality of the subject is usually evident, as in (9-126), where it bears a string of adjectives and nominalizations. Here the interrogative is not fronted.

6-190 dathin-a kiyarrng-ka dangka-a thaldi-n-da wirdi-n-da wurkar
that-NOM two-NOM person-NOM stand-N-NOM stay-N-NOM boy(NOM)
ngaaka-ya kurri-ja karrngi-ja thungal-i
what-MLOC see-ACT hold-ACT thing-MLOC
Those two boys standing over, what do they keep looking at?

Compounds with ngaaka are not always used. In the following circumstances the interrogative base suffices:

(a) in asking someone their identity.

6-191 nyingka ngaak ?
you:NOM what(NOM)
Who are you?

nyingka ngijin-da ngaak ?
you:NOM my-NOM what(NOM)
You are my what (relation)?

(b) Where there is insufficient evidence to assign the questioned entity to one of these categories:

6-192 dathin-a dangka-a kiyarrng-ka dangka-a ngaaka-ntha
that-NOM person-NOM two-NOM person-NOM who/what-AOBL
kurri-n-d ?
look-N-NOM
Who / what are those two people looking for ?

6-193 dan-da ra-yin-da kila ngaak
here-NOM south-FROM-NOM trampling noise(NOM) who(NOM)
Who/what is trampling from the south there?

Interrogatives bearing a semantic case are likewise not compounded:

ngaaka-wuru [_-PROP] 'why, with what purpose'
ngaaka-nguni [_-INSTR] 'using what'
ngaaka-marra  [__-UTIL]  'to use for what'
ngaaka-ngarrba  [__-CONS]  'because of what'
ngaak-arra  [__-GEN]  'whose' (by haplology from ngaaka-karra)
ngaaka-warri  [__-PRIV]  'lacking what, without what'
ngaaka-maru-tha  [__-V.D]  'for whose benefit'
gaaka-wula-tha  [__-V.ABL]  'from what'
Etc.

6-194 ngaakarra wumburung-ka nyingka karrngi-j ?
what-POSS spear-NOM you:NOM hold-ACT
Whose spear are you holding?

6-195 ngaaka-wuru rik-iya kunawun ?
what-PROP cry-LOC child(NOM)
Why is the child crying?

6-196 maku-walad-a burldi-jarra birrk-ina, ngaaka-marra-na
woman-LOT-NOM roll-PST string-MABL what-UTIL-MABL
burldi-jarr?
roll-PST
The women rolled some string, to use it for what?

6-197 ngaaka-maru-tha nying-ka kurrka-th?
what-V.D-ACT you-NOM take-ACT
Why did you take it?

6.5.2.2 Jina-a 'where'

The basic meaning, 'where', is illustrated in (6-198). Like other nominals
having inherent location, jinaa does not take modal case in the instantiated
modality, but does in marked modalities (6-199):

6-198 jina-a ngijin-da wangalk ?
where-NOM my-NOM boomerang(NOM)
Where is my boomerang?

6-199 jina-wu nyingka wirdi-ju?
where-MPROP you:NOM stay-EUT
Where will you be / stay?

Partially reduplicated jijina means 'whither, where to'. It escapes modal case in
the future, but not in the past (no data on other modalities):

6-200 nyingka jijina warra-ju? ru-lung-ku ngada warra-ju
you:NOM whither go-FUT east-ALL-MPROP I:NOM go-FUT
Where are you going? I am going to the east.

6-201 nyingka jijina warra-jarra wulji-na?
you:NOM whither go-PST last night-MABL
Which way did you head last night?
Younger speakers have extended *jina* 'where' to cover 'whither' at the expense of *jijina*, probably under the influence of English. They would render (6-200) as *nyingka jinawu warraju*.

Various semantically compatible nominal suffixes — relational, adnominal and derivational — combine with *jina-*:

- **jina-rung-ka** to where (synonymous with *jijina*).
- **jina-nurru** in what place
- **jina-wan-da** from what place (used to identify languages, songs, dances, customs etc.)
- **jina-ngathi** born where

Some examples are:

6-202 *nyingka jina-rung-ku?*  
you:NOM where-ALL-PROP  
*Where are you going?*

6-203 *nyingka jina-nurru-na kaba-tharr wangalk-ina?*  
you:NOM where-ASSOC-MABL find-PST boomerang-MABL  
*Where did you find the boomerang?*

6-204 *jina-wan-da kangk-a bi-l-da kamburi-j?*  
where-ORIG-NOM language-NOM 3-PLU-NOM speak-ACT  
*What language are they speaking?*

The nonce suffix -*mulu* derives *jinamulu* 'how much, how many':

6-206 *jinamulu-na bijarrba-na bi-l-d?*  
how many-MABL dugong-MABL 3-PLU-NOM  
*How many dugong did they (catch)?*

**Jina-** also occurs in compounds with the words *warrku* 'sun' and *darri* 'time'.  

*Jinawarrku* means 'what time (of day)'. It is treated as one word, with modal case appearing only once:
Compounds with darri refer to more distant time (6-208 - 6-211). They seem to be in transition from two words to one: in the future and emotive modalities they inflect as a single word (6-209, 6-210), 6-211) while in the prior modality they inflect separately (6-208). (No data on other modalities).

6-208 jina-na darri-na dathin—a dangka—a dali—jarr?
where—MABL time—MABL that—NOM person—NOM come—PST
When did that man come?

6-209 jina-darr—u ru-lung—ku thaa—thu?
where—time—MPROP east—ALL—MPROP return—PUT
When will you come back eastward?

6-210 jina-darr—u kantharrkuru mala—wu?
where—time—MPROP alone(NOM) beer—PROP
When will (I ever get to be) alone with my beer?

6-211 niya jina-darri—nja dali—d nga—ku—lu—wan—jani—d
he:NOM where—time—MOBL come—DES 1—INC—PLU—POSS—V.D—DES
When will he come back here to get us?

6.5.2.3 Nginyina(ng)— 'why (complaint)'

This is used as a rhetorical interrogative - for complaints in the form of a question. With apologies to Georgia Green (1975) I gloss it 'whomplaint'.

Attested forms are:

nginyinang-kuru (+MOD) why

nginyinang-kina because of what, on account of what

nginyina-nguni using what

nginyina-marra to use for what

nginyina-warri without what

nginyina-maru-tha for what good, to what end

V.D—ACT

Clauses containing nginyinang- forms have a questioning intonation, but this is always rhetorical, and no reply is expected or given: the purpose is to complain
(6-213, 6-214) or to condemn some action (6-215). Contrast this with the
ngaaka- forms (6.5.2.1), which are genuinely interrogative.

6-212 nginyinang-kuru-wa nyingka kurndu-birdi-wa-n-d?
whomplaint-PROP-NOM you:NOM chest-bad-INCH-N-NOM
Why are you sulking? (Or: don't sulk!)

6-213 nginyinang-kuru-ya dathin-a thungal-da barji-ja niwan-jir?
whomplaint-PROP-MLOC that-NOM tree-NOM fall-ACT him-ALL
Why did that tree have to fall on him?

6-214 nginyinang-kuru-na )curndunurru-wa-tharr?
whomplaint-PROP-MABL mother with young baby-INCH-PST
Why on earth did we become mothers?

6-215 nginyina-maru-tha kurulu-th?
whomplaint-V.D-ACT kill-ACT
Why did (you) kill (all those fish) (when we already have more
than enough).

6-216 dan-da barri-ja wanjii-j, nga-ku-lu-wan-janii-j,
here-NOM crawl-ACT ascend-ACT 1-INC-PLU-POSS-V.D-ACT
nginyinang-kuru?
whomplaint-PROP
Here they come crawling up after us, why are they doing it?

6-217 nginyinang-kina bayi bi-rr?
whomplaint-ABL fight(NOM) 3-DU(NOM)
What are they fighting about?

Nginyinangkuru may be accompanied solely by a pronoun, with the meaning 'what's
wrong with X?'. e.g. nginyinang-kuru-wa bi-rr? 'what's wrong with those two?'.
The other forms are only attested in one word exclamations, e.g. nginyinamarr?
'what the hell are (you going to) use that for?'.

6.5.2.4 ngaakawatha 'do what'

The interrogative verb ngaakawatha is the inchoative form of ngaaka
'who/what'. It is only ever used intransitively, as in nyingka ngaakawath 'what are
you doing?\textsuperscript{14}.

Other interrogative notions, expressed in other Australian languages (e.g. Dyirbal, Yankunytjatjara) by verbs (do how, do like this, do like that) are expressed by nominals in Kayardild (as in English): \textit{jinananganda} 'which way', \textit{dandananganda} 'this way', \textit{dathinananganda} 'that way' (literally where-, this- and that- side).

6.6 Negation

Kayardild has a variety of negating devices. Described in detail elsewhere, they are brought together here in summary form.

6.6.1 Negative verb forms

These negate the entire proposition expressed by a clause (6-220, 6-221). (As when negating an English verb with unmarked intonation, or a logical proposition, the negative truth condition may be satisfied by the falsity of any one term, or several).

\begin{verbatim}
6-220 ngada kantharrkuru ngudi-nangku bangawu
 I:NOM alone(NOM) throw-NEGFT turtle-MPROP
 I can't turn the turtle over by myself.

6-221 ngada kala-tharri wangalk-i
 I:NOM Cut-NEGACT boomerang-MLOC
 I didn't / haven't cut out a boomerang.
\end{verbatim}

Negative clauses select the same modal case as positives: positive and negative instantiated clauses are unmarked, positive and negative futures take the modal PROPrietive, and positive and negative hortatives take the modal OBLique (7.1).  

\textsuperscript{14} Other Australian languages have both a transitive and an intransitive interrogative verb. The former type is exemplified by the following Dyirbal sentence (Dixon 1972:55):

\begin{verbatim}
6-218 nginda bayl yara wyama-n
 you(A) the(MASC)O man(O) do what(tr)-NONFUTURE
 What did you do to the man?
\end{verbatim}

I have been unable to elicit a transitive interrogative in Kayardild (an obvious candidate, \textit{ngaakarutha} ['what-FACT'], was rejected). But I have one sentence where the interrogative nominal \textit{ngaakawuru} is used as a quasi-transitive predicator:

\begin{verbatim}
6-219 ngaaka-wuru bl-i-da dathin-ki dangkaw
 what-PROP(NOM) 3-PLU-NOM that-MLOC person-MLOC
 What are they doing to that man?
\end{verbatim}
So Kayardild syntax treats modality and polarity as being independent (unlike Yukulta syntax, where negatives favour irrealis-type constructions – 7.4.1.2).

6.6.2 PRIVative -warri as a negator

PRIV commonly negates nominals (see also 3-86 and 6-8).

6-222 dan-da ngijin-marri, niwan-da wangalk
this-NOM my-PRIV(NOM) his-NOM boomerang(NOM)
This isn’t mine, it’s his boomerang.

6-223 niya wirrin-marri
he(NOM) shell-PRIV
He has no money.

PRIV denies attributes when combined with a qualifier, as in (6-222) and denies existence when combined with an entity nominal, as in (6-223). When functioning as a second predicate it may indicate that the main predicate was true of only a subset of the expected participants:

6-224 bang-a dii-ja bijarrba-warri dathin-ki ngurruwarra-y
turtle-NOM sit-ACT dugong-PRIV that-LOC fish.trap-LOC
Turtle were caught in that fish trap, but not dugong.

PRIV may also apply to nominalized verbs (see also 8.4.2):

6-225 ngada kurri-n-marri dathin-ki bijarrba-y
I:NOM see-N-PRIV that-MLOC dugong-MLOC
I didn’t see that dugong.

The difference between this and the negative indicative -THarri constructions is somewhat elusive. Whereas -THarri is a global negator, privative nominalization constructions seem to stress that the proposition is not true for that particular subject: ‘it can’t be said of me that I’ve seen that dugong’, ‘it couldn’t be said of that white man that he ever felt sorry for anyone’. This is well illustrated by the following pair, offered to me in explanation of the difference:

6-226 ngada raa-n-marri bang-a-y, ngijin-da thabuju raa-j
I:NOM spear-N-PRIV turtle-MLOC my-NOM EBr(NOM) spear-ACT
I didn’t spear the turtle, my brother speared (it).

6-227 ngada raa-jarri bang-a-y, maarra bijarrba-ya raa-j
I:NOM spear-NEGACT turtle-MLOC all dugong-MLOC spear-ACT
I didn’t spear any turtle, I only speared dugong.
6.6.3 NEGator -nang-

This never occurs without a following case inflection - in my small corpus of six, either LOC or PROP.

In one example it functions like a PRIVative:

6-228 ngada ngimi-wu warra-nangku, kurri-nangku warku-nang-ku
dulk-u
place-MPROP
I won't go out at night, I can't see anything with the sun not there.

In another, it negates the predicate of a nominal clause: here a paraphrase with the PRIVative is possible:

6-229 dan-ang-ki / dan-marrri babiju, warra-a
here-NEG-LOC here-PRIV grandmother(NOM) far-NOM
Granny isn't here, she's a long way off.

It may also negate an attributive nominal within a larger NP:

6-230 marin-da kurri-i-ja birdi-y, birdi-nang-kiya ngijin-ji
self-NOM see-DT-IMP bad-NOM bad-NEG-LOC me-LOC
Look at your ugly self, compared to not-bad-(looking) me.
(Cf 3-25).

-nang- is also the negative thematic in verb inflections (5.3) in all the Tangkic languages; there it is followed by a case-like termination. The 'whomplaint' interrogative nginyinang- also contains a -nang- element.

6.6.4 Existential negator warirra

Warirra, used as an interjection, can mean 'no. empty. nothing'. Frequently it functions as a one word negative existential clause: 'there is nothing'. It may also follow a subject as in ngada warirr 'I've got nothing'. It is often followed or preceded by a more explicit clause with a privative NP or negative inflection:

6-231 kurda-a ngijin-da wuran-marrri, warirr
coolamon-NOM my-NOM food-PRIV nothing
My coolamon has no food in it, it's empty/there's nothing.
(They) dug for water, working westward through the scrub, eastward along the beach, nothing, (they) couldn't find water.

Its nominal meaning of 'empty' or 'nothing' is clear from its INCHoative and FACtitive verbal derivatives warirra-wa-tha 'disappear, vanish' and warirra-ru-tha 'annihilate'.

Warirra may also modify a nominal head N, meaning 'no N':

Any predicate expressed by semantic case has scope over the negative. With a locative NP, for example, it means 'in no N':

Warirra may also be used in place of -warri to negate a nominal, as in the following commentary on which stingrays yielded good blades for circumcision:

Not the brown stingray, not the burukurungk, not the black spotted ray, only the cowtail ray.

6.6.5 Double privatives

In Kayardild double privatives (on the nominalized verb and other nominals) may optionally be used to stress the negative nature of the proposition:

From the east (the fish) aren't running, from the south they're not running, not coming back.

PRIV on the object shows that no OBJ was Ved: the normal OBJECT case implies that a particular OBJ was not Ved:
6-237 ngada kurri-n-marri dangka-warri / dangka-y
   I:NOM see-N-PRIV person-PRIV person-MLOC
   I haven't seen anyone / him.

6.6.6 Other negative expressions

More specialized negative meanings are contained in the particles maraka
'COUNTERFACTUAL. (subject) should have (but didn't). (speaker) falsely
concluded that ...', and nginia 'in vain, to no avail, for no apparent reason'.
See below.

6.7 Particles. Clitics and Interjections

6.7.1 Use of modal and complementizing case instead of particles

K has fewer particles and clitics than Lardil. Yukulta and most typical
Pama-Nyungan languages, presumably because two of the functions normally
discharged by particles and clitics are fulfilled by higher level case marking: modal
qualification is partly provided by the modal case system, and evidential
qualification by 'insubordinated' complementized clauses.

To take two modal notions, 'perhaps' is expressed in Yukulta by the clitic
yana; and the notion 'instantiated' ('there is/has been a world in which this was
true') is expressed in Lardil by the post-verbal clitic -kun. But in K the
opposition between PaST verbal inflection and/or modal ablative, and ACTual verbal
inflection and/or modal locative, conveys these respective ideas. The functional
equivalence of modal case/verb inflection and modal particles is illustrated by the
tendency of younger speakers to create new particles, borrowed from English,
such as marrbi (< E 'might be') 'perhaps', and baymbay (< 'bye and bye') 'this
unpleasant thing might happen'. These replace both the verb inflection and the
modal case (see below).

As for evidentials, many Australian languages have special particles that
either attribute the authorship of a proposition to someone else, or signal that the
proposition is based on the direct sensory evidence of the speaker (see, e.g.,
Laughren 1982 on Warlpiri 'propositional particles'). Both these functions are
performed in K by 'insubordinated' complementized clauses (9.4.2).

Moreover, other meanings expressed by particles in other languages are
expressed in K by manner nominals. 'In revenge', for example, merits a special
particle in Dyirbal. while it is expressed in K by the manner nominal junkuyunku. Yet other meanings encoded elsewhere by particles are expressed in K by verbal inflections: negatives, for example, have their own special verbal inflections, and 'almost', expressed by particles in Diyari and Dyirbal, among others, has a special verb inflection in K.

What remains is a handful of particles and clitics, whose meanings vary according to their position within the clause, the constituents they modify, and their interaction with verb inflections and modal case.

6.7.2 Particles

6.7.2.1 Maraka ‘CounteR-FaCTual’

This may modify a clause or a NP: its exact meaning depends on its scope, and the verbal inflection and modal case of the relevant clause.

Verbal clauses with maraka allow three combinations of verb inflection and modal case. Maraka is usually clause-initial, but clause-second and clause-final positions are also attested.

(a) Counterfactual clauses with the future verb inflection and the modal proprietive case outline a course of action which should have been taken but wasn’t. (This corresponds directly to the ‘prescriptive’ use of FUTure plus MPROP clauses without maraka – 5.2.3.5).

6-238 nyingka maraka raba-nangku dathin-ku dulk-u
you:NOM CTRFCT tread-NEG.FUT that-MPROP place-MPROP
You shouldn’t have set foot in that (secret) place.

6-239 maraka bi-l-da kinaa-ju nguman-ju
CTRFCT 3-PLU-NOM tell-FUT you-MPROP
They should have told you.

(b) Those with the future verb inflection and the modal locative case refer to events that could have happened but didn’t. Again this corresponds directly to the non-counterfactual use: FUT plus MLOC codes ability/potential located in the past (7.1.3).

6-240 maraka ngudi-ju bangay
CTRFCT throw-FUT turtle-MLOC
(They) could have thrown the turtle (overboard, to lighten the boat), but didn’t.
6-241 *maraka yuuma-thu barruntha-y*

CTRFCT drown-FUT yesterday-MLOC

*He could have drowned yesterday (but didn’t).*

(c) Those with the ACTual verb inflection and the modal LOCative signal an appearance counter to fact. (The corresponding non-counterfactual clauses mark factual statements about actual occurrences.)

6-242 *jani-jani-ja niwan-ju, yakuri-ya buru-tha thaa-tha marak*

search-REDUP-ACT him-PROP fish-MLOC take-ACT return-ACT CTRFCT

*They searched for him, as if they were going out to get fish.*

The clausal complements of the verbs *nguthaliyatha* 'pretend (that)' and *durumatha* 'lie (that)' may also be introduced by *maraka* (see also 9-69):

6-243 *niya nguthaliya-th, maraka kalka-th*

3sgNOM pretend-ACT CTRFCT be sick-ACT

*He pretended he was sick.*

In (6-242) and (6-243) the scope of *maraka* is the whole proposition, and it is placed at the clause periphery. In ACTual clauses, however, it is more usual for the scope of the counterfactual to be limited to a single NP or modifier, which it precedes. This construction implies that, at the time of the clause, someone held a false belief about the identity or characteristics of the relevant entity:

[A night fisherman has been seized by the monster Kajurku, who grasps him between his teeth and appropriates his bark torch, which the victim’s companions see from the shore:]

6-244 *kurri-ja manharr-iy, maraka dangka-karran-ji, birra niwan-ji*

see-ACT torch-MLOC CTRFCT man-GEN-MLOC TOO his-MLOC

*(They) saw a bark torch, and wrongly thought it was the man’s, that it too was his.*

6-245 *maraka ngumal-iya kurzka-tha karrngi-j*

CTRFCT single-MLOC take-ACT grasp-ACT

*(He) went off with (a married woman), mistakenly thinking she was single.*

6-246 *maraka warra-wan-da dangka-a niwan-ji kurdala-th*

CTRFCT far-ORIG-NOM man-NOM him-MLOC spear-ACT

*One would have thought it was an unrelated person who speared him (but no, it was a close relative).*

6-247 *ngada waa-ja maraka yiiwi-jirri-n-ji*

I:NOM sing-ACT CTRFCT sleep-RES-N-MLOC

*I was singing, (at a time when) one would have thought I had got to sleep.*
6-248 dukul wuru y dangka y barrwa a ji dukul i, maraka bilwan ji dukul i place PROP MLOC man MLOC block ACT place MLOC CTRFCT their MLOC

(MacKenzie, a white settler) blocked the traditional owners off from their land, (a) wrongly thinking it was his.
(b) when they thought it was theirs.
(c) you'd have thought it was theirs, but not any more.

As these examples illustrate, the identity of the person suffering under the misconception is not determined grammatically, but left to context\textsuperscript{15}. Thus in (6-244) and (6-245) it is the subject of the sentence who holds the mistaken belief, while in (6-246) and (6-247) it is anyone holding normal expectations about human behaviour. (6-248) is three-ways ambiguous. and different listeners gave different explanations: the misconception could be attributed to the subject, the object, or any potential onlooker.

Maraka may also be used, with this 'misconception' meaning, with scope over nominal clauses:

6-249 jatha wuru maku uru, maraka nyingka ngumal d other PROP woman PROP CTRFCT you NOM single NOM

(You've) got another woman, (you're carrying on like you) think you're a single man.

The following construction is rather problematic: it is the only one of its kind attested (although declared acceptable by several speakers):

[A man asked me for cigarettes, a request I avoided by saying I didn't smoke. He replied:]

6-250 maraka ngumban ji wadu baa n ki CTRFCT you MLOC smoke bite N MLOC

Oh, I thought that you were a smoker (smoke biter).

Most likely, it is an elliptical object-complement construction of the type 'I mistakenly (saw/asked) you (OBJ: MLOC) (as a) smoker (OCOMP: MLOC)'. Constructions of the general type 'see OBJ to be OCOMP' are attested (see 6.2.4.3), although an unellipsed exact correspondent of 6-250 has not been.

Finally, maraka may modify a nominal predicate: here it indicates

\textsuperscript{15}Cf Laughren (op. cit.:149) on the Warlpiri particles kulanganta and nganta: 'It is left open to the addressee to interpret who actually held the belief deemed false by the speaker at the time of speaking. The implication by the speaker and the interpretation by the addressee can depend very heavily on extrinsic (pragmatic) information or context and/or contextual information in the larger discourse'.

resemblance (6-251, 6-252) or comparability of some attribute (6-253, cf 6-50), without implying that anyone was actually deluded\textsuperscript{16}.

6-251 nyingka kIRR-makuu, marakaa makku
you:NOM face-woman CTRFCT woman(NOM)

(From a taunting song to a rejected lover):
You are a woman-face, (you) look like a woman.

6-252 kaban-d maraka kamarr
stargazer-NOM CTRFCT stone-NOM

The stargazer (fish) is like a stonefish.

6-253 dan-da kunawuna jungarr, maraka niwan-da kanthathu mankarr
that-NOM child-NOM big-NOM CTRFCT his-NOM father-NOM sturdy(NOM)

That boy is big, he’s sturdy like his father.

Comparative note: A cognate and semantically similar particle is used in Lardil (Hale 1981). \textit{Mara} plus the future verbal inflection (and, automatically in Lardil, the future modal case) is a counterfactual indicating "that the proposition embodied in the clause is hypothetical rather than actual".

In independent clauses it marks failed attempts of unachieved intentions:

6-254 ngada mara ra-thu kiin-ku karnjin-ku, yuud-denja
I:NOM MARA spear-FUT this-FUT wallaby-FUT PERF-leave

I was going to spear the wallaby, but it ran off.

In hypothetical periods it marks consequential falsity (i.e. that the antecedent condition is not met):

6-255 ngada kurri-tharr karnjin-a, ngada mara la-thu
I:NOM see-MNFUT wallaby-NOM I:NOM MARA spear-FUT

If I saw a wallaby I would spear it (but I don’t so I won’t).

It may also appear in both clauses if the conditional is cast in the past, with a false antecedent (and therefore a false consequent):

6-256 ngada mara kurri-tharr karnjin-a, ngada mara la-thu
I:NOM MARA see-MNFUT wallaby-NOM I:NOM MARA spear-FUT

If I had seen a wallaby I would have speared it.

An extended form \textit{maraka} has the same counterfactual sense, "but can also appear with non-future predicates, indicating an appearance contrary to fact";

\textsuperscript{16}Clitics serving as both semblatives and counterfactuals have been reported by Breen (1984) for Yandruwandha and Pitta-Pitta, neither closely related to K.
6-257 \textit{kiin nguthaliya-ku, maraka kalka-n} \\
\hspace{1cm} \textit{this-NOM pretend-INSTANTIATED MARAKA sick-N} \\
\hspace{1cm} \textit{He's fooling, (acting) as if he were sick (but he's not really).}

6.7.2.2 \textit{Nginja ‘FRUSTrated’}

This particle has a wide range of meanings, transcending a single English translation. All express the fact that an event goes against someone’s purpose, desire, moral code or expectations about the world. It almost always begins the clause.

\textit{Nginja} usually implies that an action did not lead to its expected outcome (translatable by ‘in vain’ or, in Mornington English, ‘for nothing’):

6-258 \textit{nyingka jangka-ya bithiin-ji kurri-j, nginja} \\
\hspace{1cm} \textit{you: NOM other-MLOC man-MLOC see-ACT FRUST} \\
\hspace{1cm} \textit{thigh-put-ACT I:NOM you-MLOC eye-XS-NOM I:NOM} \\
\hspace{1cm} \textit{ngumban-ji yulkalu-tha dana-th.} \\
\hspace{1cm} \textit{You look at other men. I put you on my thigh (betrothed you) for nothing, (you’re a) flirt. I’m leaving you for good.}

6-259 \textit{barruntha-y duruma-th, nginja ngumu-wa-th, nginja} \\
\hspace{1cm} \textit{yesterday-LOC lie-ACT FRUST black-INCH-ACT FRUST} \\
\hspace{1cm} \textit{kamburi-ja muma-th, ja-warri} \\
\hspace{1cm} \textit{3peak-ACT thunder-ACT rain-PRIV} \\
\hspace{1cm} \textit{(The weather) lied yesterday. In vain the sky blackened, in vain the thunder spoke, there's no rain.}

\textit{Nginja} may also precede a NP, signalling the uselessness of some implement:

6-260 \textit{maarra minba-lu-tha wara-th, nginja wumpurung-k} \\
\hspace{1cm} \textit{all wound-FAC-ACT send-ACT FRUST spear-NOM} \\
\hspace{1cm} \textit{(I) sent all (the fish) off wounded, my spear was useless.}

I have a single example in which \textit{nginja} takes modal case. The same meaning, however, is conveyed:

6-261 \textit{nga-ku-rr-a nginja-wu warra-ju, kaba-nangku kumbuna-wu} \\
\hspace{1cm} \textit{we-INC-DU-NOM FRUST-MPROP go-FUT find-NEG.FUT rat-MPROP} \\
\hspace{1cm} \textit{We’ll go for nothing, we won’t find the mangrove rat.}

In the above sentences \textit{nginja} appears in the clause describing the purposeful action. But it may also appear in the clause describing the (disappointing) consequence: here it translates as ‘anyway’:
Nginja may also be used to castigate an action that the speaker believes should not have taken place:

6-263 nginja diya-ja mala-y
FRUST eat-ACT beer-MLOC
You (schoolkids) shouldn’t have drunk that beer.

(This is paraphraseable with maraka plus the negative future: kilda maraka diyanangku malawu.)

Finally, nginja is also appropriate when an event goes against one’s expectations:

6-265 nginja kalka-th
FRUST sick-ACT
He got sick suddenly, for no apparent reason.

Comparative note: Hale’s notes on Yangkaal contain two sentences with a form nginja. Both appear to express unpleasant consequences, and co-occur with the apprehensive verb inflection -nymarr:

6-266 baa-nymarr , nginja bala-a-nymarr ngijin-d
bite-APPR PART kill-PASS-APPR 1:POSS-NOM
If it doesn’t bite me, I won’t kill it. (‘it might bite, with the unpleasant consequence that it might get killed by me’.)

6-267 nyiwa jawi-ji , bana nginja barlji-nymarr
you:NOM run-SUPP AND PART fall-APPR
If you run you might fall.

Mangarayi, not closely related to the Tangkic group, has a ‘prohibitive particle’ nginjag, possibly cognate (Merlan 1981).
6.7.2.3 kalala ‘really’

This draws attention to the truth of a proposition:

6-268 nyimgka kalala kurdala-th?
you:NOM really spear-ACT

Did you really spear (him)?

It may also modify a NP with the meaning ‘true, dinkum’ as in yuuj banda kalala ngunguka ‘old-time, true story’. I have no examples of kalala modifying a non-nominative nominal, so do not whether it would inflect.

6.7.2.4 kara ‘INTERrogative’

This was discussed in 6.5.1.

6.7.2.5 barri ‘just’

This softens an imperative by suggestively minimizing the effort involved:

6-269 barri kuujuu-j1
just swim-IMP

(To a learning child): (Go on), just swim! (There’s nothing to it!)

6-270 barri kuliya-kuliya-n , mutha-yarrath-id
just fill-REDUP-NEG.IMP many-OTHER-SAME

Just don’t give me too much food, there’s plenty yet (to feed).

6-271 barri wuu-ja ni-y
just give-IMP he-NOM

O.K., just give it back to him!

6-272 barri wanjii-ju nga-ku-l-d
just go up-FUT we-INC-PLU-NOM

Let’s just go up home now.

An identical word barri , meaning "oh, okay then, go on" is reported for Yukulta by Keen (1983), but she classes it as an interjection. I treat K barri as a particle because it has a syntactic function, or at least selectional restrictions, only occurring in imperatives.

6.7.2.6 minyi ‘AND SO’

This introduces the moral or conclusion of a story:
[In the old days, a young novice about to be initiated took fright and ran away. He was pursued and speared to death, along with his mother. Thenceforth no one dared shirk their ceremonial duties:]

6-273 warngiid-a dangka-a birdi-ru-tha dathin-ki; junku-ru-tha
one-NOM man-NOM bad-FAC-ACT that-LOC straight-FAC-ACT
wayirni; yubuyubu niya junku-ru-th,
path(NOM) track(NOM) he(NOM) straight-FAC-ACT
minyi yan-d, budii-jarri, dangka-a wirrka-a-ju
AND.SO now-NOM run-NEGACT person-NOM dance-DT-FUT
One man ruined that (ceremony), he straightened the way, he straightened the way, so that now (boys) don't run away, people can be initiated.

[Kajurku emerges from the sea and challenges men to spear him. But:]

6-274 mutha-a bithiin-da raa-ja niwan-ji kukalu-th,
many-NOM man-NOM spear-ACT him-MLOC rebound-ACT
dami-raa-j, minyi wumpuru-warri tha-tha bi-l-da
blunt-spear-ACT AND.SO spear-PRIV return-ACT 3-PLU-NOM
bal-ung-ka mutha-a dangka-a
west-ALL-NOM many-NOM person-NOM
Many men speared at him but (their spears) rebounded, speared blunt. And so the many men all returned westward with no spears.

We have already seen the use of minyi as a directional prefix within the verbal group, meaning ‘towards’ (5.8.5), and also its metaphorical use as a semblative prefix (3.6.3.4). The use described here extends the directional metaphor into discourse, by seeing the moral or conclusion as the end-point towards which the narrative has been leading.

6.7.2.7 maarra ‘all’

This always begins the clause, and is followed by whatever word it modifies.

6-275 maarra jungarra thabuju kamburi-j; duujin-d, kara
all big(NOM) brother(NOM) say-ACT Yo Br-NOM INTERROG
nyingka wirrka-a-ju
you:NOM dance-DT-FUT
All the big brothers say: little brother, do you want to be initiated?

6-276 maarra yalulu-uru kurri-ju, maarra kang-ku marri-ju
all light-MPROP kurri-JU, maarra kang-ku marri-ju
kurri-ju, maarra kang-ku marri-ju
all light-MPROP see-FUT ALL voice-MPROP hear-FUT
dangka-walath-u
person-LOTS-MPROP
“You gonna see all the light, you gonna hear all the people sing out.”

6-277 maarra dulk-a kinaa-jarri
all place-NOM tell-NEGACT
(l) haven’t told you about all the places.
Subjects modified by *maarra* are generally omitted, so that it becomes a sort of pronoun:

6-278 *maarra* bad , bath-urrng  
all west(NOM) west-BOUND  
Everyone's down west (collecting their cheques), on the west side.

6-279 *maarra* diya-a-n-kuru  
all eat-DT-N-PROP  
(Speaking of yams): (They) are all edible.

Distribution (each) and restriction (only) are also expressed with *maarra*. 'Each X Ves' is phrased 'all Xes V':

6-280 *maarra* mirndin-muthin-mirndin-muthin-d , wumpuru-nurru  
ALL several-PLENTRY-several-PLENTRY-NOM spear-ASSOC  
Each person is carrying three or four spears.

And 'only A is B' is turned round to 'all B is A', so that *maarra* can be used:

6-281 *maarra* maku-karran-d  
all woman-GEN-NOM  
(On lice as food:) Only women eat lice. (Lit. "all lice are women's").

Alternatively the word *warngiida* may be used, provided the subject is a single entity:

6-282 niya warngiid-a burdumbanyi  
3sgNOM one-NOM ignorant(NOM)  
She alone is ignorant.

*Maarra* plus verb is used to convey "all X did was V":

6-283 *maarra* kurri-ja ngijin-ji, kampuri-jarri  
all see-ACT me-MLOC speak-NEG.ACT  
(He) just looked at me without saying anything.

In Lardil *maa(rra)* has been specialized to the meaning 'only', as in:

6-284 dilanthaarr maltha *maarra* maarn  
long ago nothing only spear-NOM  
Long ago there was nothing but the spear.

A distinct verbal word for 'all', *malthuri(i)*, quantifies the object of transitive and the subject of intransitive verbs. Cf K *bakii-ja* (5.10.1.1),
6.7.2.8 Bandarra 'some'

This restricts the logical domain of the predicate to part of some set, defined by context. Sometimes it occurs in an isolated clause:

6-285 bandarra bulwi-n-d, darrbu-yii-j
SOME be shy-N-NOM drag-DT-ACT
Some (of his wives) were shy, and were dragged away (by force).

But more often it occurs in each of two contrasting clauses:

6-286 nga-l-da wirdi-jarra bandarra malankarri-nurru, bandarra
1-PLU-NOM remain-PST SOME humpy-ASSOC SOME
bankirri-nurru
windbreak-ASSOC
Some of us had iron humpies, some had windbreaks.

6.7.3 Particles borrowed from English

Three particles, borrowed from English or Kriol, are increasingly important in contemporary K, even among those upon whom the influence of English is otherwise restricted to a few lexical items. All three displace verb inflections and/or modal cases, to which they are functionally equivalent. With these particles only a limited subset of verbal and modal case inflections is used.

6.7.3.1 marrbi MAYBE

Deriving from English 'might be', this is a clause initial particle that replaces the irrealis use of the verbal PaST and modal ABLative inflections. It may be used with the ACTual/modal locative or the FUTure/modal proprietive:

6-287 marrbi dangka-karran-ji thungal-i wungi-j
MAYBE person-GEN-MLOC thing-MLOC steal-ACT
Maybe he’s been stealing people’s things.

In traditional K this would be:

6-288 dangka-karran-jina thungal-ina wungi-jarr
person-GEN-MABL thing-MABL steal-PST
(=6-287)

Marrbi can also be used to enumerate a list of NPs giving hypothetical alternatives:
The conception of another child might be shown by a snake, maybe a brown snake, maybe a python.

(In traditional K this would be expressed using the particle *bandarra* 'some'.)

6.7.3.2 baymbay 'WARNING'

Derived from English 'bye and bye', this usually replaces the apprehensive verbal inflection, with the meaning 'this unpleasant thing might happen':

6-290 baymbay nyingka ra-yii-j, kamarr-ii-wa-th
WARNING you:NOM spear-DT-ACT stone-V.I.ALL-PST
You might get stung by a stonefish.

Traditional K equivalent:

6-291 nyingka ra-yii-nyarr, kamarr-ii-wa-nharr
you:NOM spear—DT—APPR stone-V.I.ALL-APPR
(=6-290)

6.7.3.3 namu, numu NEGAtor

Deriving from English/Creole 'no more' (cf Sandefur & Sandefur 1979:125-7), this has acquired a range of negative functions. It may mark negative imperatives, replacing the special negative imperative verb inflection. The zero modal case characteristic of imperatives is retained:

6-292 namu dana-tha wumpurung-k ngarn-ki
NEGAT leave-IMP spear-NOM beach-LOC
Don't leave the spear on the beach!

6-293 namu kamburi-j, baymbay kurri-ja ngumban-ji
NEGAT speak-ACT WARNING see-ACT you-MLOC
Don't talk, or they'll see you!

Traditional Kayardild equivalent:

6-294 kamburi-n, kurri-nyarra ngumban-inj !
speak-NEG.IMP see-APPR you-MOBL
(=6-293)

And it may supplant the privative suffix in denying attributes. Here *namu* precedes the attribute denied:
6-295 namu kunya-a, jungarra dibidibi
NEGAT small-NOM big-NOM rock cod(NOM)

It wasn't a small one, it was a big rock cod!
(The traditional K equivalent is given in 6-8).

6.7.4 Clitics

6.7.4.1 {-(i) da} 'SAME'.


Younger speakers tend to add this to the truncated form, as in
dangka-y-id [man-LOC-SAME] 'still the man (OBJ)' and naa-j-id [burn-ACT-SAME] 'still burning'.

Truncated forms with an exposed final /d/ undergo regular laminalization before /i/, as happens word-internally (see 1.7.3.6): ngad(a) + (-ida) --> ngathida [I-SAME] 'me allright'.

Function: This clitic probably derives from postposition of the nominal niida 'the same'. It may cliticize onto verbs, pronouns, noun/adjectives, and locationals, all of which may be maximally inflected, and conveys whatever sense of 'sameness' is appropriate to its host.

On nominals and pronominals in the nominative, it means 'the same ones as previously referred to'. It is interchangeable with the word niida used as an adjective: the opposite meaning, 'a different one', is conveyed by jatha'a 'other':

6-296 dathin-a kiyarrng-ka dangka-a bi-rr=ida dangka-a
that-NOM two-NOM person-NOM they-DU=SAME person-NOM
barruntha-ri nga-ku-lu-wan-jir kamburi-jir?
yesterday-ALL we-INC-PLU-POSS-ALL speak-ALL
bi-rr=ida dangka-a // niid-a / jatha-a dangka-a
they-DU=SAME person-NOM // same-NOM / different-NOM person-NOM

Are they the same two men who talked to us yesterday?
The same two men // the same/different men.

Cliticized to warngiid-a 'one', it means 'same as' (6-48); to thathung-ka 'together', it means 'both':

6-297 thathung-ida bi-rr-a wurkar
together=SAME they-DU-NOM boy-NOM

They were both boys.

On nominals bearing a semantic case it indicates the persistence of the role described (like English 'still'): 
The big rock cod was speared, speared in the head, didn’t swim off, sank down by the bait, dead.

To the south we took the children off our shoulders, kept going (the long way) through the scrub to the south.

(The grass ropes) would last a long time, in water all the while, in the sea and still in the sea; they wouldn’t get weak.

My younger brother is still small.

Still unharmed he emerged from the far eastern side of the saltpan.

(The initiates) were painted while still uncircumcized (before being circumcised).

I’ve got nothing, I’m still cadged out.

While still coming home from the north he got sick.

Note that in the last two examples no NOMinative suffix appears. Instead, (-ida) cliticizes directly to the stem. This necessitates a slight revision to the ‘elsewhere condition’ guiding suffixation of the NOMinative: it occurs where no relational, modal, associating or complementizing case is present, and no clitic.
Persistence may be emphasized by the verb *wirdi-ja* 'stay', itself taking (-ida):

6-306 yan-d, ngarrku=da *wirdi-ja=d*

_now-NOM strong=SAME stay-ACT=SAME_

And he's still strong today.

On future verbs, it indicates that the activity is far from finished:

6-307 ngada ngaka-thuu=d

_I-NOM wait-FUT=SAME_

I'll have to wait a long time yet.

In addition, (-ida) may be used to show extension, as with English 'even' (example in Text 3) and assent (K lacks a word for yes):

6-308 ngath=ida mungurru kamburi-n-d

_I:NOM=SAME knowing-NOM talk-N-NOM_

Yes, I'm the knowledgeable talker (said by an old woman who owns a certain story).

And amplification:

6-309 ngarii-ja=da *narra-nguni-ya kala-th*

_before-ACT=SAME shell.knife-INST-MLOC cut-ACT_

Way back in the old days we used to cut things with shell knives.

6.7.4.2 Focus -ka

This may be used for emphatic focus. It is particularly common in excited exchanges, where it may redirect the hearer's attention (6-310, 6-311) or show exasperation (6-312):

6-310 niya-niya-k !

_3sgNOM-REDUP-FOC_

That's him / watch him!

6-311 marri-ja ri-ya-ka marri-ja ri-ya-k !

_listen-IMP east-NOM-FOC listen-IMP east-NOM-FOC_

Listen to the EAST, listen to the EAST!

6-312 banaba dirrkuru-k

_ignorant(NOM) unceasingly-FOC_

(You) KEEP getting it wrong!

Often it marks a deviation from the speaker's expectations:
6-313 niya-ka kuujuu-j
3sgNOM-FOC swim-ACT

So HE'S the one going inl (I thought you were).

6-314 mutha-a walbu, maraka budubudu, nga-1-da kantharrka-k
many-NOM raft(NOM) CTRFCT boat 1-PLU-NOM alone-FOC

(There were) lots of rafts, (big) like boats - and we thought we
were ALONE!

-ka may also be used for purely rhythmic purposes. in songs and spells - see
Text 6 for an example.

In Lardil, as in K, -ka is used as a focus marker: ngerrur wuyininj, niya-ka mathu dangka-r 'his) own father-in-law, it is he who gets the
person (i.e. initiate)' (Hale 1981).

In Y, -ka is a subordinate clause clitic, marking cause. It always
follows the first constituent (Keen 1983:249).

6.7.4.3 -rna 'NOW'

This follows the verb, or in its absence the head noun of the predicate. I
am unsure whether this is a borrowing from English 'now' or Kriol na17 ; or is a
traditional K clitic, as maintained by several older speakers who are normally great
purists18.

Whatever its origins, its function is remarkably like Kriol -na, and to a lesser
extent English 'now'. It may soften a request, or imply that although previous
failures to obey were tolerated, the listener must now cooperate:

6-316 marri-ja=rmal
listen-IMP=NOW

Listen now!

It may signal a change in state:

[In a narrative on circumcision rituals, an older man says to
several initiates:]

17 Cf Bamyili Kriol burrum na, ontap la eshis 'Put it on the coals now' (Sandefur and Sandefur,
1981:29)
18 Yukulta has a clitic -rna, suffixed to the first clausal word, which derives polar questions:

6-315 DIRRKULI-WURLU=rna=NYI
husband-PROP=RNA=YOU

Are you married? (Y: 242)
Men, you're men now, you'll be men, big men!

And it may contrast a present state of affairs with one that existed before:

And so we eat it now, we learned about it, we eat damper.

Note that *rna*, unlike (*-ida*), does not displace the nominative suffix. This suggests a more recent origin, supporting the English/Kriol loan hypothesis.

6.7.5 Conjunctions

The role of these is quite limited.

*Bana* 'AND' is used far more rarely than its English counterpart, for conjunction is usually shown by simple juxtaposition (4.4.3.6). So *bana* is restricted to lists, which have a special intonation and require all NPs to be in the nominative, since they are topics.

Since what are listed may be alternatives rather than conjuncts, 'or' is often a better translation:

*My older brother can’t swim and my son can’t swim.*

*Bana* may also follow a noun, with the meaning ‘too’:
We two are going. Me too.

Birra 'too' expresses a similar meaning: the NP it modifies is asserted to be another member of the set under discussion. It usually follows, but may also precede (6-244), the NP referring to the included individual:

6-323 ngada birr
I:NOM TOO
Me too (alternate answer to 6-322).

6-324 yeah, nga-1—da thunduyingathi-na mutha-a maku, ngada birr
1-PLU-NOM (name)-ABL many-NOM wife(NOM) I:NOM TOO
Yes, we, Thunduyingathi's wives were many. I was among them.

This is formally identical to the third dual pronoun. It is possible that the 'TOO' use derived from a group/subset construction (4.4.3.5) in which the individual being included is the subset. The use of the dual suggests that the number of the group is determined by taking the second group (i.e. the other wives) as singular, qua single group, rather than non-singular, qua a number of individuals.

6.7.6 Interjections

These have no syntactic function, and usually make up a complete sentence. They include:

warirr '(I've got) nothing; nothing doing; no.' (May also be used as a noun, meaning 'nothing').

yukurdida 'That's right; there you go' (e.g. when easing a blind man into a car).

kwiy 'Wow!' (A pleased exclamation at one's own success).

ngarri 'Oops, oh no!' This expresses disappointment at one's own stupidity (for example after leaving a spear behind, or missing a fish), or self-correction, as when substituting one word for another.

yakay 'Watch out, wow, ouch!' (Expresses surprise or sudden pain). While watching an event continue, as when watching a willy-willy tear through the camp, it may be reduplicated indefinitely: yakaya yakaya yakaya yakaya...

yaniyuud 'Wait a minute!' (Related to yanda 'now' and yuuda 'first').
yaa! yaa! (A special exclamation used during wind magic).

There is no single extant K word for 'yes'. Assent is expressed by repetition of the interlocutor's assertion, by use of the clitic (-ida) 'same', by the English loan 'yeah', and by the words junku-d [straight-SAME] 'true indeed' or yuud, lit. 'already' - cf Italian gia: (Yukulta, Yangkaal and Lardil have the typically Eastern Pama-Nyungan ngii).

Five interjections that use sounds outside the normal K phonemic repertoire are:

ht  (A forceful aspiration followed by an unreleased alvolar stop, made while dancing.)

nl,  (Nasal clicks which precede statements of regret, self-reprimand or parody.)

m!  (A ceremonial interjection that releases initiates from silence).

hurru  (A bilabial nasal, initiated and terminated by glottal closure. This sound may be said in thanks as one receives food etc.)
CHAPTER 7

THE MODAL CASE SYSTEM

The 'modal case' system is one of the most unusual and interesting features of Kayardild grammar. We have already seen how suffixes whose basic function is adnominal or relational can be used to signal modality (2.4.3): that these follow adnominal or relational case suffixes but precede associating and complementizing suffixes (2.4), and that their domain is, roughly speaking, the VP (2.4.9). Their correlation with verb inflections for tense, mood and aspect was discussed, in simplified fashion, in 5.2.2.

The present chapter draws together the discussion of modal case as a system.

Firstly (7.1) I review the correlations between modal case and verbal tense/mood/aspect. For a subset of sentence types modal case seems to be distributed across the VP, appearing as modal case on NPs and as the termination on verbs. With other sentence types the many-to-one relation between verb-inflections and modal case invites an analysis in which modal cases code super-ordinate categories subsuming the more specific categories marked on the verb. Even this analysis, however, is too simple: to a limited extent modal case can be varied independently of, or in the absence of, verb inflection.

In 7.2 I discuss the semantic overlap between modal and adnominal or relational uses of case. There is, I argue, a parallel between modal case and the widespread use of local cases or prepositions as complementizers. But where the complementizer use of local case codes temporal or modal relations between clauses, i.e. relative tense/modality, modal case codes absolute relations between a single clause and the speech act.

In 7.3 I examine the domain of modal case in more detail. This roughly corresponds to the VP. But certain NPs, that the 'associating OBLique test' (6.4.1.1) show to be inside the VP, nonetheless escape modal case: e.g.
PROPriete ‘intentional objects’. I argue that these are ‘semantically oriented’ to the subject in the sense that a statement of their meaning must refer to the subject. A parallel is drawn with ‘ergative agreement’ in other Australian languages.

In 7.4 I use comparative data from within the Tangkic subgroup to show how the modal case system evolved. Two factors in the proto language combined to produce the modal case systems found in Kayardild, Lardil and Yangkaal: (a) the replacement in main clauses of fully transitive ergative constructions by ‘antipassive’ middle diatheses, under certain semantic conditions, and (b) the use of local cases as complementizers, marked over the verbs and NPs of subordinate clauses. With ‘insubordination’ – the reinterpretation of subordinate as main clauses – these complementizers became markers of absolute rather than relative tense/modality. Since both (a) and (b) type constructions were morphologically accusative, the evolution of modal case is closely bound to the abandonment of morphological ergativity in Kayardild, Yangkaal and Lardil.

7.1 Verbal tense/mood and the semantics of modal case categories.

7.1.1 The simplest account: distribution across the VP

We mentioned in 5.2.2 that the terminations of some verb inflections are formally identical to the modal case they select: such formal identities are found between the IMMEDIATE and MLOC, the FUTURE and MPROP, the HORTATIVE and MOBL, and the DIRECTeD and MALL.

Even the range of allomorphs may be identical. Future verb inflections, for example, end in \(-(k)u\). with allomorphs \(-(k)uu (/_{COBL})\) or \-(k)uru (/_{CLOC})\), while the corresponding modal case, the PROPriete, is \((k)u\), with allomorphs \-(k)uu (/_{COBL})\) or \(_(k)uru (/_{CLOC})\):

7-1 nyingka kurri-nang.ku niyan-ju balmbi-wu
you:NOM see-NEG.FUT her-MPROP morrow-MPROP

You will not see her tomorrow.

1 Identity could also be posited between the IMPerative verb inflection, analyseable into thematic plus nominative, and the zero modal case, realized as a NOMinative when no relational or associating case has been assigned.
You better not see her tomorrow.

Similarly, the 'inceptive' verbal inflection ends in \(-ir(i)\), with the allomorph \(-iring-\) (/_MCASE. 8.6), while the modal allative it selects is \(-(k)ir(i)\) (5-46): this extends to \((k)iring-\) before modal case (3.3.7).

In Lardil comparable formal parallels exist between the verbal future inflection and the nominal 'Future Objective' (7-76), and the verbal 'Marked Non Future' and the nominal 'Marked Non Future Objective' (7-81).

These formal similarities would be neatly captured by a rule distributing the appropriate modal case suffix across the whole VP, including both verbals and nominals:\footnote{This, in effect, is the analysis Klokeid (1976:520) proposes for Lardil: "if a tense category is present in a clause, then that tense appears not only on the verb, but distributes to its dependents, excepting only the subject".}

7-4 \(<VP[_MCASE] : V-THEMAT-xMCASE, (NP[_MCASE])^N >

\[
\begin{align*}
\text{IMMEDiate} & : x=LOCative \\
\text{FUTure} & : x=PROPrietive \\
\text{DIRECTed} & : x=ALLative \\
\text{HORTative} & : x=OBLique \\
\text{IMPerative} & : x=∅
\end{align*}
\]

There are two further respects in which case-like verb terminations behave identically to the modal case they select:

(a) both have identical sequence restrictions (3.2.3). Thus HORTative verb terminations parallel OBLique inflections, with which they are formally identical, in proscribing further case suffixes. Similarly, IMMEDIATE verb terminations parallel the formally identical LOCative inflections in not permitting a further LOCative inflection.

(b) The LOCative case participates in the suppletive LOC:OBL portmanteau \(-kurkka\). So does the IMMEDIATE verb inflection (analyseable into thematic plus LOCative) when followed by a complementizing OBLique (9.1.5.1).

Both these facts would be accounted for automatically by the VP-distribution analysis.
But elegant as it is, this rule only accounts for part of the data.

Firstly, there are constructions where verb and NPs bear formally different suffixes - e.g. the PRECONdition suffix -THarrba (formally similar to the CONSequential -ngarrba) which takes the modal ABLative (-kinaba) (5.2.3.8). To salvage the 'distribution hypothesis' here one would need a category-sensitive rule assigning one case to NPs and another to verbs:

\[ 7-5 \quad \text{VP}_{\text{x-MCASE}} : \text{V-THETMAT-x-MCASE, (NP}_{\text{y-MCASE}} \] ^N \]

A model of modal case that uses a VP-distribution rule, with extra category-sensitive substitutions, is a reasonable account of how clausal complementizers, that were the ancestors of the modal case system, must have worked -see 7.4.1.3.

There are also verb inflections that cannot be analysed into thematic plus case, either because they were never so analyseable (e.g. DESiderative -da) or because sound change has left then synchronically unanalyseable (e.g. the APPRehensive -NHarrra, whose original components -TH- plus UTILitive -marra are no longer obvious\(^3\)). For these we need an 'irregular' rule of the type:

\[ 7-6 \quad \text{VP}_{z} : \text{V-z, (NP}_{\text{y-MCASE}} \] ^N \]

DESiderative: \( z = -\text{da} \quad x=\text{OBL} \)
APPRehensive: \( z = -\text{NHarrra} \quad x=\text{OBL} \)
PaSt: \( z = -\text{THarrra} \quad x=\text{ABL} \)

As 7-6 stands, the modal case values appear to be assigned quite arbitrarily. But in fact there is a clear semantic motivation, which we now examine.

7.1.2 Modal case as superordinate category to verb inflections

All modal cases but the DIRECted correspond to a semantically coherent group comprising several verb inflections (see Fig. 7-1). Sentence examples are in 5.2.3.

The modal case meanings are superordinate to the semantically more specific verbal inflections.

Thus MLOC covers 'instantiated' propositions - those that have been, or are.

\(^3\)See 5.3 for full discussion.
<table>
<thead>
<tr>
<th>Verb Inflection</th>
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<th>Negative Form</th>
<th>Unmarked choice for modal case. Form of Modal Case</th>
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<td>-na</td>
<td>-</td>
</tr>
<tr>
<td>ACTual</td>
<td>-TH.a</td>
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<td>ALMOST</td>
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<td>DESiderative</td>
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<tr>
<td>DIRECTed</td>
<td>-THiri(ng)</td>
<td></td>
<td>ALLative (kiri(ng))</td>
</tr>
</tbody>
</table>

**Figure 7-1:** Modal case as a superordinate tense/mood category: verb inflections and unmarked choice for modal case

taking place (ACTual)\(^4\), or those that are specifically asserted to be taking place at the time and place of the speech act (IMMEDiate).

MPROP covers 'future' propositions, that the speaker expects to take place: when used in a subordinate clause (9.3.9) they mark an event the matrix subject expects and intends to take place.

MABL covers 'prior' propositions, that are asserted to have taken place some time before the speech act (PAST) or before the time of the main clause (PRECONDITION), or not to have taken place some time before the speech act (ALMOST). It also extends to the secondary use of the PaST inflection to denote past and present irrealis conditions.

MOBL covers 'emotive' propositions: DESideratives, which report the wish of the speaker to perform or have performed the action described by the verb: APPRehensives, in which the speaker outlines an unpleasant possibility, in the hope that the hearer will help prevent it: and HORTatives, in which the hearer is requested to intervene and bring about (POS) or halt (NEG) the state of affairs.

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\(^4\)Note that negative propositions can be instantiated as well as positives - by actually failing to take place.
described by the clause. It also extends to the secondary ‘future irrealis’ meaning coded by the DESiderative (5.2.3.9).

The unmarked ‘zero’ modality, being an ‘elsewhere’ case, does not lend itself so well to a unified semantic characterization. But the two verb inflections it correlates with – the imperative and nominalization of ongoing uncompleted activity – could perhaps be grouped as ‘imminent uncompleted’.

On the basis of the above data, then, five of the six modal categories are superordinate to the more specific tense/mood categories coded by the system of verb inflections. To account for this, we could propose a ‘modality distribution rule’ which, after diagnosing the most salient modal feature of the verb inflection (e.g. ‘emotive’ in the APPRehensive, ‘prior’ in the PaST) would distribute the relevant modal case over the appropriate NPs.

7.1.3 ‘Independent’ use of modal case.

So far I have biassed the data by only presenting sentences in which the choice of modal case is entirely determined by the verb inflection. But further data shows that the above account needs refinement. Firstly, modal cases are often used in nominal clauses involving location or movement where no verb inflection is present:

7-7 ngada dathin-kiring-ku kamarr-iring-ku
I:NOM that—MPROP stone—MPROP
I will (go) to that stone.

7-8 jina-na darr-ina nying-ka jirrka-an-kina?
where—MABL time—MABL you—NOM north—FROM—MABL
When did you (come back) from the north?

7-9 nyingka yubuyubu-na mirra-na?
you—NOM track—MABL good—MABL
Are you on the right track?
(Here MABL expresses the ‘irrealis’ meaning that is one extension of the verbal PaST / prior modality.)

They are also used meaningfully with nominalized verbs, which bear no information about mood or tense. Thus the privative nominalization –n-marri, in which the regular verb inflections have been neutralized, may take either the zero or the ablative modal case according as an instantiated or past/irrealis meaning is expressed:
7-10 nga-ku-rr-a bijarrba-ya karrrma-n-marri
we-INC-DU-NOM dugong-MLOC wrestle-N-PRIV

We two haven’t wrestled dugong.

7-11 nying-ka nguku-na dali-jarrma-n-marri ?
you-NOM water-MABL come-CAUS-N-PRIV

Haven’t you brought the water?

To retain the ‘VP distribution’ hypothesis, would have to maintain that the verb ‘passes on’ the modality feature to its daughter NPs before being neutralized by nominalization. But even this explanation would be unable to account for the following data:

7-12 ngada kurri-nangku mala-wu (balmbi-wu)
I:NOM see-NEG.FUT sea-MPROP morrow-MPROP

I won’t (be able to) see the sea (tomorrow).

7-13 ngada kurri-nangku mala-y (barruntha-y)
I:NOM see-NEG.FUT sea-MLOC yesterday-LOC

I could not see the sea (yesterday).

Here the modal case system is acting independently of the verbal inflection. The future verb inflection can indicate ability as well as futurity (5.2.3.5), and it is this abilitative meaning intended in (7-12) and (7-13). But the possession of a certain ability may be located in time, and this is what the modal cases are signalling here: the ‘future’ PROPrietive in (7-12) places the speaker’s inability in the future, or merely makes a prediction (the two meanings merge) whereas the ‘instantiated’ LOCative in (7-13) shows that there was a real occasion, yesterday, when the speaker was unable to see the sea. (The modal LOCative and PROPrietive are also in opposition in clauses with the FUTURE verb inflection and the CounterFACTual particle maraka – see 6.7.2.1).

With the apprehensive verb inflection the alternatives become even richer, for three modal cases are possible:

7-14 warrjawarri ngada barrbiru-tha manharr-iy, kurri-nyarra
slowly(NOM) I:NOM lift-ACT torch-MLOC see-APPR
ngijin-inj, kala-nyarr, rabi-nyarr
lsgPOSS-MOBL fly-APPR arise-APPR

Unhurriedly I lifted the bark torch, in case (the diver birds) should see me and fly off.
7-15  ny ing-ka ngudi-na  wangalk, ngada ngumban-ju burldi-nyarr
you-NOM throw-NEG.IMP rang-NOM I:NOM you-MPROP throw-APPR
Don't you throw the boomerang, or I'll throw one at you.

7-16  tharrara  kali-nyarra wambal-iya, naa-nyarr
ember-NOM jump-APPR bush-MLOC burn-APPR
(Look out), the embers are jumping into the bush, it might burn.

The modal oblique, as in (7-14), is commonest for the most basic meaning expressed by the apprehensive is that the event described is/would be unpleasant, calling for the 'emotive' oblique. But in certain situations more potent factors may override this: in (7-15) the speaker stresses his certainty of being able to effect an unpleasant retaliation by choosing the 'future' modal proprietive (the 'emotive' modal oblique would also be acceptable here, and would emphasize the unpleasantness of the consequence).

In Lardil the cognate of the PROPrietive - the 'Future OBJective' - is the only modal case allowed with the APPRehensive. See 7-78.

A third possibility is that the unpleasant event is actually taking place, as in (7-16)\(^5\). Here the LOCative modal case shows the reality of the occurrence, while the APPRehensive verb inflection expresses the speaker's distress.

These examples show that modal case does not always depend on the verb inflection, but can to some extent be varied independently, allowing for a multiplication of subtle meanings. From this we may conclude that modal case can encode a separate meaning from that given on the verb, although the need for the two to be logically compatible (one cannot state simultaneously that the same event has actually happened and will occur in the future) places strict limits

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\(^5\)The use of 'lest' clauses to describe actually-occurring undesirable events has been reported for Yidiny (Dixon 1977:352-3).
There appear, however, to be conventionalized co-occurrence restrictions beyond the call of semantic compatibility. The DIRECTed verb inflection, for example, always selects the modal ALLative, although prior, instantiated or future values would be semantically compatible with it.

An ideal grammar of K would combine the formal generalizations made by the VP-distribution rule (7-4) with the semantic generalizations about modal case as a semantic category superordinate to verbal inflection: it could also allow for the 'independent' use of modal case just discussed. To do this it would need:

(a) 'distribution rules' of the type proposed in 7.1.1, along with 'category-sensitive' variants.

(b) 'semantic diagnosis' rules that would select an appropriate modal case after examining the semantic content of the verb inflection.

(c) 'independent' rules that could re-assign modal case on a semantic basis, in defiance of or in the absence of (a) and (b).

The 'independent' use of modal case has not been reported for Lardil, and thus seems to be a recent K innovation, encouraged by the association of each modal case with a semantically coherent group of verbal inflections.

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6 The modal case system has proved particularly vulnerable to English/creole influence. Some young speakers have abandoned the past and apprehensive inflections and their attendant verbal cases: in their place they use the particles bin and baymbay ('bye and bye'), together with the indicative verbal inflection and the locative modal case. They do, however, retain the future verb inflections and proprietive modal case. Other speakers, less affected by English, have kept the full range of verb inflections, but their use of modal case correlates entirely with verb inflection: the independent use of modal case described above is not found. In other words, their grammar could be explained by a modality distribution rule. Thus the independent use of modal case described in this section is restricted today to the oldest speakers. And as one would expect, Wurm's recordings of K, made in 1960, contain a higher incidence of independent uses than is found today. Elsewhere in Australia are many other cases where those features of a language most interesting for general linguistic theory are the first to disappear following English contact; the situation is probably similar throughout the colonial world. Two examples are the disappearance of syntactic ergativity from Dyirbal (Schmidt, 1985) and the tendency among younger Warlpiri speakers towards freezing of word order (Bevin and Shopen, MS), which would leave it a more 'configurational' language.
7.2 Relational and modal meanings: a common semantic core?

In this section I examine the extent to which relational or adnominal meanings overlap with the modal meanings of the same case. This bears crucially on whether modal cases should be treated as different functions of the same case, as suggested in 2.4.8, or as homophonous forms quite distinct from the more usual case functions. More generally, it answers the typological question of why modal case should exist at all. I will argue that whereas relational cases relate the NP they mark to the action described by the verb, and case-like complementizers in many languages extend this to the relationship between two clauses, modal cases relate the 'world' described by the clause to the 'world' of the speaker at the moment of speech. This provides, in passing, a glimpse into the philosophy of time, modality and existence implicit in the K language.

The relevant cases are all, in a broad sense, locational: LOCative, ABLative, ALLative, PROPrieteive (having) and OBLique (etymologically an old dative). But I must stress from the outset that I do not subscribe to the 'strong localist' position, which sees tense/mood meanings as derived from more basic local meanings (see Lyons 1977:718–20 for discussion and references). Rather, I believe that both are semantically complex (with the possible exception of the LOCative) and both include mood/tense-like components in their meaning.

The local relations ALLative and ABLative, for example, are not undecomposable thematic units (e.g. 'GOAL' or 'SOURCE') but include, at least, the notion of 'becoming': Foley and Van Valin (1984) treat 'X Y-ALLative' as BECOME (BE AT (X, Y)) and 'X Y-ABLative' as BECOME (NOT (BE AT (X, Y))). Yet 'become' is an essential component in the semantics of tense. In Wierzbicka (1981b:216) the future proposition 'Helen will work as a typist' is reductively paraphrased as 'the world a part of which is me saying this can be thought of as becoming a world a part of which is Helen working as a typist' (my emphasis -

\[\text{Clark (1970) argues that 'possessive' and 'having' (here, PROPrieteive) constructions are closely related to the semantically more fundamental 'locatives'. Although her discussion is primarily concerned with predicative constructions, it can be applied with equal validity to attributive constructions employing adnominal suffixes. Possessives, she maintains, are more appropriate when the 'location' is animate, and the thing located is not definite; the 'having' relation is more appropriate when the location is animate and the thing located is definite. Accordingly, she groups existential and locative constructions (both 'hyperlocatives') with possessive and 'having' constructions (both 'possessives') under the joint rubric 'locational'. Her analysis may be extended to include the ALLative as the directional counterpart of the LOCative and the DATive as the directional counterpart of the PROPrieteive (i.e. 'want to have').}\]
Similarly the past proposition 'at that time George was fat' is paraphrased as 'that world, which can be thought of as becoming the world a part of which is me saying this, can be thought of as a world a part of which is George fat' (ibid: 194). Less obvious is the implicit reference to futurity, or at least expectation, in the PROPrietive (general having) case in K. This will be discussed below.

So at least some of the cases which can be used modally – the ABLative, ALLative and PROPrietive – include tense or modality type components in their most basic meanings. It is not too preposterous that these should be extended to a predominantly modal use. The situation with the OBLique is less clear; I will argue that its various uses have become so specialized that only a diachronic link can be salvaged.

These locational cases are essentially two-place predicates (albeit of a rather complex nature). But there is no inherent restriction on what arguments they take. Used adnominally ('the fool on the hill') they take two entities (NPs) as arguments. Used 'relationally', they take an entity argument (e.g. a local NP) and a proposition (the core of the clause). Used as complementizers they take as arguments two propositions: the main and subordinate clauses.

As the arguments being related change from NP to clause (i.e. as 'rank-shifting' occurs) only some languages retain the same locational markers. Yidiny, for example (Dixon 1977:332–346), does not use regular case suffixes as complementizers, but the subordinate verbal inflection is formally similar (and possibly related diachronically) to a local case. Nevertheless, probably the commonest pattern is for local case markers or adpositions to double as complementizers. English, for example, uses local prepositions with the infinitive, as in 'they stood up to applaud the musicians'. Many Pama-Nyungan languages mark the appropriate local case on every subconstituent of the subordinate clause (except the equi-deleted subject), as in Djapu (Morphy, 1983:132–3 & 7–17).
This appears to have been the situation in proto Tangkic (7.4.1.3).\(^8\)

7-17 ngayi rongiyi-n [nha-nhara-ngur malu-mirringu-wal].\(^{\text{abl}}\)

3sgNOM return-PERF see-NMLSR-ABL father-KINPROP-OBL

(Human nominals in Djapu take OBLIQUE case suffixes for the ablative case function.)

All of this is quite familiar, and few would dispute that genuine polysemy is involved, with similar relationships being set up between arguments of different types.\(^9\) Of course, the meanings of these relationships are not identical — when used as complementizers, the temporal meaning usually predominates over the spatial, for example — but a cluster of related but distinct meanings is typical of case polysemy in general (see Wierzbicka 1980a). The important thing is that a substantial semantic overlap can be established.

Modal case, because it is so unfamiliar, may not appear to follow this pattern. I would claim, however, that it represents a further application of the same two-place predicate, but taking as its arguments the speech act and the proposition expressed by the clause. The main difference from the uses just discussed is that here only one of the arguments — the proposition containing modal case — is a linguistic object. The other — the (time of the) speech act — is not expressed by any linguistic material, but given by context.

This is typical of deictics. The word 'now', for example, means something like 'the time at which the event described in this proposition happens is the same as the time at which I say this'; it could therefore be treated as a two-place predicate taking as arguments the containing proposition, and the context of utterance.

\(^{\text{8}}\)There is a substantial literature on the use of locationals as complementizers. Starosta (1972) mentions examples from Hebrew and Japanese where the morpheme which marks direction of motion may also introduce purposive complements. Among the many unrelated languages using locational prepositions, prefixes or case markers as complementizers are Swahili and Hungarian (Moravcsik, 1972), Bengali (Ferguson 1970), Maori (Clark 1973) and Diegueno (Gorbet 1973).

Washabaugh (1975) has argued that complementizers in creoles develop from 'locatives'; Nichols (1975) extends this to 'locationals' in the sense given above, citing examples where possessive and purposive markers (e.g. bilong in Tok Pisin, for in Gullah) introduce complements: Tok Pisin mi go long gaten bilong kamautim kaukau 'I go to the garden to pull out sweet potatoes' (ex. from Wurm 1971); Gullah well she just gone tor take a rest 'well she has just gone to take a rest'.

\(^{\text{9}}\)A further possibility is for a temporal preposition to relate a subject and a VP, as in Welsh periphrastic tense constructions like Mae lfwr wedi darllen y llyfr 'Is lfwr after reading the book = lfwr has read the book’. (This is not the analysis proposed in Awbery (1976), who treats darllen y llyfr as a full clause from which the subject has been equi-deleted. Base-generation as an embedded nominalized VP, however, is an equally plausible account.) If modal case obeyed the simple VP distribution rule outlined (and rejected) in 7.1, Kayardild clauses could be analysed in a similar way: as copula clauses comprising a subject and a VP embedded under a local case. But the complexities outlined in 7.1.2 and 7.1.3 make such an analysis impossible.
The difference between relative and absolute tense provides a good analogy with the difference between complementizing and modal uses of a local case or adposition (and in fact the evolution of modal from complementizing case corresponded to a shift from relative to absolute tense - 7.4.2.3). Relative tense involves a temporal relation between two propositions: the main and the subordinate clause. Absolute tense, on the other hand, involves a temporal relation between a proposition and the context of utterance. If we think of this in terms of ‘worlds’, then relative tense relates the ‘world in which [main clause]’ to the ‘world in which [subordinate clause]’, while absolute tense relates the ‘world in which [main clause]’ to the ‘world a part of which is me saying this’.

This ‘absolute’ complementizing use is far less common than the relative complementizing use, but examples are found in a number of creoles. In Tok Pisin the originally spatial word klostu (‘close up’) signals an ‘almost’ modality, as in dispela haus klostu pundaun ‘this house is nearly falling down/ nearly fell down’ (Dutton 1973:101). And in Gullah (Nichols 1975) the preposition ‘for’, as well as being a locational marker and a complementizer, may mark modal obligation in a main clause: where for put this ‘where should one put this’.

Having noted these somewhat marginal parallels from other languages, I would now like to examine the K modal cases from this perspective. With the LOCative, ABLative, ALLative and PROPrietive, I will argue, the link between modal and adnominal/relational meanings is synchronically valid. With the OBLique, links of this type may once have existed but have been obscured by reconstructable historical changes.

The modal LOCative, as we have seen, marks the modality ‘instantiated’: in other words it describes a state of affairs the speaker knows to be occurring or have occurred. The choice of the LOCative, which primarily expresses the coincidence of two entities, is obvious enough with present occurrences, but at first sight may appear inappropriate for past ones. Recall, though, that the modal

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10 Cassirer (1923) offers several examples ‘where language designates time relations by the same means which it has developed for the designation of local relations’. In Somali, for example, variations in the vowels of the definite article express ‘differences of spatial position and situation, but also .. temporal differences.’ Hymes (1975:313–29) discusses the evolution in Kiksht of directional verbal prefixes, which interact with regular tense prefixes to produce a finely graded set of tense distinctions. Both these systems appear to have arisen rather differently to modal case, through direct extension of a main clause delictic from space to time. In the Tangkic languages, on the other hand, the route was more tortuous - see 7.4.
ABLative with the PaSt verbal inflection is used when pastness is being stressed: choice of the ACTual verb inflection, together with MLOC, stresses the actuality of the event. We can summarize this as follows: 'the world a part of which is me saying this can be thought of as in a world where [Main clause]'.

The 'prior' modality associated with the modal ablative can similarly be paraphrased as: 'the world a part of which is me saying this can be thought of as coming from a world where [Main clause]'. Where it is functioning relatively, as with PRECONdition clauses, the following substitution could be made: 'the world where [Main clause] can be thought of as coming from a world where [Subordinate clause]'.

The modal ALLative is used for events just coming into the speaker's awareness, or to describe activities as they approach the speaker. The link between relational and modal meanings here is obvious: the meaning of the latter may be represented as 'the world a part of which is me saying this can be thought of as moving towards a world where [main clause]'\(^\text{11}\).

The use of the modal PROPrietive to code futurity requires some further explanation. Although the semantic link between 'having' and 'futurity' is the hardest for English speakers to see\(^\text{12}\), it is, paradoxically, the one most fully exemplified in other areas of K grammar. Its employment to mark the 'intentional objects' of verbs like 'search for' or 'wait for' was noted in 3.3.5.4 and 6.2.3. Moreover, it may attach to active or passive nominalized verbs, producing the meaning 'able to V' or 'one can expect this to V' (8.2.10.1).

It may also mark some entity whose subsequent appearance is augured by an omen. In (7-18), from a mythical story, the protagonist has gone out spearing fish. All the fish he sees are a bloody red: unknown to him, this signals the imminent approach of the lecherous mud-dwelling predator Barrindindi, accordingly marked with the PROPrietive.

\(^\text{11}\) It is perhaps more natural here to think of the 'other world' moving towards the world of the speech act. This would require the normal order of 'context argument' and 'main clause' to be reversed, as in 'there is a world which the world containing me saying this can be thought of as moving towards, where [Main Clause]'\(^\text{1}\).

\(^\text{12}\) Nonetheless, this link is far from being limited to K. A notable Indo-European example is the development of the synthetic future in modern Romance languages from vulgar Latin VERB + habere. In Ukrainian, too, (I. Mel'cuk, p.c.) the future of verbs is formed with the infinitive plus the finite form of the verb 'have': citat' imu [read have-l] 'I will read'.
There were many fish, heralding that monster Barrindindi.

In all these uses, the PROPrietive case is intimately linked with the notion of 'expectation'.

The semantic connection between the PROPrietive case and expectation is made clearer by comparing the two types of 'having' case in K: the PROPrietive and the ASSOCiative. As mentioned in 3.3.5, the ASSOCiative case is appropriate when the possessor actually has the object with him at the relevant time, though without necessarily owning it. The PROPrietive case is far more general, and includes a component something like 'X can expect PROP to be in the same place as X, when X wants'. (The presence of this 'expect' component links it to the rather unusual 'intentional object' and 'presaged appearance' uses outlined above).

Fitting this into the framework we have been using so far, this would give something like 'one can expect that the world, of which me saying this is a part, will be in a world where [Main Clause].'. Note that the definition I propose for the adnominal use of PROP already includes a modal element, 'expect': I am not deriving the modal meaning from the adnominal, but claiming that both include modal elements.

The OBLique case, in modern K is essentially syntactic (3.3.6) and thus it is impossible to isolate a basic meaning for it in the way we can for the other modal cases. Data from the more conservative Yukulta, however, suggest that in proto Tangkic it was a general dative with a broad range of meaning: most importantly, this would have included 'goal' or 'purpose' arguments of verbs like 'look for' or 'hunt for' (3.4.2.7). In 7.1.2 above we characterized MOBL as coding an 'emotive' modality, but an alternative view is that it is used for situations which it is the 'goal' or 'purpose' of the speaker to bring about or prevent: DESideratives reporting the intent of the speaker to perform or have performed the action described by the verb; APPRehensives whose purpose is to outline an unpleasant consequence and thereby preempt it; and HORTative clauses uttered with the purpose of inducing the listener to intervene and bring about or halt some state of affairs. A historical link between the purposive-like semantics of the modal oblique and the purposive relational use of its proto Tangkic reflex can thus be established (7.4.1.3). although it probably has no validity synchronically.
A fuller analysis of the meanings shared by modal and relational or adnominal case uses is beyond the scope of this thesis. But I hope to have convinced the reader that genuine polysemy is involved, with similar relations being set up between different entities: adnominal case relates two nominals, relational case links one nominal to the verbal action, complementizing case links two clauses, and modal case relates the world of the clause to the world of the speech act.

7.3 The domain of modal case marking.

All other case functions — adnominal, relational, associating and complementizing — have as their domain a syntactic constituent: respectively, embedded NP, NP at clause level, all NPs in the VP, and the clause. The distribution of all these case suffixes can readily be accounted for by introducing the case at the appropriate constituent level. With adnominal, relational and complementizing suffixes this mirrors the semantic scope of the case. (Associating case is purely syntactic and thus cannot be assigned a semantic scope).

Modal case, however, is more complicated. Its domain is, roughly, the same as the associating OBLique, viz. all NPs in the VP. Like associating case it does not appear on subjects, subject complements, second predicates on the subject (6-160), including those bearing an adnominal ASSOCIATIVE or PRIVative (6.4.1.1), and the syntactically parallel ‘body part as locus of effect’ NPs (6.4.2). In short, all NPs outside the VP escape modal case. Again like the associating OBLique, it appears on objects, locations and time NPs (all 7-1), allatives (7-7), instruments coded by the INSTRUMENTAL case (7-30) and UTILitives (7-35). These are all within the VP, as it is defined in 2.4.5 and 2.4.9.

Note in passing that even if the domain of modal case was the VP, this would not mirror its semantic domain precisely. Tense and mood are, semantically, operators over the whole clause, not the VP. This is clearly shown by the interpretation of second predicates on the subject. These are interpreted as attributes of the subject at the time of the clause, even though they are syntactically outside the constituent marked for tense (the VP).

13See, for example, Foley & Van Valin (1984). Lexical Functional Grammar (e.g. Neidle 1982 for Russian) provides an explicit mechanism for introducing the grammatical feature TENSE at VP level, but treating it semantically as an operator at clause level.
Certain NP arguments, however, such as 'intentional objects', escape modal case (7-19), even though they are demonstrably within the VP, as shown by the fact that they take an AOBL if the clause is nominalized (7-20):

7-19 niya jani-jarra kunawuna-wuru /*kunawuna-wuru-na
3sgNOM search-PST child-PROP child-PROP-MABL
He searched for the child.

7-20 niya jani-n-da kunawuna-wuru-nth
3sgNOM search-N-NOM child-PROP-AOBL
He is searching for the child.

Other NPs which escape modal case, though demonstrably within the VP, are body part instruments in NOM or PROP (other instruments in PROP optionally escape modal case); PROPrietary 'themes' of transfer verbs; and demoted human agents. I shall discuss these in more detail in 7.3.2, where I argue that all such NPs are semantically 'oriented' to the subject in some way. I will contrast them with semantically similar arguments that are not 'subject-oriented' and do take modal case.

These facts can be accounted for by assuming that modal case is distributed over the VP, but specifically blocked from appearing on NP arguments whose semantics link them with the subject in some way. On this interpretation, K allows two degrees of positive syntactic linkage between subject and other NP arguments (Fig. 7-2). The tighter link, existing between subject and other NPs outside the VP, expresses either secondary predication or the 'subject's body part as locus' relation: NPs linked to the subject in this way escape both associating and modal case. I shall refer to NPs of this type as 'construed with the subject' or 'subject-construed'.

The looser link exists between subjects and NPs that do not make actual second predications about the subject, but nevertheless require reference to the subject in any characterization of their case meaning. NPs of this type are inside the VP, and take associating case: their link to the subject is shown by their failure to take modal case, a phenomenon I will call 'modal blocking'. I shall refer to NPs of this type as 'subject-oriented'.

Since modal case does not appear in NPs inflected for 'verbal case', such arguments cannot code 'subject-orientation' in this way. With some verbal cases, however, there is a functional analogue in the choice
NP type | Associating case | Modal case
---|---|---
(a) Subject | - | -
(b) 'Subject-construed':
Second predicate on subject; body part of subject as locus; subject complement.
(c) 'Subject-oriented':
Inflected for relational case, but statement of meaning includes subject as argument, e.g. 'intentional object'.
(d) Other NPs inflected for relational case, e.g. OBJect, LOCation.

Figure 7-2: Associating and modal case as morphosyntactic indicators of semantic linkage with the subject

between transitive and detransitive forms. The verbal ablative, for example, uses the normal 'transitive' form when stressing the movement of the object, and the detransitivized form when stressing the movement of the subject. This is discussed in 3.4.2.4.

Note that it is the NPs escaping modal case that are positively characterized semantically: they agree with the subject in not taking these cases. This is the obverse of what happens in many ergative Australian languages, where a semantically definable subclass of NPs attracts ergative case marking in transitive clauses (in agreement with the clausal subject). and remain unmarked in intransitives.

A dramatic demonstration of this parallel is to compare ergative Yukulta with Kayardild - NPs liable to ergative agreement in Y are modally blocked in K (examples below).

Because the syntactic effect of linking subjects to NP arguments by case agreement is more obvious in ergative languages, a brief summary of this phenomenon will provide a useful introduction to the semantics involved. For fuller descriptions of individual languages see Hale (1982a) and Simpson (1983a) on Warlpiri, Goddard (1983) on Yankunytjatjara, and Austin (1981b) on several Pilbara languages.
7.3.1 Ergative agreement in Australian languages

In Australian languages with ergative agreement no syntactic distinction between ‘subject-construed’ and ‘subject-oriented’ arguments has been reported: ergative agreement is used in both situations. (This is not surprising – perhaps no other Australian language has at its disposal a number of case ‘levels’ comparable to Kayardild.)

The use of ergative agreement to mark ‘subject-construed’ second predicates on the subject is illustrated by the following sentences from Yankunytjatjara (Goddard 1983:60 & p.c.): the second predicate ‘child’ agrees in case with the clausal subject, taking the nominative in 7-21 and the ergative in 7-22:

7-21 nganana nyara-kutu tjitji yanku-payi
    1pl(NOM) there-ALL child(NOM) go—CHARACTERISTIC
    We used to go there as children.

7-22 nganana tjitji-ngku nyaku-payi
    1pl(ERG)  child-ERG see—CHARACTERISTIC
    We used to see (it) as children.

Second predicates can often be construed with objects as well. In effect, this usually means they remain morphologically unmarked, since most objects take the ABSolutive, usually phonologically null. For a discussion of second predicates on the object in Warlpiri, see Simpson (1983a).

In addition, there are frequently a number of ‘manner nominals’, e.g. Yangkunytjatjara wala ‘quickly’. These too take ergative agreement. Like their K equivalents (see 4.3.1) they can only occur as second predicates; in Yankunytjatjara at least they can only modify the subject.

‘Body-part’ involvement can also be coded by case agreement, as in the following Pitjantjatjara example (Hale, cited in Blake 1977):

7-23 wati-lu tjitji mara-lu pu-ngu
    man-ERG child(ACC) hand-ERG hit-PAST
    The man hit the child with his hand.

As in K body part NPs in many ergative Pama-Nyungan languages can be controlled by a greater range of functions than can other second predicates, e.g. dative arguments. See Hale (1983:39) on Warlpiri.

The second predicate manner NPs above would be ‘subject-construed’ in
K. As mentioned in 6.4. body-part NPs in K are rather complex: they are subject-construed when loci of effect and subject-oriented when instruments.)

Another example of ergative-agreement involves instruments. A common pattern, exemplified by Yukulta, is for them to take the ‘having’ case, plus ergative agreement:

7-24 barrunthaya-kadi mirliya-ja nayibi-urlu
    yesterday 1sgS:PAST cut-(REFL:IND knife-PROP
Yesterday I cut myself with a knife. (Y:248)

7-25 laa-ja =kandi dathin-da makurrarra wurr-urlu-ya
    spear-IND 3sgA:FUT that-ABS wallaby(ABS) sharp-PROP-ERG
miyarl-urlu-ya
    spear-PROP-ERG
He will spear that wallaby with a sharp spear. (Y:248)

On a priori semantic grounds, one can treat such constructions as second predicates of having, with the instrument use inferred: ‘he, having a spear, killed the wallaby’ (inferred: with it). Alternatively, the semantic information supplied by the instrument NP may exceed mere second predication, and explicitly include a ‘use’ component: ‘I cut myself, having a knife and bringing it into contact with myself’. Because ergative-agreement does not distinguish subject-construed from subject-oriented NPs, there is no syntactic clue to the semantics here. In K, however, these different semantic types correspond respectively to subject-construed second predicates with the ASSOCIATIVE case, and subject-oriented PROPRIETIVE NPs – see 7.3.2.1.

The remaining types of NP prone to ergative agreement clearly involve more than simple second predication, and correspond more closely to the subject-oriented NPs found in K. Motion cases (the ablative and allative) commonly take ergative agreement when emphasizing the motion of the subject rather than the object— that is, when a component like ‘SUBJ became at ALL’ is part of the meaning. A Warlpiri example was discussed in 3.4.2.4.

A less common type involves goal NPs. In Yankunytjatjara (Goddard 1983:129-30) NPs giving the intention of an action take the suffix -kitja and agree in case with the actor:

7-26 wati malu-kitja ya-nu
    man(NOM) kangaroo-INTENT(NOM) go-PAST
The man went off, wanting (to get) kangaroo.
The man took a rifle, wanting (to get) kangaroos.

Goddard points out that the PURPosive case could also be used here, but would imply 'a need or conventionally recognized purpose', whereas the INTENT suffix 'says that the actor has a strictly personal intention that may or may not be a conventionally recognized goal.' Significantly, the PURPosive does not show ergative agreement. The semantic reason for this contrast apparently resides in the personal nature of the motivation shown by the INTENT suffix: the motivation can only be known by knowing something about the actor.

To summarize this section, a number of Australian languages use 'ergative agreement' to signal a semantic link between subject and the target argument. The actual semantic conditions range from strict secondary predication (e.g. 7-21, 7-22) to a looser type of semantic orientation, where the case meaning includes a semantic component referring to the subject.

The semantic conditions calling for modal blocking in K (as distinct from those that place the target NP outside the VP and therefore block associating case as well) are more specific, being limited to the looser 'subject orientation', rather than second predication on the subject. We will now examine these in more detail.

7.3.2 The semantics of subject-orientation in Kayardild

The specific semantics of this phenomenon is best brought out by comparing constructions with basically similar participant roles, but differing in subject orientation.

7.3.2.1 Types of instrument

Perhaps the most subtle investigation of the semantics of the instrumental case is that given in Wierzbicka (1980a). Her explications of the Russian instrumental include both a 'subject component' ("SUBJ did something") and a contact component ("INSTR came into contact with OBJ"). Different languages take different components as paramount, leading to different patterns of case syncretism. Ergative/instrumental syncretism, as in Dyirbal (Dixon, 1972), presumably stresses the subject component. Locative/instrumental syncretism, as in Warluwarra (Breen, 1971), stresses the contact component. In yet other languages the instrument function may simply be inferred from the presence of a
second predicate of having, as with the Yukulta examples discussed above; in ergative languages with this construction the having suffix is followed by ergative agreement. (Blake 1977: Ch. 5 gives further examples of these syncretisms).

K allows a number of possibilities. When the instrument is borrowed or temporarily snatched up for the task at hand, the ASSOCiative is used. This functions as a second predicate on the subject, with the reading ‘X Ved. temporarily having ASSOC’ (implied: ‘and using it’). Like all other second predicates on the subject, the ASSOCiative NP escapes both AOBL (6-165) and modal case (7-28):

7-28 bi-rr-a yalawu-jarr yakuri-na mijil-nurru
they-DU-NOM catch-PST fish-MABL net-ASSOC
They caught some fish with the net (temporarily using it).

Where the subject is using a body part as instrument, the NOMinative is most commonly used (6.4.3), although PROP is also possible (7-29): they escape modal case.

7-29 ngada ja-wuru ngawu-na jambila-tharr
I:NOM foot—PROP dog-MABL kick-PST
I kicked the dog with my foot.

We saw in 6.4.3 that such NPs take AOBL in nominalized clauses, and are therefore part of the VP. This shows them to be ‘subject-oriented’, as we would expect since they are part of the subject.

When emphasizing the physical contact between instrument and object (e.g. cooking yams under the coals, rubbing someone’s body with ochre, etc.), the INSTRumental case is used. Significantly, the INSTRumental requires modal case: instead of the link between SUBject and instrument it stresses the contact between instrument and OBJECT, and is therefore not ‘subject-construed’.

7-30 kuri-ju wara-wan-nguni-wu
clean-FUT mouth-ORIG-INSTR-MPROP
(He’ll) clean (it) with spittle.

Returning to our fishing scenario, INSTR emphasizes the contact between fish and net, as when they are driven into it:

7-31 bala-tharra mijil-nguni-na kiija-n-d
kill-PST net-INSTR-MABL drive fish by clapping water-N-NOM
(We) killed the fish with the net, driving them into it by clapping.
M.I.E. preserves the 'instrument of equipment' vs. 'instrument of contact' distinction by its choice of prepositions: (7-28) was translated 'catch fish got net', and (7-31) 'catch fish la net'. ('la/lo' is the locative preposition).

A fourth possibility involves the PROPrieteve case. Semantically, this is the most general instrument case, and can be used to paraphrase any of the others. It takes AOBL in nominalized clauses, showing it to be part of the VP.

7-32 ngada kala-n-da thungal-inja narra-wuru-nth
I:NOM cut-N-NOM tree-AOBL shell knife-PROP-AOBL
I am cutting down the tree with a shell knife.

This shows that even though its basic 'having' use (3.3.5) would make a 'having' second predicate meaning of the type found in Yukulta (see above) quite plausible, this is not the interpretation given it in K; for that, the ASSOCIative is used.

Interestingly, PROPrieteve instruments are the only type which allow both modally inflected and blocked variants. I do not have enough examples in marked modalities to formulate the conditions on this definitively, but it appears that they take modal case when an object is present, as in (7-33), but escape it where no object is expressed (7-34).

7-33 ngada burldi-ju wangalk-uru-uru yarbuth-u
I:NOM hit by throwing-FUT boomerang-PROP-MPROP bird-MPROP
I will hit that bird with a boomerang.

7-34 nga-l-da kala-tharra rawalan-ku
1-PLU-NOM cut-PST baler shell-PROP
We used to cut (things) with baler shells.

To summarize: the ASSOCIative functions as a 'having' second predicate and escapes both modal and associating case, while the other constructions involve arguments within the VP and take associating case. Of these, the body-part as instrument construction is always subject-oriented, and escapes modal case; the object-oriented INSTRumental always takes modal case, and the rather neutral PROPrieteve allows both options.
7.3.2.2 Conventional vs private goal

K nominal cases distinguish two kinds of 'goal': those incipient in the situation, and those that may only be inferred through knowledge of the subject's intentions.

The first type takes the UTILitive relational plus a modal case:

7-35 nyingka ngi-nurr-
wa dali-jarr kuwan-
marra-na?
you:NOM firewood-
ASSOC-NOM come-
PST fire-UTIL-
MABL

Did you come with wood for the fire?

The UTILitive plus modal construction is used here because any culturally attuned observer seeing you bringing wood would see immediately that your goal is to make fire: the fire is immanent in the situation described. Other appropriate situations include chopping down certain trees for windbreaks, gathering balel shells for water carrying, rolling strings for catching fish, making a fire for cooking fish on the coals, or digging a ground oven for roasting them (see examples in 3.3.14). In all of these situations the goal is so obvious to members of the culture that it can be known without access to the subject's intentions.

The second type uses the PROPrietive with no modal case, as in (7-19) 'he searched for the child'. This construction is appropriate when the goal cannot be directly observed, but can only be inferred from other knowledge we have about the subject. Unless we already know that X has lost his child, we may mistake his activity for animal-tracking: even if we work out that he is looking for someone we may not know whom.

This is comparable to the contrast between 'conventionally recognized purpose' and 'personal intention' in Yankunytjatjara (7.3.1). In both languages the personal nature of the subject's motivation is emphasized by a morphological link with the subject: ergative agreement in Yankunytjatjara, and modal blocking in K.

Yukulta also codes 'subject-orientation' through ergative agreement, when PROPrietive goals are involved, although here the contrast of private vs conventional goal seems to have been neutralized in favour of the latter, as indicated by the presence of ergative agreement on the totally determined goal of 7-37.

Further distinctions may be made using 'verbal cases'—see 3.4. But as NPs taking verbal case are not sensitive to the category 'modal case', these uses are not relevant to the discussion here.
I'm looking for a stick. (DYL 269)

Rather puzzlingly, the Yukulta verb janija 'look for' selects a transitive auxiliary, although its case frame is middle: ABS:PROP or ABS:DAT (compared to ERG:ABS for miilatha 'delouse').

He's delousing (that person) for lice. (DYL 269).

Modal blocking is also found with the PROPrietive arguments of verbs of transfer of possession such as wuuja 'give PROP to OBJ' or marndija 'deprive OBJ of PROP, take PROP off OBJ'.

He took money off his father.

These arguments are not second predicates, for they take AOBL in nominalized clauses:

He is taking money off his father.

There is a clear semantic motivation for 'subject-orientation': as discussed in 6.2.5, this frame stresses the ownership by SUBJ of the thing transferred, either before ('give'), or after ('deprive') the transfer, as opposed to the NOM:OBJ:LOC frame of wuuja, for example, which implies a mere transfer of position (and induces no modal blocking).

Again the corresponding construction in Yukulta codes subject-orientation by ergative agreement:

I gave the flying fox to the child / took the flying fox off the child. (DYL:272)
7.3.2.4 Demoted agents

The final and most problematic argument type to escape modal case involves demoted human agents. As outlined in 6.3.2, these may take the OBLique or ABLative.

Analogy with non-human agents, which can take modal case (see 6.3.2.2) suggests they lie inside the VP, although I have no examples with nominalized clauses that would provide a solid test of this.

The lack of modal case after the OBLique could be attributed to regular morphological sequence restrictions (3.2.3) and is therefore not an issue here. But modal blocking after the ABLative is significant, since ABL can be followed by other case suffixes (e.g. 2-45). (7-41) illustrates modal blocking after an ABLative demoted human agent NP. Other examples are (3-36) and (6-126).

[Adolescents were forbidden to eat the tasty flesh of young stingrays. To avoid detection, they would sneak off and:]

7-41 kurri-i-nyarra jungarra-na dangka-na , burukuraa-ja warra-y
see-DT-APPR big-ABL person-ABL make fire-ACT far-LOC
Lest (their smoke) be seen by the adults, they would make their cooking fires a long way off.

It is difficult to relate this lack of modal case on demoted agents to 'subject orientation'. One possibility is that modal blocking here is 'stranded', being induced at some level of representation in which the actor is the subject. At present I see no way of testing this claim. 15

In Lardil, too, demoted agents escape modal case. But tense/mood does play a part in case selection: demoted agents take the ACCUSative in the unmarked modality, and the GENitive elsewhere (Hale 1981).

15 A relational grammarian could cite the 'chomeur marking principle' according to which 'if chomeurs are not specially marked, then a chomeur undergoes the same case marking as for the relation borne immediately prior to becoming a chomeur.' (Klokeid 1976:191). Under this interpretation 'same case marking' could read 'same modal case marking'.

16 But it is interesting to note that in the one clause type with no active correspondent — namely -Thirri-n– RESultative clauses — demoted agents do take modal case. See 8.4.3.
7.3.2.5 The domain of modal case marking: overview

Modal blocking within the VP, as we have seen, always links it semantically with the subject in some way: a body part is seen as part of the subject himself; a goal or motivation is conceptualized as a personal concern of the subject, not necessarily evident to the public eye; a transferred object is seen as possessed by the subject either before or after the transaction17.

The exact semantics of 'subject orientation' varies from construction to construction. It is clear, however, that the determination of 'subject orientation' requires a far more detailed representation of case meaning than that provided by 'thematic roles': rather, something like Wierzbicka's detailed explications of the Russian instrumental (Wierzbicka 1980a) may be needed.

Whenever this representation includes explicit reference to the subject, modal blocking is appropriate. Glancing briefly through our examples, the 'body part instrument' meaning includes a component like 'SUBJ did something with X, which is part of SUBJ's body'; the PROPrieteive 'private goal' includes a meaning component something like 'SUBJ is thinking about PROP, SUBJECT wants to be in the same place as PROP'; PROPrieteive themes with transfer verbs would express a meaning something like 'SUBJ has PROP; because of this SUBJ can cause OBJ to have PROP' for wuuja 'give' and 'SUBJ has PROP after causing OBJ not to have PROP' for marndija 'deprive'.

In other words, the (complex) predicates expressed by the case suffix include as arguments at least the host NP and the clausal subject.

The meanings of the non-subject-oriented NPs, on the other hand, may all be framed without specific reference to the subject. There are a number of possibilities here:

(a) the predicate expressed by the case can have as arguments the host NP and the proposition encoded by the clausal core, as with adjuncts like the (relational) LOCative.

17Surprisingly, the ALLative in K does not show modal blocking (see 3.3.7.1, 3.4.2.1 and 3.4.2.2 for examples). In this respect K differs from those Pama-Nyungan languages like Warlpiri which use ergative-agreement to stress that the subject, as opposed to the object, reaches the destination (cf 3.4.2.4). Perhaps the nominal ALLative in K is inherently non-specific with regard to which entity moves; should more precision be desired, a functionally equivalent verbal case can always be used.
(b) the predicate may take as arguments the host and the object, as with the INSTRumental of contact: 'INSTR came into contact with OBJ, causing something to happen to OBJ'.

(c) the predicate may take as arguments the host and something else whose identity is left to context. The 'UTILitive of conventional purpose' is an instance of this – a possible formulation is 'one could see the people would use X with/to make UTIL'. Here the role of context is dual: it supplies the identity of X, which is usually an OBJECT (e.g. 3-91 to 3-94) but may also be a second predicate on the subject (as in 7-35). And it supplies the identity of the 'user', who may not even be represented by an argument of the clause (e.g. 3-94).

The fact that modal blocking is used specifically to signal a semantic link with the subject of a type that extends beyond simple second predication, while no such mechanism exists for non-subjects, is one consequence in K of the 'syntactic privileges' accorded to the subject.

It follows that in assigning modal case we must have access to the detailed semantics of the case, for the construction in which it occurs. Models of grammar which content themselves with simple 'thematic' labels like INSTRUMENT, GOAL or CAUSE will be ill-equipped to do this.

An important question for further investigation is: what happens to 'subject-oriented' NPs when the clause is passivized? Does modal blocking persist, as in the corresponding active clause, or is it keyed to the derived subject alone? So far I have been unable to obtain sentences that answer this decisively – only ACTual clauses have been heard, and in these the domain of modal case is limited anyway to objects, instruments in the INSTRumental, and UTILitives (2.4.3).

7.4 Evolution of the Tangkic modal case systems

Comparative reconstruction explains many of the unusual features of the K and L modal case systems: (a) the formal similarities between (some) verb inflections and modal case (b) the appearance of modal case, in 'marked' modalities, on virtually all NPs in the VP (c) its more restricted domain in the unmarked modality (d) the semantic link between modal and more basic case uses. It can also be shown that the highly unusual modal case systems arose from a relatively normal proto system.

In all modern Tangkic languages case-assignment depends on (a) main vs subordinate clause status (b) verbal categories of tense/mood. In Yukulta (and
probably in the proto language) a third series of factors is important: negation, inverse person combinations, and irreality can all trigger middle constructions in underlyingly transitive sentences. Because case-assignment depends on so many factors, it is construction type, rather than cases considered in isolation, that must be compared across languages and used as the basis of historical reconstruction. Fortunately most construction types are preserved, in some guise, in at least two of the modern Tangkic languages, increasing the certainty of our reconstruction.

7.4.1 Nature of the proto language

Despite an early suggestion by Hale (1970) that proto Tangkic was morphologically accusative, it is now generally accepted that it was ergative, like the vast majority of Pama-Nyungan languages.

Klokeid (1978) and McConvell (1981), working independently (and both relying on Yukulta and Lardil data only) advanced similar arguments for an ergative ancestry.

Firstly, Klokeid showed that the underlying (i.e. pre-truncated) form of the Lardil 'OBJective' case is -NHTHa. This is identical to the Yukulta dative, which can mark objects in middle constructions: Klokeid inferred that the Lardil system arose through generalization of such a clause type, which replaced the old ergative type.

Secondly, L (like K) leaves the (non-pronominal) objects of imperatives unmarked; this can be explained as a last residue of ergative morphology.

Thirdly, both pointed out that the passive in Lardil arose from an earlier reflexive construction with cognates throughout Australia (see also Dixon (1980).

Hale had suggested that languages of the majority ergative type had evolved by generalizing a passive construction present in an accusative proto language. As he pointed out, this hypothesis 'entails that the so-called ergative case is simply that of the agent of a passive' (Hale 1970:764). Changes of this type have occurred in several Polynesian languages (Hohepa 1969, Chung 1976).

Consideration of the marking of demoted agents in modern Tangkic passives gives no support to this. Each insular language has a different pattern: in Lardil, demoted agents take the OBJECTive (pT *DAT) or GENitive/possessive pronoun; in K they take the ABLative, OBLique (pT *DAT), LOCative or verbal intransitive allative; the limited data on Yangkaal contains but one example, with a possessive pronoun. (Details on these choices are in 6.3.2.2). Such diversity suggests recent and
independent innovation, rather than continuation of an ancestral construction. More importantly, none are cognate with the pan-Australian ergative marker -ngku "-lu.

Finally, McConvell demonstrated similarities between some Lardil main clause types and subordinate clause types in Yukulta, and suggested that the former were derived from the latter.

Although both agree that pT was ergative, they propose different explanations of why the ergative proto system was abandoned. I postpone discussion of this until 7.4.3.

In this section, I will take the ergative nature of the proto-language as established. The emphasis will be on the related question of how modal case evolved, a question which the addition of K and Yangkaal data allows to answer in some detail.

I will further assume that Y preserves the pT system in all respects but four:
(a) it has innovated a clitic 'auxiliary' cross-referencing core arguments and coding tense and transitivity (see 7.4.3 for justification) (b) some subordinate types in pT allowed alternate case-marking possibilities to those preserved in Y (c) where Y allows two 'general middle' case frames - ABS:DAT and ABS:LOC - pT allowed only the former (see below) (d) the exact semantic conditions triggering main clause antipassives may have been different in pT to what is now found in Y. When supporting claims about pT, I therefore give Y examples: the reader should bear the above differences in mind.

pT appears to have had three basic construction types for transitive argument structures: two are further divisible into several subtypes. These are illustrated in 7-3.

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18The Yukulta auxiliary is highly complex:
(a) In the maximal case, argument roles are shown by person markers, ordered by person, plus a transitivity marker, e.g. nga-rngu-ka-di [1A-2/3DuO-TR-FUT].
(b) Third singular arguments are not overtly marked, but the transitivity marker -ka indirectly indicates the presence of 3A and 3O arguments, e.g. ka-rrri [(3sgA)-(3sgO)-TR-PRES].
(c) When first singular subjects occur with unmarked singular objects, the transitivity marker is absent; transitivity is inferred from the form of the person markers, e.g. nga-rrri [1A-(3sg)-(TR)-PRES].

To avoid burdening the reader with these complications, which I do not believe to have been part of pT anyway, I give the AUX a simplified gloss in terms of roles alone, e.g. [3A:3O:PRES] for (b) above.

19Yukulta has a fourth type, in which both subject and object take the ABSolutive. This is used for statements of 'competence' like 'rainbirds (ABS) make nests (ABS)'; this contrasts with statements of 'performance' like e.g. 'the rainbird (ERG) is making a nest (ABS)'.

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Figure 7-3: Underlyingly transitive construction types in pT
7.4.1.1 Unmarked clause type: ergative

The unmarked clause type was ergative. Non-pronominals had a formally distinct ergative case for transitive subjects (A): this was homophonous with the LOCative (see Appendix D). Intransitive subjects (S) and transitive objects (O) took the ABSolutive. Pronominals appear to have had the same form for A, S and O. I will consider this a case of homophony and gloss them, like other nominals, ERGative if A and ABSolutive if S or O. Since no word class distinguished S from O, the case system appears to have been ergative rather than 'tripartite' (Goddard 1982):

7-42 dangka-ya=karri ngawu bala-tha
     man-ERG 3A:30:PRES dog(ABS) hit-IND
     The man is hitting the dog. (Y:206)

7-43 dangka-ra=ngka wirdi-ja karn-ki
     man-ABS 3S:PRES sit-IND grass-LOC
     The man is sitting on the grass. (NE:FN)

7-44 diya-ja=ngarri ngada
     eat-IND 1A:30:PRES lsgERG
     I am eating (it). (Y:214)

7-45 ngada=kadi wirdi-ja
     lsgABS 1S:PRES sit-IND
     I am sitting. (Y:214)

7-46 jingka-ka=nk-i ngada
     follow-IMP 10-2A lsgABS
     (You) follow me! (Y:213)

Besides indicative (past/present) and imperative clauses, exemplified above, the ergative case frame could be used in realis desideratives:

7-47 mirliya-da=yikarri dan-da birrk-a
     cut-DES 2A:30:PRES this-ABS string-ABS
     You should cut this string. (It's a good idea). (Y:238)

\[20\] In Yukulta A, S and O are represented by distinct forms on the auxiliary. But this is a matter of grammatical function rather than case—see remarks in Appendix D.
7.4.1.2 Semantically triggered antipassives

Under a variety of semantic conditions - mostly where the effect of the action is not transferred to the object - underlyingly transitive clauses in Y take a middle case frame (ABS:DAT, ABS:LOC or ABS:PROP). Following Keen (1983) and McConvell (1976, 1981) I refer to these clause types as 'antipassives'. Note, however, that the Yukulta 'antipassives' are both functionally and formally different from the more widely known 'antipassives' described for Dyirbal, Yidiny etc (see Dixon 1979 for discussion and references). The possibilities are summarized in 7-4.

<table>
<thead>
<tr>
<th>Case Frame</th>
<th>Conditions</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABS:PROP</td>
<td>Realis desideratives (pos:optional; neg:obligatory)</td>
</tr>
<tr>
<td>ABS:DAT</td>
<td>(a) Irrealis desideratives</td>
</tr>
<tr>
<td></td>
<td>(b) General Antipassive when</td>
</tr>
<tr>
<td></td>
<td>(i) no other DATive argument present AND</td>
</tr>
<tr>
<td></td>
<td>(ii) target NP is non-pronominal</td>
</tr>
<tr>
<td>ABS:LOC</td>
<td>General Antipassive when</td>
</tr>
<tr>
<td></td>
<td>(i) a DAT argument is already present OR</td>
</tr>
<tr>
<td></td>
<td>(ii) target NP is pronominal.</td>
</tr>
</tbody>
</table>

Conditions triggering General Antipassive (GA):
(i) Negation of non-past sentence OR
(ii) Inverse subject-object combinations OR
(iii) Conditional/dubitative sentence.

**Figure 7-4:** Antipassive Case Frames in Yukulta

The ABS:PROP frame is limited to realis desideratives: it is optional with positives (7-48) and obligatory with negatives (7-49) (this last could also be

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21These latter are syntactically motivated, securing (S/O) pivot status for topical NPs in underlying A function. The change in case frame - typically from ERGative-ACCusative to NOMinative-DATive - is accompanied by derivational marking on the verb.

The Yukulta/pT 'antipassive', on the other hand, is semantically motivated, basically stressing lack of object-affectedness, as in negated or irrealis clauses. It is not accompanied by any change in verbal morphology: even though Yukulta has a contrast between transitive and intransitive verbs (e.g. bala-tha 'hit' and bala-ja 'hit oneself, be hit'), this is not used in the 'antipassive', the transitive form being retained. (This contrasts with Warrgamay (Dixon 1981), in which 'antipassives' combine a change in case-frame with a shift from transitive to intransitive verb forms).

Readers are invited to verify for themselves that no ambiguities can arise through these alternations, given the conditions stated in 7-4, showing that no verbal signalling is functionally necessary, even without an AUXiliary.
accounted for by GA condition (i)\textsuperscript{22}:

7-48 diya-da-ngarri kuruntha-wurlu
eat-DES 1A:3O:PRES barramundi-PROP
I am going to have a feed of barramundi. (Y:238)

7-49 diya-nangkurlu =kadi kuruntha-wurlu
eat-NEGDES(REALIS) IS:PRES barramundi-PROP
I can’t eat barramundi (it’s taboo to me). (Y:239)

With irrealis desideratives the ABS:DAT frame is used:

7-50 kawa-da =kadi makurrarra-ntha
cook-DES 1S:PRES wallaby-DAT
I’d like to cook a wallaby in a ground oven (but don’t expect to). (Y:239)

7-51 nga-rr-ma-ngarra kuli-nada kuluthu-ntha
1-DU-STAT IS:PRES wash-NEGDES(IRR) clothes-DAT
We don’t want to wash the clothes (DYL:255)

The distinction between realis and irrealis desideratives is not
coded in positive transitive verbs. Thus we have realis intransitive
-THurlu vs irrealis intransitive -da, and realis negative nangkurlu vs
irrealis -nada; both these contrasts are accompanied by the case frame
alternations just described. But with positive transitives the same form
-da may be realis or irrealis, the distinction being coded entirely by
the choice of case frame: realis ERG:ABS or ABS:PROP vs irrealis ABS:DAT.

Elsewhere, one of several distinct factors may trigger what I will call the
‘general antipassive’ or GA. (‘General’ because of the variety of triggering
conditions, compared to those triggering the ABS:PROP frame). Regardless of
which factor is responsible, this selects an ABS:DAT case frame (e.g. 7-52)
unless (a) the underlying OBJECT is pronominal (7-53) or (b) another DAT
argument is already present (7-54). Under conditions (a) or (b) an ABS:LOC

\textsuperscript{22}These are not the conditions stated by Keen 1983. But they are consistent with all examples in her
corpus. An example of a desiderative with an ERG:ABS frame is 7-47; the difference in case marking
between it and 7-48 cannot be attributed to negation, inverse subject-object combinations or irrealisness.
The main two factors triggering the GA in Yukulta are (a) negation of a non-past sentence, as in (7-52) and (7-53) and (b) 'inverse' person combinations such as third acting on second person (7-54). Conditional and dubitative clauses may also have triggered the GA, although the evidence here is not conclusive (Keen 1983:234-8).

7-52 walirra-ngka dangka-ra kunawuna-ntha bala-tha
NEG 3sgS:PRES man-ABS child-DAT hit-IND
The man isn’t hitting your child.

7-53 walirra-ngalawa-ningki bala nga-la-wan-ji burldamurr-i
NEG lpluOBL-3sgS:PUT hit 1-PLU-GEN-LOC three-LOC
He didn’t hit us three. (Y:231)

7-54 ngamathu-yarrng-ka=rrawa-rра karna-ja wurlan-ki ki-rr-wa
mother-DU-ABS 2duOBL-3duS Cook-IND food-LOC 2-DU-DAT
kunawuna-ntha
child-DAT
(Your) two mothers are cooking food for you two children. (Y:206)

Of the two GA frames, only the ABS:DAT has a Lardil parallel. It is therefore possible that this was the only frame in pT, and that the ABS:LOC frame, attested in all the other languages, developed after Lardil split off. (Alternatively, L may have simply have generalized the ABS:DAT frame at the expense of the ABS:LOC).

Although the presence of cognate constructions in all modern languages provides firm evidence of their existence in pT, we cannot know what the exact triggering conditions were. Neither negation nor inverse person combinations affect the choice of modal case in K. Ya or L. The specific conditions may have been lost when the constructions were generalized (see below), or some other semantic factor, now lost, may have been responsible. All we can infer, then, is that under unknown semantic conditions the ABS:DAT construction was used in pT, and that the ABS:LOC frame probably came into use as a later alternative.

---

23 Note that, because ERG and LOC are homophonous for non-pronominals the ABS:LOC frame would be potentially ambiguous for non-pronominal combinations: man-ERG/LOC hit woman ABS could mean 'the man hit the woman' (basic ergative construction) or 'the woman hit the man' (antipassive). The above restrictions prevent this occurring. In fact, the above sentence would not be ambiguous under the semantic conditions found in Yukulta - knowing that a sentence was affirmative, past, realis, and involved a non-inverse person combination, we could work out that the basic ergative construction was required, and hence that the first interpretation is correct. With a different set of triggering conditions, however, such as the 'unaffected object' condition found in Warlpiri ERG:DAT constructions, we could not use this reasoning, and the sentence would be ambiguous.

24 See Mallinson & Blake 2.4.5 and Comrie (1981b:6.2.1) for discussion and references.
What is important historically is that all these constructions were accusative rather than ergative: transitive and intransitive subjects are morphologically identified, and objects morphologically distinguished from them. This provided a clear model from which accusative morphology could develop.

7.4.1.3 Complementized subordinate clauses

Subordinate clauses are normally more conservative than main ones (cf Givon 1979), and the Tangkic languages are no exception. Whereas pT main clause types (1) and (2) have either been lost or undergone a drastic change of function in all languages but Y, every modern Tangkic language preserves several pT subordinate clause types. Accordingly, examples from all four languages will be used here in support of our reconstruction.

Subordinate clauses in pT were formed by adding a complementizing case suffix to the verb, following the -TH- thematic (which as we saw in 5.3 is most probably an old nominalizer/infinitive marker) and a case-suffix to all NPs of the subordinate clause except the subject where present. (In Keen's Yukulta examples the subject is equi-deleted from all but PRIOR clauses; it is hard to know whether this was obligatory.) Fig. 7-5 summarizes the probable pT clause types.

In negatives the complementizer followed the negative -nang- thematic - 5.2.1. To simplify the exposition negatives will not be discussed here; they have undergone comparable changes.

This is summarized in 7.4.1.3. These complementizing cases transparently signal the temporal/modal link between clauses. DATive and PROPrieteive cases, for example, may apply to NPs marking purpose; DATive and PROPrieteive complementized clauses have a similar meaning, and function like ordinary NPs bearing the appropriate case. Likewise the CONSequentlal signals temporal priority whether it applies to a simple NP or a clause.

In fact, pT had two layers of complementizing case: that just discussed, plus an outer layer assigned in agreement with the main clause antecedent (9.6.1). Where confusion may arise, I will call the first 't-complementizing case' (t for 'tense/mood') and the second 'c-complementizing case' (c for 'coreference').

For most subordinate clause types - purpose, implicated, movement purpose and simultaneous - the case following the verb thematic and that appearing on NPs is identical.
<table>
<thead>
<tr>
<th>Clause function</th>
<th>Case suffix following verb</th>
<th>Case on subordinate NPs</th>
<th>Construction attested in:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Purpose</td>
<td>-inj (DAT)</td>
<td>[-inj] (DAT)</td>
<td>Y K</td>
</tr>
<tr>
<td>Implicated</td>
<td>-urlu (PROP)</td>
<td>[-kurlu] (PROP)</td>
<td>Y K Y, Ya L</td>
</tr>
<tr>
<td>Movement</td>
<td>-irlu (ALL)</td>
<td>[-kirlu] (ALL)</td>
<td>Y K</td>
</tr>
<tr>
<td>Simultaneous</td>
<td>-i (LOC)</td>
<td>[-kiya] (LOC)</td>
<td>Y K Y, Ya</td>
</tr>
<tr>
<td>Prior</td>
<td>-arrba (CONS)</td>
<td>[-ngarrba] (CONS)</td>
<td>(K) L</td>
</tr>
<tr>
<td>Lest</td>
<td>-marra (UTIL)</td>
<td>[-inj] (DAT)</td>
<td>Y K</td>
</tr>
</tbody>
</table>

(See 5.3 for details of verbal reconstruction)

Figure 7-5: Complementized subordinate clauses in pT

Purpose clauses. with reflexes in Y (7-55) and possibly K (5.2.3.10) involved a DATive on verbs and NPs alike:


Implicated clauses. with reflexes in Y (7-56), L (7-57) and K (5.2.3.5), involved a PROPrietary on verb and NPs:

7-56 wanji-ja=kadi [marliyan-kurlu bala-th-urlu]PROP go up-IND lsgS:PRES possum-PROP hit-THEMAT-PROP I'm climbing up to hit that possum.

7-57 ngada yuurr-kangka niween I:NOM(*ABS) PERF-tell him:OBJ(*DAT) [were-thuru wangal-kuru]PROP-DAT throw-FUT(+OBJ) (*THEMAT.PROP+DAT) boomerang-FUTOBJ(+OBJ)(*PROP+DAT) I told him, to throw the boomerang.

25The difference between 'purpose' and 'implicated' clauses is a subtle one. According to Keen, purpose clauses mark 'intended future result'. 'Implicated clauses', by contrast, mark the natural response to a situation: a sentence like 'he lit the fire [in order to cook the wallaby]' (Implicated) does not convey 'that the fire was lit "with the purpose of" cooking the wallaby, but that "having the wallaby" implied "lighting a fire" to cook it on' (Keen 1983:247).
(Constituents of the subordinate clause here have an underlying 'outer objective' (pT DATive) - which manifests itself by preventing truncation of its host. See Appendix E.

'Movement purpose' clauses, with reflexes in Y (7-58) and K (8.6), took an ALLative on both verb and NPs:

7-58 ngan̂h-ma =kadi warra [kurlkang-kirlu jani-jani-j-iulu
1sgS-STAT 1S:PRES go bulrush-ALL search-RDUP-THEMAT-ALL
kuluu-kuluu-j-iulu]$_{\text{ALL}}$
dig-RDUP-THEMAT-ALL

I'm going to look for some bulrushes to dig up. (Y:208)

And 'simultaneous' clauses took a LOCative on verb and NPs, as in this Yukulta example:

7-59 kurri-ja=ngarri [murruku-ya mirrala-th-i]$_{\text{LOC}}$
see-IND 1A:30:PRES woomera-LOC make-THEMAT-LOC

I'm watching him make a woomera.

Kayardild and Lardil also preserve this construction in the form of -THurrka clauses (THEMAT-LOC:DAT) in Kayardild (9.1.5.1) and -jirr 'CONTEMPoraneous' clauses in Lardil (Appendix E).

In Yangkaal there has been a semantic shift, with these clauses being used for hypothetical protases:

7-60 niya ngijin-ji baa-ji,
3sgN0M me-LOC bite-SUPPOS(*THEMAT.LOC)
ngada jambala-thu niwan-ju
I:NOM kick-PUT him-MPROP
If he bites me, I'll kick him.

Two clause types, however, required different cases on verb and NPs, although the cases involved were closely related semantically.

Prior clauses appear to have allowed two alternate constructions. In one, NPs took the CONsequential, which is the same case as appeared on the verb. This is preserved in Lardil (7-61) and as a rare alternative in K (4.4.3.4).

7-61 nyingki mara ja-tharr dawun-ngarr,
you:Nom(*ABS) CTRFCT enter-MNF(*THEMAT CONS) house-MNPOBJ(*CONS)
ngada mara kurri-thu ngimben-thar
I:NOM CTRFCT see-PUT you-POBJ

If you had gone into the house, I would have seen you.

In the other alternative, preserved in Y (7-62), Ya (7-63) and K (5-20), the
same verb inflection was employed, but with the ABLative on NPs. (ABLative and CONSequen- tial are of course related semantically: the first expresses spatial priority; the second, temporal priority.)

The man saw the woman (who had already started) kicking the child.  
(Y:246)

7-63 nyingka ngudi—jarrba wangalk—in,  you:NOM throw-PRIOR(*THEMAT.CONS) boomerang—MABL(*ABL)  ngada burldi—ju ngumban—ju junkijarrad  I:NOM hit—FUT you—MPROP in return  
If you throw the boomerang (at me), I’ll hit you back. (HFN)

The disparity in case-choice in the Y, Ya and K versions of this construction suggests some sort of combinatory restriction in pT, such that temporal priority was expressed by the ABLative with some word classes instead of the the expected CONSequen- tial. (It may be significant that the CONSequen- tial has ceased to be a productive relational case in all T languages but K). Restrictions something like this are found, for example, in Dja- pu (Morphy 1983:132), where Human nominals take the OBLique case where others take the ABLative or CAUSal (7-17).

Lest clauses likewise required different case choices for verb and NPs: the UTili- tive case -marra on the verb, and the DATive or PROProprietive on NPs. Y (7-64) and K preserve the first alternative: Lardil (7-65) and K the second. As mentioned in 7.1.3, K also allows the LOCative: because this is restricted to K it is hard to tell when this third possibility emerged.

7-64 yarrarama—ja=ladi [jirrma—ny.marra whisper—IND 3plS:PRES wake—LEST(*THEMAT.UTIL)  kunawuna—ntha]UTIL/DAT child—DAT(*DAT)  They are whispering, lest they wake the child.

7-65 kurri-kurri, ngawa wungiy. merr look—RDUP(IMP) dog:NOM(*ABS) steal—EVIT(*THEMAT.UTIL)  wurdalji—wu meat—FOBJ(*PROP)  Watch out or the dog might steal that meat.

Here again it is worth noting that the UTILitivne -marra survives as a case proper only in K (although even there it is not used on NPs of
such complementized clauses). In the remaining Tangkic languages it is restricted in use (3.3.14); probably a later development.

Again, the cases chosen for verb and NP are closely related in meaning: the UTILitive of use in K is translated by the DATive in Y (3.3.14), and the 'potential having' meaning, as in K and L dul-marra dangkaa [land-UTIL man] 'hereditary custodian of territory' can be paraphrased with the PROPrietary.

Comparison with Yidiny (Dixon 1977:338-9) suggests another possible explanation of the case divergence here. In Yidiny, transitive clauses like 'man-ERG hit woman-ACC' must be antipassivized before subordination if the (underlying) A argument is to be pivot: this would give 'man-NOM hit-ANTIPASSIVE woman-DAT'. If these are then inserted as a causal subordinate clause, e.g. 'the person-NOM is running away because (he) hit the woman', the (antipassivized) subordinate verb bears a special 'causal subordinate' inflection, while the subordinate object NP can take one of two cases:

(a) it may take the CAUSal case - the nominal analogue of the verb inflection.

(b) it may take the DATive case, retaining the case it would bear in an antipassivized main clause.

It is possible that LEST clauses in pT, in contrast to the other subordinate types, followed pattern (b) - with the subordinate clause being obligatorily set in the 'antipassive' frame, giving objects an appropriate middle case. In support of this, it is significant that the three cases available in apprehensive clauses in the modern T languages - the (pT) DATive, PROPrietary and LOCative - were the three cases available in main clause 'antipassive' frames (7.4.1.2).

To summarize this section, pT appears to have had up to six complementized clause types in which the verb and its non-subject NPs bore a case illustrating the relative temporal or modal relationships between the two clauses. In four (purpose, implicated, movement purpose and simultaneous) the same case suffix was added to verb and NPs. In one (prior) either the same case (CONS) could be used for verb and NPs, or the NPs could take a different case (ABL). With the remaining type, the APPRehensive, verb and NPs took distinct but again near-synonymous suffixes: this may have reflected a Yidiny-style main clause antipassive frame rather than simple case distribution.

Two further features of these clause types were crucial in shaping the development of the K, Ya and L systems that evolved later:
(a) The subordinate subject usually equi-deleted, but where matrix and subordinate subjects were not identical it would appear without 'complementizing case' (e.g. 9-137). This applied to transitive and intransitive subjects alike. Objects, on the other hand, took complementizing case. To the extent that subordinate subjects appeared, case-marking in t-complementized clauses was totally accusative, morphologically equating A and S, with O marked differently. This would have increased the number of accusative constructions opposed to the 'basic' ergative construction.

(b) Although our data on this is far from complete, it seems that all NPs but the subject took t-complementizing case. Objects have been exemplified already: Keen's Yukulta corpus also contains examples of LOCations (7-66) and temporals (7-67), in both of which the t-complementizing case replaces the relational LOCative these NPs would take in a main clause. (Correspondingly, in K and L the marked modal cases replace relational LOCatives — see 3.2.3). There is also one example of a subordinate ALLative, which is followed by the t-complementizing case (7-68).

7-66 kurri-ja-nganda [kabaj-inaba jawi-jarrba]
see-IND 1sgA:PAST sand-ABL run-PRIOR
I saw you running on the sand.

7-67 birlkali-ja=wuluwaka [yulmburr-inaba-ntha]
sorry-IND 3plOBL:1sgA:PRES long-ABL-DAT
thaa-tharrba-ntha]DAT
come back-PRIOR-DAT
I feel sorry for them having had to walk so far.

[The outer dative shows the subordinate subject is controlled by a matrix DATive, here the indirect object of 'feel sorry for'. Cf 9.6.1]

7-68 daami-ja-ngandi [natha-rlu-ngkurlu warra-jurlu]PROP
ask-IND 1sgA:3sgO:PUT camp-ALL-PROP go-IMPLICATED
I'll ask him to come to the camp. (DYL:270)

Unfortunately, Keen does not discuss whether other, 'subject-oriented' NPs, such as PROPrieteive intentional objects, themes and instruments, are retained before the t-complementizing case. As pointed out in 7.3, these almost always correspond to modally-blocked NPs in K. It is possible that such NPs in gT escaped complementizing case by association with their subjects. If so, this would account for their lack of modal case in K, as 'insubordination' extended the pattern to main clauses.
The domain of t-complementizing case in pT thus set the scene for the
domain of modal case in K, Ya and L: by not appearing on subjects, and
appearing on all other NPs (with the possible exception of 'subject-oriented' NPs).
a precedent was set for a domain covering all NPs in the VP. Note also that with
t-complementizing case in pT, to a greater extent than with modal case in L or K,
we can say that the domain is the whole VP, including the verb. The sole caveat
needed is that in LEST and PRIOR constructions case substitution must be made
according to whether the host is a NP or a verb.

7.4.2 The abandonment of the proto system

Yukulta has been the most conservative of the T languages: it alone
preserves the original ergative construction. Further testimony to its conservative
nature is the fact that all clause types in the other T languages, bar alternative
variants on the PRIOR and LEST clauses, can be shown to derive from clause
types preserved in Yukulta. This suggests that all such clause types date back to
pT, with the possible exception of the 'antipassive' ABS:LOC construction
mentioned in 7.4.1.2. The main innovation in Yukulta has been the adoption of
an auxiliary clitic complex, probably under the diffusional influence of its mainland
neighbours (see 7.4.3).

The remaining T languages - Lardil, Kayardild and Yangkaal - have
undergone the same general types of change, although the details differ from
language to language. Each has taken one 'antipassive' type construction as the
canonical main clause type, and phased out the originally canonical ergative
construction: the only trace of ergative morphology is in imperatives. And each
has recruited a number of new main clause types by 'insubordination' - the use of
subordinate as main clauses. Suffixes that were once t-complementizers, showing
the tense/mood relation between main and subordinate clauses, have become
'modal case' markers coding the tense/mood relation between clause and speech
act (cf 7.2). We now discuss these changes in more detail.
7.4.2.1 Preservation of unmarked objects in imperatives

Non-pronominal objects of positive and negative imperatives remain nominative in K (5.2.3.1), L (7-69) and Ya (7-70):

7-69 (nyingki) were / were-ne wangall
   you:NOM throw(IMP) throw-NEGIMP boomerang(NOM)
   (You) throw / don't throw the boomerang!

7-70 wirdi-ja durruma-na bardubardu-wa buluku
   stay-IMP chase-NEGIMP poor-NOM bullock(NOM)
   Don't chase the poor bullock!

In K and Ya (7-71) this is also available (though optional) with pronominal objects:

7-71 bunji bala-tha niya
   nape(NOM) hit-IMP 3sgNOM
   Hit him in the back of the neck!

This is a relict of the old ergative construction, in which objects took the ABSolutive. Note, though, that the subject takes the NOMinative (pT ABSolutive), according with modern case marking rules.

7.4.2.2 Antipassives become the canonical clause type

As we saw in 7.4.1.2, Yukulta has two 'general antipassives' reassigning the cases of subject and object as ABS:DAT or ABS:LOC. It is likely that pT had only the first of these, the second being innovated after Lardil split off. We cannot be sure of the triggering semantic conditions.

Each of these middle constructions has been taken as canonical by some modern language.

Lardil has generalized the ABS:DAT frame, so that its reflex is now the unmarked construction, found with transitive verbs in the 'plain' form, which take the 'OBJECTive case', cognate with the pT dative:

7-72 ngada yuurr-were wangalk-in
   1sgNOM(*ABS) PERF-throw boomerang-OBJ(*DAT)
   I threw the boomerang.

---

26 As mentioned in 7.4.1.1, pronouns in pT may have had the one form for A, S and O, so pronoun subjects of imperatives would not have been distinct anyway. But apposed nominals, which are quite possible in the modern languages (e.g. 'you children chase him!') would have taken a distinct ergative inflection, no longer preserved.
Klokeid (1978) uses internal reconstruction to set up \(-INHTHa\), cognate with the pT dative, as the underlying form for the L 'Objective' case. For present purposes we may note that three regular morphophonemic processes in L are responsible for the surface forms: SCHWA-DROP, giving \(-INHTH\), cluster-reduction, giving \(-INH\), and final-delaminalization, giving \(-in\).

Kayardild (2.4.3) and Yangkaal (7-74), on the other hand, took the ABS:LOC form as canonical:

6-74 niya ngijin-ji yathuyii-jarrma-th
3sgNOM(*ABS) lsg-(M)LOC(*LOC) laugh-CAUS-ACT

He made me laugh.

In clauses of this type, that originated as pT antipassives, the domain of modal case is restricted to objects (but see 2.4.3 for some qualifications as regards K), rather than covering all NPs in the VP, as is typical with the other modal cases. This reflects their origin: pT antipassives reassigned the case of subject and object only, while complementized clauses, from which the other modal cases derived, assigned case to the whole complement VP.

We saw in 7.4.1.2 that two other situations required an antipassive type construction: (a) the irrealis desiderative (POS -da, NEG -nada), which triggered the ABS:DAT frame, and (b) the realis desiderative, (POS -da, NEG -nangkurlu) which triggered the ABS:PROP frame.

The irrealis desiderative construction, with its ABS:DAT frame, has parallels in K (5.2.3.9) and L, where pT -da has become -rr by regular sound change: there has also been a semantic shift in L from desiderative to sequential imperative:

6-75 ma-tha kiin wangal, karnjin-in nee-rr
take-IMP this boomerang wallaby-OBJ(*DAT) hit-SEQIMP(*DES)

Take this boomerang and hit the wallaby.

In K the domain of the OBLique has been extended to the VP (with the usual exceptions), presumably by analogy with the other modal uses of the desiderative, which all derive from subordinate clauses and hence had the VP as domain. The sources for Lardil do not specify the domain of the OBJECTive case in this
construction. But since there was in L no analogic pressure for extending the
domain (there being no modal Objective constructions with a VP domain that could
serve as a template) one would expect L to preserve the pT situation, and restrict
the case to OBJECTs. More research is needed here.

Neither K nor L has a correspondent of the positive version of (b). Both
have main clauses that could be taken as corresponding to the negative version,
namely NEGative FUTURE clauses with verb inflection -nangku (ru) (K) / -nengku (ru) (L) and the modal PROPrietive. Although these could derive from
middle constructions (via the widespread semantic shift from realis desiderative to
future), an alternative explanation is that they are insubordinated 'implicated'
clauses (see below). This latter explanation is more likely, as it would account
automatically for the domain of the modal PROPrietive (all NPs in the VP) and its
occurrence with positive as well as negative verb inflections.

7.4.2.3 Insubordination

All six pT subordinate clause types are preserved in K: four remain in L. In
addition to their continued subordinate clause use, some in L and all in K may be
'insubordinated' — used as main rather than subordinate clauses, with absolute
rather than relative tense/mood. This is summarized in 7-6. Insubordinated
clauses retain the distinct morphosyntactic characteristic of complementized clauses
in pT: a case suffix marked on the verb and NPs of the VP, but not on the
clausal subject. Clauses originating in this way form the backbone of the modal
case system in these languages.

We now examine the various types individually.

(a) pT Implicated Subordinate clause —> Future main clause

Clauses deriving from pT 'implicated' complements may be used as purpose
complements in K (9.3.9) and as jussives in K (9.2.6.1) and L (7-57 above).
But they may also be used as future main clauses, both in K (5.2.3.5) and
Lardil:

7-76 dangka lorrk-i nyith-ur
man(NOM) ciny-FUT firewood-FOBJ(*PROP)

The man will c-FUT the firewood.

Semantically, two steps seem to have been taken here: (a) a shift from relative to
absolute 'intentional' meanings: from 'at the time of the main clause, X intended
### Table 7-6: Insubordination in Kayardild and Lardil

<table>
<thead>
<tr>
<th>PT Verb</th>
<th>PT NP</th>
<th>PT Function</th>
<th>X Function Subordinate</th>
<th>Main</th>
<th>L Function Subordinate</th>
<th>Main</th>
</tr>
</thead>
<tbody>
<tr>
<td>-THurlu</td>
<td>PROP</td>
<td>Implicated</td>
<td>Jussive, Purpose</td>
<td>Future</td>
<td>Jussive</td>
<td>Future</td>
</tr>
<tr>
<td>-NHmarra</td>
<td>DAT</td>
<td>Lest</td>
<td>Lest</td>
<td>Apprehensive</td>
<td>Lest</td>
<td>Evitative</td>
</tr>
<tr>
<td></td>
<td>PROP</td>
<td>&quot;&quot;</td>
<td>&quot;&quot;</td>
<td>&quot;&quot;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>-THarrba</td>
<td>ABL</td>
<td>Prior</td>
<td>Prior/Precondition</td>
<td>Past</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>CONS</td>
<td>&quot;&quot;</td>
<td>&quot;&quot;</td>
<td></td>
<td></td>
<td>Non-future</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Marked</td>
<td></td>
<td>w.r.t main</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Non-clause</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Future</td>
</tr>
<tr>
<td>-THinja</td>
<td>DAT</td>
<td>Purpose</td>
<td>Purpose</td>
<td>Hortative</td>
<td></td>
<td></td>
</tr>
<tr>
<td>-THirlu</td>
<td>ALL</td>
<td>Movement</td>
<td>Movement</td>
<td>Directed</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Purpose</td>
<td>Purpose</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-THi</td>
<td>LOC</td>
<td>Simultaneous</td>
<td>Simultaneous</td>
<td>Immediate</td>
<td></td>
<td>Simultaneous</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(Appendix E)</td>
</tr>
</tbody>
</table>

**Figure 7-6:**

The development of main clause future tense markers from 'purpose' subordinate clauses, usually involving the 'bivalent' suffix -ku, has occurred in several other Australian languages, e.g. Muruwari (Oates 1976) and Pitjantjatjara (example from Blake 1976:422):

7-77 minyma yula-ku  
woman(NOM) cry-PURP

*The woman may/will cry.*

Blake suggests a development from marking (i) goal of motion to (ii) purpose-beneficiary NPs to (iii) desiderative (infinitive clauses) to (iv) future.
(b) Lest subordinate clause \(\rightarrow\) Apprehensive main clause:

K and L both retain the subordinate use of \(-NHmarra\) clauses (e.g. 5-45 and 7-65), with the 'lest' meaning '[main clause] in order to prevent [subordinate clause]'. Both allow the \(-NHmarra\) clause to be insubordinated. with a more general 'apprehensive' meaning: 'do anything. to preempt [main clause]' or just '[main clause]. which is undesirable. is liable to happen'. As in subordinate clauses. K preserves both ancestral case-marking patterns. while L preserves only the PROPriete alternative:

7-78 ngawa wungi-nymerr wurdalji-wu
    dog(NOM) steal-EVIT meat-POBJ(*PROP)

_The dog is liable to steal the meat._

As with the implicated clause type, insubordination of 'lest' clauses is attested elsewhere in Australia. Austin (1981a:225-9) discusses the Diyari 'lest' construction, which is basically subordinate but may also occur in main clauses:

7-79 nhulu-ka kinthala-li yinanha matha-yathi
    3sgFemA-TOKEN dog-ERG 2sgACC bite-LEST

_This dog might bite you._

He suggests that 'in all the examples of this type of construction it is clear from the context that an "understood" imperative, warning or suggestion is implicit .. these sentences may be regarded as structurally subordinate because it is always POSSIBLE to add a main clause before them, although context may make it unnecessary.'

I would claim that the K and L examples are no longer structurally subordinate. and that ellipsis of the type Austin describes has become so frequent and conventionalized that in the modern languages one should speak of alternate subordinate and main clause uses. rather than deriving one from the other. The fact that one can add a 'main clause' is not a definitive test - one can add a main clause containing a declarative verb before English indicatives. but this does not show them to be subordinate.

(c) Prior subordinate clause \(\rightarrow\) Past (K). Marked Non Future (L)

Prior clauses appear originally to have coded events whose inception or

---

27 With the modal LOCative as a third type. It is less clear whether this is an innovation or an ancestral possibility; see 7.4.1.3.
completion preceded the event described by the main clause. This is preserved in K and Ya -THarrba clauses (K: 5.2.3.8. Ya: 7-63) and in L -THarr(ba) clauses (7-61).

In L, the corresponding clause type may also be used for relative clauses with non-future – usually past – reference:

7-80 karaan ngani mangarda, diwarrku budi-tharr
Where that child yesterday fall-MNF

Where is the child, who fell yesterday?

They may also be used as main clauses – again almost always with past reference. Here they usually have a focussing function, as in:

7-81 kiin mangarda diwarrku-ngarr budi-tharr
this child yesterday-MNF(*CONS) fall-MNF(*PRIOR)

That child (is the one that) fell yesterday.

It is easy to see how such focussed main clause constructions arose from clefts including a prior subordinate clause, as in the English gloss. Lardil, like K, allows zero anaphora and lacks a copula. So the only difference between a single clause, and a clefted construction with the -THarrba clause subordinate, is the presence of a pause in the latter: kiin mangarda, diwarrkungarr budittharr 'that child, (who) fell yesterday'. Given the lack of formal differentiation, such clefted constructions could easily be reinterpreted as single main clauses.

A similar change has taken place in K, complicated by the split of pT -THarrba into two K forms: PRECONdition -THarrba, restricted to subordinate clauses, and PAST -THarra, used for relative clauses and hypotheses (5.3.1), as well as past main clauses. As in L, the extension of this inflection to main clauses may have been mediated by its use in clefts – see 9.5 on the use of -THarra in object focus constructions, but with added complications in (c-complementizing) case.

(d) pT Purpose subordinate clause --> Hortative main clause

pT -THinja clauses marked purpose: some K -THinja clauses could be analysed as subordinate purpose clauses following imperatives. But their main use in K is as hortatives (5.2.3.10). This probably arose through ellipsis of a matrix imperative: ' (Do something) in order that [Purpose clause]' .

The evolution of hortatives from subordinate clauses of purpose is
widespread - a well-known example is the hortative use of the 'independent subjunctive', as in French 'qu'il vienne!' [that he come-SUBJ] 'let him come'. A Yankunytjatjara example is:

7-82 ngayulu ngalku-nytja-ku / kuli-nytja-ku
1sgERG eat-NMSR-PURP listen-NMSR-PURP

May I eat / listen?

Goddard (1983:105-7), who provides this example, suggests that 'these utterances are probably best interpreted as "indirect speech acts", for they implicitly request the addressee to do something, so that the situation they depict may become possible'.

A second round in the evolution of hortatives from subordinate purpose clauses has occurred with K 'future of purpose' clauses bearing complementizing case. This is discussed in 9.4.1.

(e) pT Simultaneous subordinate clause —> Immediate main clause (K)

pT -THi subordinate clauses marked simultaneity, including the simultaneity of an act of perception, coded by the main clause, and the perceived event, coded by the subordinate clause. K subordinate clauses preserve this function (9.1.5.1); the L correspondent has extra morphological complications (E.4).

In K, -THi clauses may also occur as main clauses, coding events that can be immediately perceived from the time and place of the speech act (5.2.3.4). As with hortatives, this appears to have arisen through ellipsis of a matrix predicate, here a perception verb: (I see/hear that) X-SIMUL.

Since the full biclausal construction would in modern K (but not in pT) require complementizing case, because ellipsed and subordinate clauses have different subjects (9.2), and since complementizing case does not in fact occur, it is likely that insubordination of this clause type occurred during a period when the pT rules still governed assignment of complementizing case.

Like the hortative, this construction has a much commoner functional doublet, involving -THurrrka clauses, which has arisen through a second round of insubordination. See 9.4.2.1 and 9.4.3.

(f) pT Movement Purpose clause —> Inceptive main clause (K)

pT subordinate clauses with the ALLative marked 'come/go in order to [Clause]. This subordinate use is preserved in K: unlike other subordinate clause types it takes a further inflection for modal case (8.6).
They may also be used as main clauses. These have a variety of meanings, but the most important is 'SUBJ is coming towards (speaker) and beginning to V'.

Once again it appears that a semantically predictable matrix clause has been ellipsed. Note that the only possible matrix verbs with the subordinate construction in K are *dalija* 'come' and *warraja* 'go' (8.6). The 'motion in order to' meaning could therefore be unambiguously recovered from a sentence whose main clause had been ellipsed: as a result ellipsis could have become ever more common and eventually have been fully conventionalized.

The 'inceptive' meaning probably developed later, through metaphorical extension of the type discussed in 7.2. The further development of 'extensive' and 'pergressive' meanings is harder to explain — see 5.2.3.12.

**Summary:** In each case, it appears, insubordination occurred as ellipsis of the matrix predicate gradually became conventionalized. During the intermediate stages, recovery of the ellipsed predicate was facilitated by the natural compatibility of certain matrix predicates with certain types of subordinate relation: warning/command predicates with Lest clauses, 'enabling' predicates with Purpose clauses, perception predicates with Simultaneous clauses, and movement predicates with 'Motion Purpose' clauses. The evolution of Marked Non Future (L) and Past (K) constructions may have followed a different route, via cleft constructions.

Sporadic cases of insubordination are widely attested, e.g. independent lest clauses Diyari, and the independent subjunctive as a hortative in the Romance languages. What is unusual about the insular Tangkic languages is their generalization of insubordination to such a wide range of clause types. In K a 'second round' of insubordination is even occurring — see 9.4.

7.4.3 Possible reasons for the loss of ergativity and development of modal case

As the 'why' of language change is always several orders of magnitude more uncertain than the 'how', I have so far restricted myself to reconstructing what changes probably took place, without going into their possible causes. To the latter, more speculative, question this section is devoted.

Klokeid (1978) proposed that phonological change was the motivating factor in undermining the ergative system of pT. The battery of truncation rules that has shortened Lardil stems would, he claims, have eliminated the ergative as a distinct
case, with subject and object forms no longer distinct in the 'basic' construction type. The other, middle constructions, in which they were distinct, would then have been taken as canonical. (Klokeid's argument is repeated in Dixon (1980:457)).

Two objections can be made to this analysis. Firstly, it is simply not true that truncation destroyed the distinctness of the ergative case. As mentioned in 7.4.1.1, the ergative of non-pronominals in pT, as in Yukulta (Appendix D), was formally identical to the locative. And this locative is preserved as a distinct case form in Lardil, having undergone some irregular sound changes, so that -(ng)e replaces pT -(kiya). On the basis of other, regular sound changes we would expect -(ng)i but there has been irregular lowering of the vowel, probably conditioned by the original following glide. In short the locative, formally identical to the pT ergative, has remained distinct from the old ABSolutive despite the many phonological changes undergone by Lardil.

A second objection relies on evidence from K and Ya, unavailable to Klokeid when he wrote the above article. In K and Ya there have been only very minor phonological changes, and the nominative (< pT absolutive) and locative (<pT locative = pT ergative) are clearly distinct in all but one declension class (which was not distinct in pT either) — see 3.2. But despite the relative phonological conservatism of K and Ya, comparable morphosyntactic changes have occurred. We must therefore seek a non-phonetic causal mechanism.

On the other hand, pronominal subjects and objects appear to have been formally identical in pT (7.4.1.1). This would certainly have favoured the growth of any construction in which they were distinct.

McConvell (1981) offers a functional explanation for these changes. He suggests that in pT, as in Yukulta, there was a clitic complex or 'auxiliary' distinguishing past, present and future tenses; verbs did not distinguish tense, but signalled mood and polarity. When 'truncation' eliminated the tense element of the auxiliary (limited in Y to a segment NCV in final position) , main clauses were left with no means of signalling tense. To this 'there was a radical solution': the

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28 The initial /k/, which occurred only after nasals, changed to /ng/ by progressive assimilation of nasality. A similar change has produced Lardil /ngan/ [GEN] from pT /karran/ in this environment.
subordinate clause types of Proto-Tangic (sic) . . which did make a distinction of tense . . were transplanted as main clause types’ (p.163). This further increased the proportion of accusative-type constructions in main clauses, until ‘Lardil took the output of the ANTIPASSIVE (nominative subject – dative object) as the canonical form of the uninflected tense type, thus eliminating almost the last trace of ergative syntax, and bringing the uninflected type into line with the other indicative tense types’ (p.165).

McConvell’s scenario contains two logically independent subplots: (a) the supposed existence in pT of a tense-bearing auxiliary, destroyed by subsequent sound change, and (b) the reanalysis of pT subordinate as main clauses, and subsequent ‘crowding out’ of the originally canonical ergative construction. While I believe (b) to be essentially correct, there are good reasons to reject (a), and to conclude that pT lacked an auxiliary altogether, its development in Yukulta being relatively recent.

Firstly, there is evidence that the processes of truncation found in Lardil free forms did not affect clitics. The pT clitic –ka, for example (6.7.4.2) is fully preserved in Lardil. More importantly K and Ya, which as we have seen suffered only minor phonological change, show no evidence of a clitic complex. (McConvell had no data on these languages). Finally, there are typological and areal reasons why auxiliaries should develop rather than be lost: the whole trend in Australia is for them to be diffused, either directly (i.e. by borrowing of forms) or indirectly (by borrowing of function) – see Blake (1979c) and Heath (1979). Moreover, Yukulta, unlike the other T languages, was in regular direct contact with languages utilizing auxiliaries, such as Garawa (Furby 1972). None of the tense-morphemes in the Yukulta auxiliary can be related to Tangkic free forms, and it is possible that they were borrowed directly from some neighbouring language, although I have been unable to trace any source for them.

If we reject McConvell’s depiction of pT as an auxiliary-using language in which tense was signalled on the clitic complex alone, we are left with a proto language with a very restricted set of main clause tense/mood categories, but a developed system of signalling interclausal tense/mood relations. Although unusual, it conforms with the picture obtained by reconstructing verb inflections (5.3); as I suggested there, this unusual system may have arisen through creolization. Such a
system would be under some functional pressure to recruit new main clause categories, as McConvell argues, and the rich system of subordinate clause types would have provided an obvious model: as argued above, the syntactic shift from subordinate to main clause status was accompanied by a semantic shift from relative to absolute tense.

The historical productivity of this process in the Tangkic languages is emphasized by the occurrence in K of a second round of insubordination, to be discussed in Chapter 9: a second, outer layer of complementizing case suffixes may also be used in main clauses. These either indicate the ellipsis of a matrix perception, utterance or command predicate, or extend to main clauses the 'odd pivot' tracking mechanisms originally applied only between matrix and subordinate clauses.

In summary, then, the sweeping morphological and syntactic changes undergone by the insular Tangkic languages cannot be attributed to sound changes which wiped out key inflections in pT, as Klokeid and McConvell propose. Rather, the reasons appear to have been functional: pT had a meagre set of main clause tense/mood categories, but a rich set of subordinate clause types. and redressed this imbalance by allowing the subordinate types to be used in main clauses as well. In the process, old 't-complementizing case' was imported as new 'modal case'.

This had the effect of increasing the number of accusative-type constructions allowed in main clauses: alongside the accusative 'antipassive' constructions were three (L) or six (K) old subordinate constructions, also accusative, compared to the one ergative construction, only possible in indicatives, imperatives and realis desideratives. To this might be added the non-distinctness of the subject and object pronoun forms in the ergative construction, whereas they were distinct in antipassive and subordinate construction types. It is not surprising that in the end the accusative constructions were fully generalized and the ergative construction fell into disuse.  

Note, however, that K does have two constructions that could be considered ergative: resultative nominalizations, probably a recent innovation (8.4.3), and the bakiija qualifier construction (5.10.1.1). Lardil also has a newly-developed 'object-topicalization' construction that could be considered ergative (McConvell 1981:172-6).
There is no evidence that the above syntactic changes served to realign morphological and syntactic categories, a mechanism Dixon (1977) credits with certain changes in Dyirbal and Yidiny, and also relevant in the development of morphological accusativity in languages of the Ngayarda group, which were already syntactically accusative (Dench 1981). The relation between case-assignment and syntactic function was undoubtedly complicated in pT, but it has become even more so in K, Ya and L: in addition to the complicated tense/modality-dependent marking of objects found in all three, L in particular has a daunting array of possibilities for subjects. To consider active clauses alone, they may be nominative (unmarked clause type), genitive (topicalized object in marked modality) and accusative (subject of active contemporaneous clause). There are also several possibilities for the 'underlying' subjects of passive clauses (6.3.2). It must be stressed, though, that the syntactic orientation of pT is largely a mystery, and further intensive work on Yukulta syntax is urgently needed.
CHAPTER 8

NON-FINITE SUBORDINATE CLAUSES

In this and the following chapter I discuss subordinate clauses. These may be classified into non-finite and finite clauses according to the cluster of syntactic criteria in 8-1.

Figure 8-1: Syntactic characteristics of non-finite and finite subordinate clauses.

<table>
<thead>
<tr>
<th>Non-finite subordinate clauses (NFSCs)</th>
<th>Finite subordinate clauses (FSCs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. Pivot must be subordinate subject.</td>
<td>Pivot may be subordinate subject, object or instrument (at least).</td>
</tr>
<tr>
<td>3. Obligatory omission of subordinate subject.</td>
<td>Zero anaphora of subordinate pivot according to usual discourse rules; non-pivot usually not omitted.</td>
</tr>
<tr>
<td>4. Subordinate clause agrees in modal case with antecedent.</td>
<td>No case agreement with matrix antecedent. Instead, an outer complementizing case tracks marked coreference conditions.</td>
</tr>
<tr>
<td>5. Verb is morphologically nominal. (except motion purpose clauses)</td>
<td>No restrictions on type of verb.</td>
</tr>
<tr>
<td>6. Distributionally equivalent to Noun Phrases.</td>
<td>Not distributionally equivalent to NPs; usually adjoined.</td>
</tr>
</tbody>
</table>

Non-Finite Subordinate Clauses (NFSCs) will be discussed in this chapter. Finite Subordinate Clauses (FSCs) in Chapter 9.

There are two basic types of NFSC.

'Nominalized clauses' have verbs with the nominalizing formative -n- in place
of the normal verbal inflection. In addition to their main clause function as de facto present ongoing (8-24) or completive (8-4) inflections, they function as object complements of perception verbs (8-1), as second predicates of manner (8-2) or consequence (8-3), as restrictive relatives (8-5), and as goal adjuncts (8-6).

8-1 ngada kurri-ja ki-rr-wan-ji kurri-nju-n-ki
I:NOM see-ACT you-DU-POSS-MLOC look-RECIP-N-MLOC
I saw you two looking at one another.

8-2 warra-ja ngarn-ki wakiri-wakiri-n-d
go-ACT beach-LOC carry coolamon-REDUP-N-NOM
(They) went along the beach, carrying coolamons.

8-3 buka-ngarrba wuran-ngarrba diya-n-ngarrba bardaka jilarri-y
rotten-CONS food-CONS eat-N-CONS stomach(NOM) sore-NOM
(His) stomach is sore from eating rotten food.
(Lit: (he), after eating food, (has) a sore stomach.)

8-4 maramara balarr-in-dangka-na dana-thirri-n-d
dinghy(NOM) white-ABL man-ABL leave-RES-N-NOM
The dinghy was left behind by the white man.

8-5 ngada wayaa-jarra dathin-kina kunawuna-na
I:NOM sing.to.health-PST that-MABL child-MABL
markuri-n-ngarrba-na
get.mulgri-N-CONS-MABL
I sang back to health that child who had got 'mulgri'. (1.3.2).

8-6 karna-j, darri-j, junku-wa-n-marii-j
heat-IMP tread-IMP straight-INCH-N-VTRANSL-ACT
Heat (the spear shaft) and tread on it, until it straightens out.

All nominalized clauses have special rules for assigning relational and modal case: 'plain' nominalized clauses, for example trigger 'Associating OBLique marking' (2.4.5), and resultative nominalizations have an ergative argument structure.

Together with nominalized clauses I will discuss 'lexical nominalizations': words like wangal-ngudinda 'boomerang thrower', ngijin-kiyiilyarriba 'one who was given form (brought into the world) by me', and warrku-darayarriba 'one circumcized at daybreak'. Like clauses, these have an argument structure with a verbal predicator and up to two arguments: one prefixed, the other the referent of the nominalization.

1To express object complements, relative clauses and goal adjuncts, many speakers prefer FSCs. So my corpus of NFSCs - particularly passives - still has several gaps.
Like clauses, there are regular rules governing the voice of the verb stem and the semantic rules of the arguments. And like subordinate clauses, they are presupposed rather than asserted. Syntactically, however, they are nominal words (usually entity nominals). They may inflect for number and nominal derivational suffixes such as muthanda 'excessive', may be modified by other nominals, and are part of a NP. And where the arguments of syntactic nominalizations are free NPs, lexical nominalizations must incorporate their arguments as prefixes.

'Motion purpose' clauses give a motivating action toward whose execution the matrix subject is moving in space as well as time. Syntactically they are 'DIRECTed' VPs directly embedded beneath a matrix adjunct NP; all their constituents (including the verb) take a further modal case inflection in agreement with that of the matrix clause:

8-7 balmb-u ngada dali-ju ngumban-jiring-ku kamburi-jiring-ku
morrow-MPROP I:NOM come-FUT you-MALL-MPROP speak-DIR-MPROP

Tomorrow I'll come to talk to you.

8.1 Morphological structure of nominalized verbs

As mentioned above, nominalizations functioning as the verbs of nominalized clauses (henceforth, 'clausal nominalizations') have very similar morphological possibilities to 'lexical nominalizations' (excepting -Tharrba clauses - 8.3). These are summarized in 8-2. The only two differences are that (a) lexical nominalizations may take PROPrietary after the nominalizing morpheme, and (b) negative lexical nominalizations are formed with -THARR (also the NEGative ACTual suffix) while negative clausal nominalizations use nominalizing -n- plus PRIVative -marri. Nominal prefixation is far commoner with lexical nominalizations, but nevertheless possible with certain types of clausal nominalization. Because of this

By dealing with lexical nominalizations in this chapter, I do not wish to imply that they should be treated by the same rules as govern the syntax of the language: I do not attempt to 'derive' lexical nominalizations from underlying clauses, in the style of Lees (1960). There are simply too many irregularities, and despite a certain degree of productivity, rules for the formation of lexical nominalizations are not fully productive in the way syntactic rules are (cf Chomsky 1970). The important insight in Lees is that complex nominalizations have a proposition-like semantic structure. Once semantic structure is distinguished from constituent or functional structure the parallels and differences between nominalizations and clauses can be clearly seen.

An assumption which I have made without justification is that lexical nominalizations have a clause-like functional structure as well: at least at first sight, certain grammatical functions, such as subject, object, demoted subject, and locative and instrumental adjuncts, must be recognized if the relation between encoded meaning and the structure of the nominalization is to be accounted for - see 8-3. Whether this can be replaced by a direct mapping between semantics and word form is a question that requires further investigation.
Figure 8-2: Morphological structure of nominalized verbal words

<table>
<thead>
<tr>
<th>Prefix</th>
<th>Verb Stem</th>
<th>Voice</th>
<th>Nominalizer</th>
<th>Compleitive/Potential/Negative</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nominal Stem</td>
<td>V</td>
<td>ø</td>
<td>-n-</td>
<td>ø</td>
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<td></td>
<td></td>
<td></td>
<td>-DT-</td>
<td>-CONS-</td>
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<td></td>
<td></td>
<td>(-yii-)</td>
<td>-ngarrba</td>
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<td></td>
<td>-RES-</td>
<td>[-PROP-]</td>
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<td>-THirri-</td>
<td>-kuru</td>
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<td>-RECIP-</td>
<td>-PRIV-</td>
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<td>-NTHu-</td>
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<td></td>
<td></td>
<td>[Negative]</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td>-THarri</td>
</tr>
</tbody>
</table>

Note: (a) [ ] encloses possibilities limited to lexical nominalizations.
(b) RESultative -THirri- is incompatible with CONSequential -ngarrba (through redundancy), and PROPrieteive -kuru (through contradiction).

morphological overlap, a given form may double as a lexical and a syntactic nominalization (which itself may serve several distinct functions). Thus the stem rajurri-n- [walk around-N-] may function as a lexical agentive nominalization meaning 'toddler', or as a clausal nominalization with various functions, such as the object complement of a perception verb:

8-8 kurri-ja dathin-a dangka-a rajurri-n-d!
look-IMP that-NOM man-NOM walk around-N-NOM

Look at that man walking around!

Nominalized verbs in either function may be inflected for modal or complementizing case. But only in their lexical function can they take relational case inflections, nominal number suffixes such as the dual (e.g. rajurri-n-kiyarrngka 'two toddlers'), or nominal derivational suffixes such as EXceSSive -muthan-da (e.g. ngayamaa-n-muthan-da [quarrel-N-XS-NOM] 'quarrelsome person').
8.2 Lexical nominalizations in \(-n\)-

A handful of simple lexical nominalizations are semantically idiosyncratic: e.g. \(kularri-n-da\) ‘opposite sex sibling’ (\(< kularri-ja\) ‘untie’: see B-3 for a possible etymology) and \(ngaka-n-da\) ‘sandbank’ (\(< ngaka-tha\) ‘wait’: one waits there to fish).

Most, however, follow a more regular pattern, although there is some formal overlap between semantic types. I will discuss these individually, loosely following the classification in Comrie & Thompson (to appear).

8.2.1 Agentive nominalizations

These derive entity nominals meaning ‘one which Ves: one characterized by Ving: Ver’.

8.2.1.1 Intransitive

The unadorned verb stem is used with intransitive verbs:

\begin{itemize}
  \item \textit{wathangi-n-da}\hspace{1cm} roll over-N-NOM \hspace{1cm} baby able to roll over ("turn-over baby")
  \item \textit{barri-n-da}\hspace{1cm} crawl-N-NOM \hspace{1cm} baby at crawling stag
  \item \textit{ngarii-n-da}\hspace{1cm} come first-N-NOM \hspace{1cm} first born; first portion of food
  \item \textit{raj urri-n-da}\hspace{1cm} walk around-N-NOM \hspace{1cm} toddler
  \item \textit{danaa-n-da}\hspace{1cm} come last-N-NOM \hspace{1cm} last born; last portion of food.
\end{itemize}

8.2.1.2 Transitive

Transitive verbs take a prefixed nominal object. Occasionally this is compounded (e.g. 8-18). 

\begin{itemize}
  \item \textit{dangka-baa-n-da}\hspace{1cm} person-bite-N-NOM \hspace{1cm} person-biter (e.g. snake)
  \item \textit{darr-kurri-n-da}\hspace{1cm} thigh-look at-N-NOM \hspace{1cm} lecher ('thigh-looker')
  \item \textit{mijil-burldi-n-da}\hspace{1cm} net-cast-N-NOM \hspace{1cm} spider ('net-caster')
  \item \textit{kambin-kurri-n-da}\hspace{1cm} child-look at-N-NOM \hspace{1cm} incestuous parent
  \item \textit{dangka-kurndi-n-da}\hspace{1cm} person-tie up-N-NOM \hspace{1cm} policeman
  \item \textit{ngamathu-daa-n-da}\hspace{1cm} mother-fuck-N-NOM \hspace{1cm} mother-fucker
  \item \textit{dangka-wuu-n-da}\hspace{1cm} person-give-N-NOM \hspace{1cm} generous person ('person-giver')
\end{itemize}

Where the action is repeated on the same individual, rather than on a class of individuals, it is possible to prefix a pronominal stem (formally, a possessive pronoun):

8-9 nyingka ngijin-duruma-n-d
you:NOM 1sgPOSS-lie-N-NOM
You always lie to me.

There is also a class of 'actual' kin terms having this form - ngijin-badi-n-da [me-bearer-N-NOM] 'bearer of me; my biological mother' (see Appendix B.2.2 for the full set).

8.2.1.3 Negative

Negative agentive nominalizations of transitive verbs take the suffix -THarri (formally identical to the NEGative ACTual inflection): wuran-diya-jarri [food-eat-NEGNMZ] 'fuss-pot', wadu-baa-jarri [smoke-bite-NEGNMZ] 'non-smoker'. The following example illustrates their functional equivalence to positive agentive nominalizations:

8-10 bang-a-wala-tharri kiyarrng-k, birdi-ru-tharri, turtle-miss-NEGNMZ two-NOM bad-FAC-NEGNMZ
banga-raa-n-da kiyarrng-k
turtle-spear-N-NOM two-NOM
(They were) no pair of turtle-missers, no fumblers, but a pair of turtle-spearers.

Lardil has a parallel construction, e.g. dangka-be-jarr(i) 'thing/animal that does not bite people'.

8.2.1.4 Agentive nominalizations with prefixed locale

Occasionally the nominal stem plus a mysterious suffix -inji is prefixed to the verb:

8-11 kaban-da dulk-inji-wirdi-n-d
stargazer fish-NOM sand-?-stay-N-NOM
The stargazer fish is a sand-dweller.

8-12 niya warngiid-dulk-inji-wirdi-jarri
3sgNOM one-place-?-stay-NEGNMZ
He never stays in one place.
8-13 niya dulk-inji-wungi-n-da
3sgNOM country-?-steal-N-NOM

He's always poaching on other people's country.

Note that dul-wungi-n-da, with the object directly incorporated, would mean 'stealer of (someone else's) country' rather than 'poacher on (someone else's) country'.

-inji may be an archaic form of the LOCative suffix (cf the modern LOC. -i(ya) in this environment). A related form appears in some place names such as barnunji (barnu 'swamp root') and kurthangarranji (kurthangarra 'flying fox'). in the word yurdanji 'pregnant woman' (yurda- 'inside') and the partly analysable compound balubunji-wirdi-n-da 'lobster' (no free form balubu). Assuming (i)nji to be an old locative allomorph is consistent with other reconstructable allomorphs of the locative, such as -ngki, as well as to ergative-locatives in other languages (cf Warumungu ERG/LOC -nji).

8.2.2 Instrumental nominalizations

These denote instruments - 'that which is used for Ving OBJs'. The object is prefixed to a detransitivized verb stem:

<table>
<thead>
<tr>
<th>Turtle-spear-DT-N-NOM</th>
<th>Thing-tie up- DT-N-NOM</th>
<th>Sea-hit- DT-N-NOM</th>
</tr>
</thead>
<tbody>
<tr>
<td>banga-ra-yii-n-da</td>
<td>thungal-kurndi-i-n-da</td>
<td>mala-bala-a-n-da</td>
</tr>
<tr>
<td>turtle spear</td>
<td>rope</td>
<td>harpoon (M.I.E. 'wap')</td>
</tr>
</tbody>
</table>

Perhaps the most interesting, deriving from the expression baa-ja wadu 'smoke' (lit. 'bite the smoke'), is the word for tobacco: wadu-ba-yii-n-da [smoke-bite- DT-N-NOM], literally 'that by means of which the smoke is bitten'.

A reflexive meaning for the verb sometimes makes more sense than a passive, as in mibur-kurri-i-n-da [face-see- DT-N-NOM] 'mirror' (that by means of which one sees (one's) face).

Hale (1965) discusses similar constructions in Lardil, e.g. kurka-thureme-e-n [panja-pound- DT-N] 'pestle for pounding panja'. They are not attested in Yukulta.
8.2.3 Locational nominalizations

These are used to characterize places by what happens at them. There are two types:

(a) \(N(obi) - V(tr) - DT-n\) 'place used to V OBJ: place where OBJs are Ved':

- **wa 1 bu-kumdi-i-n-da kunawuna-wirzka-a-n-da**
  - raft-tie up-DT-N-NOM
  - youth-initiate-DT-N-NOM
  - *place where rafts are lashed together initiation ground*

- **bi j arrba-durrwa—yii—n—da**
  - dugong-chase-DT-N-NOM
  - *dugong hunting ground*

One example lacks a prefixed object, presumably because the verb already specifies it semantically: **tharrma-a-n-da** [graze.on.seaweed-DT-N] 'place where seaweed is grazed on (by dugong and turtle)'.

In another example an 'intentional object' with the PROPriective case is prefixed to an intransitive verb:

**warrngal-uru—dii-n-da**
- wind-PROP-sit-DT-N-NOM
  - *place where one summons up ('sits down for') the wind*

(b) \(N(subi) - V(tr. motion) - DT-n\) 'place where SUBJ Ves. place Ved at by SUBJ':

- **yakuri-barji-i-n-da**
  - fish-fall-DT-N-NOM
  - *grass dam used to catch jumping fish*

- **dangka-wirdi-i-n-da**
  - person-remain-DT-N-NOM
  - *haven, place where people remain (e.g. during flood)*

Slightly anomalous is **warrku-burri-i-n-da** [sun-emerge-DT-N] 'morning star'. This probably represents an extension from the above spatial meaning to a temporal one: 'time when the sun emerges'.

The corresponding negatives in -\(THarri\) mean 'place that is / has been Ved at by no N':

- **dangka-barji-i-jarri**
  - person-fall (be born)-DT-NEG/NMZ
  - *place no-one was born at*

- **dangka-kamburi-i-jarri**
  - person-speak-DT-NEG/NMZ
  - *place spoken in by no-one*
8.2.4 Time nominalizations

These have the structure \( N(\text{obj})-V-DT-n- \) (like instruments), and mean 'time when one \( \text{Ves OBJs} \)' or 'good time for \( \text{Ving OBJs} \)'.

8-14 biril-uru, yakuri-ra-yii-n-d
   clear weather-PROP fish-spear-DT-N-NOM
   It's clear weather, just right for spearing fish.

8.2.5 Cognate object nominalizations

These denote 'dummy' or 'cognate' objects: they contain an unadorned verb stem. Only two are attested: kuwalkulaa-n-da [dream-N-NOM] 'dream': wirrka-n-da [dance-N-NOM] 'dance'. With wirrkanda at least the form is ambiguous, and also allows the agentive reading 'dancer' (in addition to the 'syntactic' meanings discussed in 8.4).

8.2.6 Inchoative state nominalizations

These have form \( V-DT-n- \), and mean 'one that has \( \text{Ved} \) (inchoative), not necessarily as a result of another's action'. They appear to derive from detransitivized verbs with inchoative or middle meaning:

dara-tha \( \rightarrow \) dara-a-ja \( \rightarrow \) dara-a-n-da
   break (TR) break (inch.), get broken broken (e.g. engine, bone)

mirndili-ja \( \rightarrow \) mirndili-i-ja \( \rightarrow \) mirndili-i-n-da
   shut, close off shut (inch.), grow over(path) shut off, overgrown

8.2.7 Affected object nominalizations

These have the form \( V-RES-n- \), and mean 'one which has been \( \text{Ved} \), undergoing significant physical change as the result of another's action'. An oft-heard example is dara-thirri-n-da [break-RES-N-] 'circumcized man' (lit. 'one who has been broken'). As in\(^3\):

8-15 dara-thirri-n-da ngalama-th, dara-a-n-marri-ya wirdi-ja ngumal-d
   break-RES-N-NOM marry-ACT break-DT-N-PRIV-NOM stay-ACT single-NOM
   Circumcized men married, the uncircumcized stayed single.

Pronominal stems representing the 'demoted agent' may be prefixed, as in ngijin-dara-thirri-n-da 'person initiated by me'.

\(^{3}\)8-15 is my sole example of a contrast between positive RESultative and negative plain PRIVative; I do not know if the RESultative can be negated directly by adding the PRIVative.
Other examples are *kawa-thirri-n-da* [roast-RES-N-] ‘one who has been “roasted”’ (i.e. one punished for poaching by having his faeces roasted in a ground oven - said to produce total constipation and subsequent death), and the synonymous *wal-maru-thirri-n-da*, based on the compound verb *wal-maru-tha* [ground oven-put] ‘avenge OBJ by roasting OBJ’s faeces in a ground oven’.

One example has a prefixed body part, with reflexive meaning: *nal-barrki-jirri-n-da* [head-chop-RES-N-] ‘(woman) who has cut her own head (during mourning)’.

### 8.2.8 Miscellaneous types

Occasionally nominals in some other function are prefixed to the basic verb stem:

**Subject complements**, as in *bayi-wirdi-n-da* [aggressive-remain-N-] ‘trouble-maker’.

**Manner second predicates**, as in *ngarrku-budii-n-da* [strong-run-N-] ‘strong runner’ and *kiyarr-barii-n-da* [two-be-born-N-] ‘twins’.

**Body part of referent**, as in *munirra-thaldi-n-da* [breast-stand-N-] ‘young girl whose breasts are beginning to stand up’.

### 8.2.9 Word-structure and grammatical function

There is a certain regularity to the relation between the structure of lexical nominalizations, and the grammatical function, relative to the verb, of the prefixed nominal, and the referent of the nominalization. These regularities are summarized in Fig. 8-3.

With one exception the roles of prefix and referent can be read off directly from the structure of the nominalization. For example, seeing a nominalization of the form *N-V(tr)-n* we know the prefix is object and the referent is subject; seeing one of the form *N-V(motion)-DT-n* we know the prefix is subject and the referent is the location. Formulating an account in which lexical nominalizations were derived from finite clauses, on the other hand, would be difficult: the choice of which argument to prefix, and when to detransitivize the verb, show no regularities beyond those given in 8-34.

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4But see Hale (1965) for an account of Lardil agentive and instrumental nominalizations within a transformational framework.
Figure 8-3: Grammatical functions and the structure of lexical nominalizations

<table>
<thead>
<tr>
<th>Structure of verb stem</th>
<th>Function of Prefixed Argument w.r.t. verb</th>
<th>Function of Referent w.r.t. verb</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>V(tr)-n-</td>
<td>Object</td>
<td>Subject</td>
<td>banga-raa-n-da 'turtle-spearer'</td>
</tr>
<tr>
<td>V(tr)-DT-n-</td>
<td>Object</td>
<td>Instrument</td>
<td>banga-ra-yii-n-da 'turtle spear'</td>
</tr>
<tr>
<td>&quot;&quot;</td>
<td>&quot;&quot;</td>
<td>Location</td>
<td>walbu-kurndi-i-n-da 'place where rafts are lashed together'</td>
</tr>
<tr>
<td>V(motion)-DT-n-</td>
<td>Subject</td>
<td>Location</td>
<td>budubudu-warra-a-n-da 'harbour'</td>
</tr>
<tr>
<td>V(tr)-THirri-n-</td>
<td>Object</td>
<td>(Demoted) agent Object</td>
<td>ngijin-dara-thirri-n-da 'man initiated by me'</td>
</tr>
</tbody>
</table>

The potential ambiguity arises with verbs whose form allows both instrumental and locative readings: that walbu-kurndi-i-n-da means ‘a place where rafts are lashed together’ and not ‘thing used for lashing rafts together’ seems to be an arbitrary fact of the language. This is further complicated by the existence of a third, minor choice: ‘good time for Ving OBJ’ (8.2.4).

8.2.10 Use of PROPrjective and CONSequential suffixes with lexical nominalizations

PROPrjective -kuru and CONSequential -ngarrba may follow the nominalizing -n-. They derive qualifying nominals, and add a meaning of expectation (PROP) or priority (CONS).

8.2.10.1 PROPrjective nominalizations: role, responsibility or potentiality

Attached to a nominalized active stem. PROP indicates an expectation about what the referent will do. Most often this reflects the subject’s temporary role or responsibility:

- **buru-n-kuru dangka-a**
  - **grab-N-PROP person-NOM**
  - midwife (responsible for pulling the baby out)

- **darri-n-kuru dangka-a**
  - **tread-N-PROP person-NOM**
  - woman responsible for treading the mother’s belly (to stimulate labour)
ngakatharrma-n-kuru dangka-a
mind-N-PROP person-NOM
person responsible for minding something (e.g. a house)

8-16 kala-n-kuru dangka-a karrma-karrma-th
cut-N-PROP person-NOM grab-REDUP-ACT
The man who has to cut (the foreskin) grabs (the initiate) hard.

8-17 mura-a kiyarrng-ka karrma-n-kuru-na dangka-na
neck.meat-NOM two-NOM wrestle-N-PROP-ABL person-ABL
The two pieces of neck-meat belong to whoever has wrestled (a dugong).

More rarely, the expectation is based on known ability, disposition, or potentiality:

thaa-n-kuru wangalk-a
toth-N-PROP boomerang-NOM
returning boomerang

kalka-n-kuru
be sick-N-PROP
weak, ailing, easily tired

8-18 dathin-a dulk-a mutha-dangka-kurulu-n—kuru
that-NOM place-NOM many-person-kill-N-PROP
That place can kill (has the power to kill) many people.

Attached to a passive nominalized stem. PROP gives the meaning ‘capable of being Ved’. This often translates with English -able/-ible.

diya-a-n-kuru
eat-DT-N-PROP
edible (e.g. yam)

kurri-i-n-kuru
see/look at-DT-N-PROP
(a) visible (b) eligible (woman), able to be made advances to.

An important mythical example is the word kukal-ii-n-kuru [rebound-DT-N-PROP], used to describe the being Kajurku, from whom all spears rebound: he is ‘able to be rebounded off’.

Unlike other uses of PROP. the ‘ability’ derivational use can be followed by the PRIVative of negation, as in diya-a-n-kuru-warri [eat-DT-N-PROP-PRIV] ‘inedible’ and wirrka-a-n-kuru-warri [initiate-DT-N-PROP-PRIV] ‘unable (e.g. not ready) to be initiated’.

8.2.10.2 CONsequential -ngarrba: prior action

This adds the meaning ‘one that has Ved before/already’. Thus while dara-n-kuru dangkaa [break-N-PROP person] means ‘man who has to do the circumcizing’, dara-n-ngarrba dangka-a [break-N-CONS person] means ‘man who has circumcized (someone) before’.

The use of CONSequential nominalizations to form relative nominalized clauses with this prior meaning is completely productive, making ‘lexical’ and ‘clausal’
nominalizations hard or impossible to distinguish. More examples of consequential nominalizations are given in the section on clausal nominalizations – 8.4.4.

8.3 Lexical nominalizations in –THarrba

Lexical nominalizations may also be formed with the verb inflection -THarrba on an active or detransitivized stem, plus a prefixed nominal⁵. They are used to denote entities characterized by having performed the nominated action some time in the past. Sometimes they are roughly synonymous with RESULTative or CONSEQUENTIAL nominalizations, although -THarrba nominalizations lay greater stress on the social or mythological significance of the action.

8-4 summarizes the possible grammatical functions of the prefixed argument.

<table>
<thead>
<tr>
<th>Active stem</th>
<th>Detransitivized stem</th>
</tr>
</thead>
<tbody>
<tr>
<td>Object-V-THarrba</td>
<td>Demoted agent-V-DT-jarrba (pronoun only)</td>
</tr>
<tr>
<td>Location-V-THarrba</td>
<td>Location-V-DT-jarrba</td>
</tr>
<tr>
<td>Time-V-THarrba</td>
<td>Time-V-DT-jarrba</td>
</tr>
<tr>
<td>Derived subject-V-DT-jarrba</td>
<td></td>
</tr>
</tbody>
</table>

Figure 8-4: Grammatical functions of the prefixed nominal in -THarrba nominalizations

8.3.1 Form

The inflection -THarrba is also used as a finite verb inflection in PRECONDITION clauses (5.2.3.8). Because -THarrba nominalizations belong to a different word class (nominals), I will gloss them differently, as PAST NOMinalizations. Both inflections share two optional morphophonemic changes (cf 5.2.3.8):

(a) the palatal conjugation form -jarrba may lenite to -yarrba. This gives alternative nominalized forms like natha-wirdi-jarrba/natha-wirdi-yarrba ‘married man’. In nominalizations, unlike in PRECONDITION verbs, this lenition is obligatory for some lexemes (e.g. the -dara-yarrba series described below).

(b) the long vowels preceding lenited palatals are optionally shortened:

\[
\text{wirrka-a-jarrba} \rightarrow \text{wirrkaayarrba} \rightarrow \text{wirkayarrba}
\]

This can result in neutralization of active and derived passive forms:

5There is a single unprefixed example – the word wirrkaayarrba [initiate:DT:THarrba] 'initiated man'.
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gi jin-ba di-jarrba —> ngi jinbadiyarrba
1sgPOSS-carry-PSTNMZ
my mother; bearer of me

gi jin-ba di-i-jarrba —> ngi jinbadiiyarrba —> ngi jinbadiyarrba
1sgPOSS-carry-DT-PSTNMZ
my child; one borne by me

(Where detransitivization involves a change from interdental to palatal conjugation the formal distinctness is preserved, since the interdental does not lenite — see the (mi)ma-tha examples discussed below.

8.3.2 Functions

8.3.2.1 Biological kin terms

These identify actual nuclear kin — parents, children and siblings — in terms of key biological processes, denoted by the verb stem. In contrast to the classificatory kin terms, which apply to a large class of referents, biological kin terms single out one significant and prototypical individual from a set of classificatory equivalents — for example, my biological father (ngi jin mimatharrba), from the set of my classificatory fathers (kanthathu).

The mother relationship is epitomized by the verb badi-ja 'carry, bear' (see example above): the father relationship by the verb mima-tha 'beget' (usually shortened to -ma-tha). The offspring terms are obtained by passivizing the stem, as shown below. Sibling relationships use the verb warra-ja 'go' plus a prefixed nominal of relative position. With the parent and child terms the propositus is identified by a prefixed pronominal stem; the first singular possessive stem may be replaced by the reflexive pronoun marin-da. Examples are:

ngakin-(mi)ma-tharrba
1:INC:NSG:POSS-beget-PSTNMZ
Our father; begetter of us

niwan-badi-yarrba
3sgPOSS-carry-PSTNMZ
His/her mother; bearer of him/her

ngi jin-ba di-yarrba OR marin-ba di-yarrba
1sgPOSS-carry-PSTNMZ self-carry-PSTNMZ
My mother; bearer of me

danaa-n-marra-yarrba
come last-N-go-PSTNMZ
Youngest sibling (lit. 'last gone')

ngarii-n-marra-yarrba
precede-N-go-PSTNMZ
oldest sibling ('first gone')
8.3.2.2 Ritually cemented relationships

These identify individuals in terms of some ritually important activity performed on or by the person nominated in the pronominal prefix. Two such actions are represented in my corpus: midwifing/delivering, with the verb *kinyi-lu-tha* [physical form–FAC–] ‘endow with physical form, deliver’, and circumcizing, with the verb *dara-tha* ‘break, circumcize’. Again, these single out a single significant individual from a set of classificatory equivalents: normally the midwife is a “father’s sister” (*marrkathu*), and the circumcizer a “wife’s father” (*kardu*). As with the parent terms, passivization is used to give the reciprocal term. Examples are:

- **ngijin-kinyilu-tharrba**
  - 1sgPOSS-deliver-PSTNMZ
  - Deliverer of me

- **niwan-dara-tharrba**
  - 3sgPOSS-break-PSTNMZ
  - Circumcizer of me

These terms may be used in reference or address: frequently they are employed to enlist the addressee’s co-operation by reminding them of their ritual debt:

8-19 **ngumban-kinyilu-tharrba bardakawari**
  - 2sgPOSS-deliverer-PSTNMZ hungry(NOM)
  - The person who brought you into the world is hungry.
  - (Implied: give her some food – you owe it to her.)

Initiated men may also be referred to by a -THarrba nominalization specifying when in the ceremony they were circumcized:

- **ngarii-n-dara-a-yarrba**
  - first-N-break-DT-PSTNMZ
  - one circumcised first in the ceremony

- **danaa-n-dara-a-yarrba**
  - last-N-break-DT-PSTNMZ
  - one circumcised last in the ceremony

- **warrku-dara-a-yarrba**
  - sun-break-DT-PSTNMZ
  - one circumcised at daybreak
8.3.2.3 Stages of life

THarrba nominalizations with verbs representing ritually important actions may indicate someone’s arrival at a certain stage of life:

8-20 dathin-a dangka-a natha-wirdi-jarrb
that-NOM man-NOM camp-stay-PSTNMZ
“He got wife now”. (And lives in his own camp).

8-21 kunawuna wirrka-(a)-yarrb
child(NOM) initiate-DT-PSTNMZ
“He finish, bin through already”. (The child has been initiated).

The ‘now’ or ‘already’ in my informants’ glosses focusses attention on the candidate’s achievement of a new stage of life; on the effects of his action on his social role. Resultative nominalizations, by contrast, draw attention to the persistent physical effects of an earlier action (8.2.7): they would be more appropriate when examining someone’s body for cicatrices or subincision.

8.3.2.4 Place names

Many place names have the form N-V-THarrba, and mean ‘(the place) where N Ved (with intransitives) / was Ved (with passivized transitives)’. This meaning is closely related to the stage-of-life meaning: just as ritual actions bring people into a new stage of life, so do mythical actions form the landscape into its present state.

Some examples are:

wambal-barji-jarrba
bush-fall-PSTNMZ
The place where the bush was flooded (‘fell’ under water).

kathuka-barndi-yarrba
redbill-stop(DT)-PSTNMZ
The place where the redbills were stopped (by a flood).

maali-badi-yarrba
swamp turtle-carry(DT)-PSTNMZ
The place where the swamp turtles were carried off (out to sea).

waldarra-kurdala-yarrba
moon-spear(DT)-PSTNMZ
The place where the moon was speared.

The mythical reasons for some of these have been lost. Buka-rna-yarrba[dead-burn(intr)-PSTNMZ]^6 is, etymologically, ‘(the place where) the dead/dead things were burned’, but no-one could give any explanation for this.

^6Here, too, the final vowel of the verb stem has been shortened, although in this case it is intrinsic to the verb root (nauja 'burn (intr.)') rather than introduced by detransitivization.
8.3.2.5 Other uses

The above four types account for the vast majority of -THarrba nominalizations. Occasionally, however, ad hoc combinations are used as relative participles; they have definite reference and may or may not be followed by a further entity nominal:

8-22 maku-ngalama-tharrba dangka-a ngumal-d, jardi-y
woman-marry-PSTNMZ man-NOM single-NOM behind-NOM
The man who had married that woman is left behind (she’s run off).

8-23 [ngijin-thuu-yarrba / ngijin-marndi-yarrba
lsgPOSS—insult—PSTNMZ lsgPOSS—take from—PSTNMZ
ngijuwa walaru-tharra-nth] COBL
lsgSUB;COBL avenge by cooking faeces in ground oven-COBL
Those who insulted me/who stole from my country I avenged by cooking their faeces in a ground oven.

The -THarrba nominalizations here are the object topics of independent complementized clauses – see 9.5.2.1.

One particularly interesting example is the word for dog, kurthurra-warra-yarrba [calf-go-PSTNMZ], literally ‘the one that followed at people’s calves’. Dogs had long disappeared from Bentinck Island, through flood or famine, as had their PT name, ngawu. But they were celebrated in several myths, and it seems likely that the explanatory term, which had been remembered, was re-applied when dogs were rediscovered following Lardil/European contact.

8.3.2.6 Comparative note

Both Lardil and Yukulta can use the cognate verb inflection, whose main function is to code ‘prior’ (Y) or ‘marked non future’ (L) clauses, to derive nominalizations. In both, the use as a nominalization is relatively marginal.

Lardil verb stems with the Marked Non Future -tharr may function as ‘non-future nominalizations’, as in kanjawaa-tharr mangarda [shake-a-leg dance-THARR youngster] ‘youngsters who are doing the shake-a-leg’ (Klokeid 1976:481). -Tharr nominalizations contrast with ‘future nominalizations’, using the future inflection, and ‘generic’ nominalizations in -n-: kanjawaa-n mangarda ‘youngsters who do the shake-a-leg’. From Klokeid’s examples it seems that nominalizations can only occur as modifiers.

The only example in Y is contained in the introduction to Keen’s 1983
grammar, where she mentions a place called *kurlthangarra-diya-jarrba* [flying.fox-eat-PRIOR]. Without further explanation we cannot know whether this means 'the place where flying foxes eat' or 'the place where flying foxes feed'.

It seems likely that in all three languages these nominalizations originated as 'prior' clauses modifying a main clause head. Subsequent developments led to argument prefixation (K,Y) and omission of the head nominal (K,Y). But beyond this the path of their development cannot be reconstructed, without more information on the Y and L uses.

8.4 Nominalized clauses

Nominalized clauses fall into four types, classifiable by the form of their verb:

- **V-n-** Plain nominalization
- **V-n-marri** Privative nominalization
- **V-Thirri-n-** Resultative nominalization
- **V-n-ngarrba** Consequential nominalization

A nominalized clause may contain a multi-word verb complex; in this case all verbs of the complex have the same form. An example is 8-59.

Each type has its own rules governing which NP arguments are permitted, and what case(s) they take. These are summarized in 8-5 (there are several gaps in my corpus). Each type also has its own range of functional possibilities, drawn from a set of five: main clauses, second predicates on the subject, object complements, restrictive relatives, and goal adjuncts. The possibilities of each syntactic type are summarized in 8-6. With minor exceptions the argument/case-marking ties.

8.4.1 Plain nominalizations

8.4.1.1 Permitted arguments: case assignment

*Active plain nominalizations* have no restrictions on possible arguments. All NP arguments within the VP take an 'associating OBLique' following their other case inflections (see 2.4.5 & 6.4.1.1 for examples), which are assigned as for a finite clause.

(a) Active plain nominalized clauses may function as main clauses describing ongoing, uncompleted actions. This function takes the zero modal case:
### Figure 8-5: Permitted arguments and case-marking rules for the four nominalized clause types

<table>
<thead>
<tr>
<th>Clause type</th>
<th>Permitted arguments</th>
<th>Case-marking rules</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plain</td>
<td>No restriction</td>
<td>Active: normal relational/modal case, plus Associating OBLique.</td>
</tr>
<tr>
<td>Privative</td>
<td>No restriction</td>
<td>Case-marking rules of corresponding finite clause.</td>
</tr>
<tr>
<td>Resultative</td>
<td>Demoted agent/ instrument only</td>
<td>Pronominal: free possessive pronoun Human non-pronominal: ABLative Non-human animate, 'direct' instrument: CONSequential Indirect cause: ORIGIN</td>
</tr>
<tr>
<td>Consequential</td>
<td>No restriction</td>
<td>All arguments take CONSequential; this displaces relational/modal LOCative.</td>
</tr>
</tbody>
</table>

8-24 bi-rr-a bula-n-da thungal-ula-n-da kurda-nth
3-DU-NOM pull-N-NOM tree-VABL-N-NOM paperbark-AOBL

*Those two are pulling paperbark off the trees.*

This construction, like all plain clausal nominalizations, has no correspondent in any other Tangkic language. But there is a clear parallel with the ABS:DAT 'general middle diathesis' found in Yukulta with actions whose effect on the object is incomplete (recall that pT DAT corresponds to K OBL). Ongoing actions are necessarily incompletely, such as the present tense. It is in the present tense. It is possible that 'present ongoing' tense was a further condition requiring ABS:DAT constructions in pT, and that this was later extended to constructions using 'present nominalizations'; the DATive case was then reinterpreted from a marker of unaffected objects to a syntactic 'associating case', which could co-occur with modal case (see examples below). This hypothesis would also explain why AOBL is not found with passives - however and whenever they originated, it was clearly not from a 'middle unaffected' construction, so there would have been no 'unaffected objects' to mark with the dative.
Figure 8-6: Functional possibilities of nominalized clause types

<table>
<thead>
<tr>
<th>Clause type</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Main Clause</td>
</tr>
<tr>
<td>Plain</td>
<td>Ongoing uncompleted</td>
</tr>
<tr>
<td>Privative (a)</td>
<td>Negative in absence of specific finite inflection</td>
</tr>
<tr>
<td>Privative (b)</td>
<td>Focus on lack of action by subject</td>
</tr>
<tr>
<td>Resultative</td>
<td>Perfective stressing complete effect on S/O</td>
</tr>
<tr>
<td>Consequential</td>
<td>Previous action by A or S (or O if passivized)</td>
</tr>
</tbody>
</table>

Plain nominalized clauses functioning as object complements of perception clauses have the same modal case as the matrix clause: e.g. zero in 8-25, MPROP in 8-26, MLOC in 8-27, and MABL in 2-39. Unexpectedly, the modal case is inside the Associating OBLique (see 2.4.5 for discussion). NP arguments that normally escape modal case – such as those taking the 'intentional proprietive' – also escape modal case arising through agreement.

8-25 kurri-ja dathin-a maku-walad-a [dalwani-n-da thawal-inj]! Look-IMP that-NOM woman-LOT-NOM dig up-N-NOM yam-AOBL

Look at those women digging up yams!

8-26 ngada balmbi-wu kurri-ju ki-l-wan-ju [dalwani-n-ku I:NOM morrow-MPROP see-PUT 2-PLU-POSS-MPROP dig up-N-MPROP thawal-uu-nth] yam-MPROP-AOBL

Tomorrow I will watch you two digging up yams.
I saw you digging up yams.

Passive plain nominalizations: my corpus contains only three of these. This is too few to warrant strong generalizations, but a few indications emerge.

8–28, with its modal proprietive on ‘another time’, suggests that modal case may be assigned independently in main clauses of this type, and that the Associating OBLique is not used. (In a plain active nominalization AOBL would appear after MPROP in the time expression).

Another time (your head) ‘ll get broken on a stone.

Apart from the time nominal here, the only nominal arguments attested are demoted agents. These take free possessive pronouns when pronominal (8–30), the Verbal Intransitive ALLative when non-human and animate (8–29), and the GENitive when inanimate (8–28).

8–29 Yesterday I saw him being bitten by a brown snake.

8.4.1.2 Functions of plain nominalizations

In general, these describe actions ongoing at the time of reference.

(a) Main clause use. Active nominalized clauses describe ongoing, uncompleted actions. See 5.2.3.13 for examples.

Passive nominalized main clauses describe states that the subject brings about himself through carelessness (8–28) or misdeeds (8–30).

(b) Second predicate on subject. Plain nominalizations in this function describe actions accompanying the main action:

I went along, covering myself in a blanket.
Second predicate plain nominalizations may, like manner nominals, be reduplicated with plural subjects (8-2).

(c) Object complements of perception verbs. These describe an action ongoing at the moment of perception by the main clause subject. Examples of this have already been given: 2-39 – 2-41, 8-1, 8-24 – 8-26. In all these examples the object complement nominalized clause follows the object.

(d) Restrictive relatives I have two possible examples of these: each could equally allow a ‘depictive’ (object complement) rather than a ‘restrictive’ interpretation. Both examples lack NP arguments, and precede the head – the typical position for a qualifier (4.4.2.1) – but with such a small sample one cannot know if this is obligatory.

8-32 nga-ku-l-da wirrka-n-ku dangka-wu kurri-ju
1-INC-PLU-NOM dance-N-MPROP man-MPROP see—FUT
We will watch the dancing men.

8-33 rarrwa-tha kali-n-ki nganjuna-y
roast—ACT jump—N-MLOC sandfrog—MLOC
We roasted the jumping sandfrogs. (OR: we roasted them still jumping?)

(e) Goal adjuncts. Nominalized verbs may be followed by (a) the Verbal Dative, giving the use to which the matrix subject will put the matrix object (8-34), or (b) the Verbal Translative, giving the temporal target of a purposeful action (8-35, also 3-119 and 8-6). In all my examples such adjuncts have no arguments of their own (although in 8-34 one could claim that the nominalized verb shares the object as well as the subject of the main verb.)

8-34 diya-n-maru-tha kurdala-tha kirrk—i manharr—u
eat—N-V.D-ACT stab—ACT face—MLOC bark.torch—PROP
By the light of a bark torch (Kajurku) stabbed their faces to eat (them).

8-35 mutha-a dangka-walad—a mardala—a-j, wirrka-n-marli—j
many—NOM man—LOT-NOM paint—DT—ACT dance—N-V.TRANSL-ACT
Many men are painting up in readiness for the dance.
8.4.2 Privative nominalized clauses

8.4.2.1 Permitted arguments: case assignment

Privative nominalizations permit all NP argument types and require no special case marking. They take the modal case that would appear in the corresponding finite affirmative clause: MLOC where the clause is ACTual (e.g. 6-226), MABL where the clause is PaST (e.g 5-27).

Other modal case values are not attested. The absence of examples with MPROP is not surprising, since future verbs have their own special negative form, rendering negation by PRIVative nominalization unnecessary. But the DESiderative (with MOBL) and INCEPTive (with MALL) lack special negative equivalents, so we would expect corresponding negative nominalizations. More data is needed here.

8.4.2.2 Functions of privative nominalizations

These describe a variety of types of non-occurring actions.

(a) Main clause function. Here they can assert that a certain proposition is not true of the subject – see 6.6.2. Or they can provide negative counterparts to verb inflections which only have an affirmative form (see examples in 7.1.3).

(b) Second predicate function. These name an action that fails to accompany, or result from, that of the main verb (cf 8-53). Non-subject NP arguments are either omitted (8-36) or, if objects, prefixed (8-38).

8-36   diya-ja wuran-ki kinaa-n-marri
         eat-ACT food-MLOC tell-N-PRIV
      (He) eats food without telling (anyone).

8-37   ngada kurri-i-n-marri kurri-ju niwan-ju
         I:NOM see-DT-N-PRIV see-FUT him-MPROP
      I will see him without being seen.

8-38   tharda-jilari-ya dangka-a, bala-tha wurdiyalaaj,
          shoulder-sore-NOM man-NOM shoot-ACT walk about-ACT
         dangka-birraki-i-n-marri
          person-feel.pity.for-DT-N-PRIV
      (McKenzie) was a 'sore-shouldered' man (from too much shooting),
      he would walk about shooting (at people), feeling pity for no-one.

(c) Object complements of perception verbs. These name an action perceived not to occur. In all my half-dozen examples the PRIVative clause lacks NP arguments (as with second predicate PRIVative nominalizations), even when the verb is transitive.
8.4.3 Resultative clauses

In general, these describe actions that have been completed, with significant effects on the patient (if transitive) or the intransitive subject.

8.4.3.1 Argument structure and case assignment

The most significant feature of case assignment in resultative clauses is its ergativity: objects of transitive verbs and subjects of intransitives take the nominative, while the (demoted) agents of transitive verbs take an oblique case or a possessive pronoun (see below). No other NP arguments are allowed.

8-41 budubudu balarr-ina dangka-na dana-thirri-n-d
boat(NOM) white-ABL person-ABL leave-RES-N-NOM
The boat was left behind by the white man.

8-42 bi-l-da yiiwi-jirri-n-d
3-PLU-NOM sleep-RES-N-NOM
They have gone to sleep.

Cross-linguistically, there is a strong correlation between ergative constructions and completive aspect, presumably because completion of the action implies that the patient is fully affected. Languages where ergative constructions are confined to the past or perfective include Georgian, Burushaski, Gujarati and various other north Indian languages, Kalkatungu and Pitta-Pitta (see Dixon 1979 & DeLancey 1981 for discussion and references). And note the ergative behaviour of English past participles, e.g. fallen (S), beaten (O).

Interestingly, K is the only Tangkic language for which this construction has been reported. It therefore seems to be a new development, post-dating the adoption of accusative morphology elsewhere in the grammar (see 5.2.3.14 for a discussion of possible cognates outside Tangkic). Given the presence of ergative constructions in Lardil (though in a different clause type - see McConvell 1981) one might be tempted to talk of ergative traits being 'retained' rather than newly developed. But since the association of 'ergative' type constructions with perfective or completive aspect is so common, there is no need to invoke the language's ergative ancestry (at least in K) - a natural semantic association is involved.
Turning now to the case choice for demoted agents, we find a hierarchy rather different from that in finite clauses (6.3.2.2). Pronominal (human) agents are represented by possessive pronouns (8-43), inflected where necessary for modal case (8-44):

8-43 jina-a wangalk, ngakin-da kala-thirri-n-d
where-NOM boomerang(NOM) l:INC:NSG:POSS-NOM cut-RES-N-NOM
Where is the boomerang cut by us?

8-44 ngijin-ju kala-thirri-n-ju yarbuth-u kurri-ju thaa-thu,
1sgPOSS-MPROP cut-RES-N-MPROP bird-MPROP see-FUT return-FUT
jirrkara-walathida dan-d
north-EVERY here-NOM
(l) will go and see all the birds killed by me, all to the north here.

Human non-pronominals take the ABLative (see also 8-41 and 8-54).

8-45 ngaaka-na dara-thirri-n-d? bad-a dangka-a dathin
who-ABL break-RES-N-NOM west-NOM man-NOM that(NOM)
Who was he circumcized by? That west man.

Non-human animates (8-46) and instruments brought directly into contact with the patient (8-48) take the CONSEQUENTIAL:

8-46 niya wirdi-ju rajurri-nangku ngarrku-wa-thu,
3sgNOM stay-FUT walk around—NEGFUT strong-INCH-FUT
ngamathuwala-nyarrba thubun-ngarrba raba-thirri-n-d
bullock—CONS hoof—CONS tread-RES-N-NOM
He will not go walkabout but will stay here and get well, because he was trodden on by a bullock's hoof.

More indirect causes, such as branches which poison fish when swished in the water (8-47) and roaring noises which deafen initiates (3-82) take the ORIGIN case:

8-47 maarra jirndi-wan-da dina-jirri-n-d
all branch-ORIG-NOM poison-RES-N-NOM
(They) had all been poisoned by the branches (swished about in the water).

8.4.3.2 Functions of resultative nominalizations

In general, these describe actions that have been completed, with significant effects on the patient - rendering it useless (8-49), affecting it in the way intended, e.g. successfully teaching someone (8-51), or transmitting the effect to
all members of a group (8-47, 8-48). With intransitive verbs the action is asserted to have been successfully carried out: getting to sleep in (6-247); bending down far enough to drink the water in (8-52).

(a) Main clauses These mark completed actions, with the additional semantic implications just outlined. The temporal reference is determined contextually - it may be present, as in 8-48 and 8-49, or past, as in 8-47 and 8-50. I have no future examples in main clauses and do not know if they are possible.

8-48 karwa-ngarrba bala-thirri-n-d club-CONS hit-RES-N-NOM (They) were all hit with the club. (My informant's translation was "hit 'em every one", even though no overt quantifier was present.)

8-49 dathin-a nayibi mura-thirri-n-d that-NOM knife(NOM) smash-RES-N-NOM That knife is all smashed up.

8-50 karndi-wuru marndi-jirri-n-da bana dun-kuru marndi-jirri-n-d wife-PROP rob-RES-N-NOM and husband-PROP rob-RES-N-NOM They were all robbed of their wives or robbed of their husbands.

(b) Second predicates on the subject. These describe a single action, performed on the nominalized clause O or by the S, which precedes the main clause and either enables it (8-51, 8-52) or causes it to occur (8-53, 8-54).

8-51 ngumban-da marraa-jirri-n-da yulii-j, mungurru-wa-th, 2sgPOSS-NOM show-RES-N-NOM try-ACT knowledgeable-INCH-ACT bijarrba-ya karrma-th dugong-MLOC wrestle-ACT Having been shown how to by you (they) tried, learned, and wrestled dugong.

8-52 burrma-thirri-n-da kurdama-j stoop-RES-N-NOM drink-ACT Having stooped down (he) drank.

---

7 The "total effect" semantics of ergative constructions is widespread. In Kabardian (Catford 1975) the sentence 'dog bites bone' will take an ergative construction just in case the bone is bitten through to the marrow; in other cases (e.g. if the dog is only gnawing on it) an accusative (antipassive) construction will be used. In Tongan (Foley 1976) some transitive verbs contrast an ergative construction, where all of a set of objects are affected, with a middle construction, where only some are affected.
Their school, not floating on the surface, having been blocked (by a grass dam), return, dirtying the water behind them.

That place (garden) is lovely, having been worked on by daddy.

In relative participles the 'affected object' meaning is less evident. In most, perhaps all, cases, paraphrases with passive consequential nominalizations are possible. In 8-55, for example, *wungi-irrinjina* can be replaced by *wungi-i-n-ngarrba-na* with no apparent change in meaning.

8.4.4 Consequential nominalizations

These basically describe actions preceding some reference point. Passive consequential nominalizations are similar in meaning to resultatives, but do not emphasize the effect on the patient.

8.4.4.1 Permitted arguments and case assignment

Unlike resultatives, consequential nominalizations have a normal argument structure. Both actives and passives are possible.

In actives object (8-56) and location/ambience (8-59) arguments are attested. In both the above, the CONSEQUENTIAL displaces the relational/modal LOCative which would appear in ACTual finite clauses.

(Morphy (1983:133), discussing a similar phenomenon in Djapu, claims that the lack of relational case suggests there is 'no evidence that the
syntactic relationship between the nominalized verbs and their NP arguments have been preserved. Rather, it appears that the NPs are raised out of the subordinate clause into the main clause, where they are apposed to the nominalized verb. Applying this interpretation to 8-56, a more accurate gloss would be 'his stomach is sore from eating, from the rotten food'.

This 'raising' analysis may well be appropriate for K, although the evidence so far is inconclusive. The loss of MLOC here parallels their omission from finite clause objects and locations before modal case (3.2.3); I have already argued (5.2.3.8) that the CONSEQUENTIAL could be treated as a marginal modal case. To decide this question we need to know what happens with other relational case suffixes that don't disappear before modal case, such as the ALLative or INSTRumental; so far examples are lacking.

In passives, only demoted agents are allowed. My corpus contains examples of pronominal human agents (8-57). ABLative non-pronominal human agents (3-35) and CONSEQUENTIAL human non-animates (8-58), which parallels the case choice found in resultatives: so far I have no examples of consequential nominalizations with 'indirect' agents (ORIGIN in resultatives). The one difference from resultative nominalizations is that pronominal agents in consequential nominalizations are prefixed (8-57, 8-67), while in resultatives they are free forms (8-43, 8-44).

8-57 yingka kurri-jarra wangalk-ina ngijin-kala-a-n-ngarrba-na?
you:NOM see-PST boomerang-MABL lsgPOSS-cut-DT-N-CONS-MABL
Have you seen the boomerang which was cut by me / which I cut?

8-58 yingka kamburi-ja dathin-a dangka-a yarbu-nyarrba
you:NOM speak-IMP that-NOM man-NOM snake-CONS
balangkali-ngarrba ba-yii-n-ngarrb!
brown snake-CONS bite-DT-N-CONS
You speak to that man who was bitten by a brown snake!

8.4.4.2 Functions of consequential nominalizations

These describe actions preceding the temporal reference point. Unlike resultative nominalizations, consequential nominalizations have a normal diathesis and do not stress object-affectedness.

(a) Main clauses. Consequential nominalizations are rare here. They describe a prior act carried out by the subject, with persisting effects: 'SUBJ has been Ving'. Note the passive in 8-60, which occurred in a discussion of the
meat's cooked flavour: the RESULTative would be appropriate where the meat had been cooked 'right through', or recooked several times.

8-59 niya ngildi-j, niya ngimi-ngarrba wurdialaa-n-ngarrba
3sgNOM cough-ACT 3sgNOM dark-CONS walk about-N-CONS
warra-n-ngarrba wirdi-n-ngarrba rika-ngarrb
go-N-CONS stay-N-CONS cold-N-CONS

He is coughing, he has been walking around in the dark, in the cold.

8-60 dathin-a wurdalji rarrwa-a-n-ngarrb
that-NOM meat(NOM) cook on coals-DT-N-CONS
That meat has been cooked on the coals.

(b) Second predicates on the subject. These name an action already carried out by the (nominalized clause) subject at the reference time. Usually a causal link between the events is implied (8-61, 8-62, 8-56), but it need not be (8-63): sometimes both causal and non-causal readings are possible (8-64). In one example a nominal predicator is prefixed to the nominalized form of wirdi-ja 'be' (8-65). (See also 8-69 for a passive example).

8-61 marndi-nju-n-ngarrba kawa-thu-tharr
rob-RECIP-N-CONS 'roast'-RECIP-PST
Having robbed each other, they would 'roast' each other. (See 8.2.7)

8-62 kinaa-n-ngarrba wirdi-ja kanthathu-warri
tell-N-CONS remain-ACT father-PRIV
Having told/because she told, (she) became fatherless. (Said of a young girl who revealed to her parents that she had been raped by her uncle - who then killed her parents to seal the secret.)

8-63 ngada kurri-n-ngarrba duujin-ngarrba wuu-ju wuran-ku niwan-ju
I:NOM see-N-CONS YBr-CONS give-FUT food-MPROP him-MPROP
When I see younger brother I'll give him the food.
(I, after seeing younger brother, will give him food).

8-64 banki-ya kuujuu-j, mardalk-i bula-a-j, kirmma-n-ngarrba
lagoon-LOC bathe-ACT mud-MLOC pull-DT-ACT lift-N-CONS
jirmma-jirmma-n-ngarrb
pile-REDUP-N-CONS
(Black Crane) swam about in the lagoon, cleaning the mud off himself, after working hard lifting and piling up (stones for the fishtrap) all day.

8. Fires are the Kaiadilt's refrigerators: cooked meat that has become flyblown will be recooked until the rotten part is charred.
(c) Restrictive relatives. These describe a past action that can be used to identify their heads. Both active (8-5, 8-66) and passive (8-67, 8-68) stems are possible. The only expressible NP arguments are the demoted agents of passives (8-57, 8-58, 8-67). As mentioned in 8.4.4, these are prefixed to the verb stem when pronominal. Other arguments are omitted.

8-66 wungi-n-ngarrba dangka-a bala-a-j
steal-N-CONS man-NOM shoot-DT-ACT
The man who had stolen (the cattle) was shot.

8-67 ngada mungurru dathin-ki dulk-i ngijin-marra-a-n-ngarrba-y
I:NOM know(NOM) that-MLOC place-MLOC lsgPOSS-go-DT-N-CONS-MLOC
I know that familiar place. (lit. that place gone to by me).

8.5 Nominalized clauses: overview

8.5.0.1 Case assignment in nominalized clauses: summary

All nominalized clauses but the PRIVative show a number of departures from the pattern of case marking found in normal finite clauses. In increasing order of distortion:

(a) Active plain nominalized clauses retain the finite case-marking pattern, including modal case, but add an additional 'Associating OBLique' to all VP arguments.

(b) Consequential nominalized clauses add an outer CONSequential suffix to VP arguments: objects and locations. at least, lose their expected relational/modal case. Without further data we cannot tell whether this represents the non-coding of subordinate grammatical relations. or the regular disappearance of LOCalive case suffixes before certain types of following suffix.

(c) Resultative clauses have an ergative pattern of case-marking, and a rich set of alternatives for agent marking, different from those found in finite passive clauses.
8.5.1 Strict pivot requirements

Except for resultative nominalizations, with their ergative argument structure, all non-finite clauses strictly equate pivot and subject. When nominalized clauses are subordinated, the subject/pivot is obligatorily omitted: the strict pivot requirements assure recoverability of the subject's identity.

If necessary, passivization is used to satisfy this condition. In (8-68), for example, the motivation of the passive is entirely syntactic: to place an object in pivot position. Unlike in finite clauses, where the passive serves no syntactic function, being purely semantic (coding 'adversative' conditions), the passive in consequential nominalizations is primarily syntactic, with no adversative implications. The most natural English translation involves an active clause with gapped object:

8-68 niwan-da duujin-da wungi-jarra kuji-j-na
 3sgPOSS-NOM YBro-NOM steal-PST spearhead-MABL
ngumban-mirrayala-a-n-ngarrba-na
2sgPOSS-make-DT-N-CONS-MABL

*His younger brother stole the spearhead you made (lit. made by you).*

The strict pivot requirements on non-finite clauses contrast markedly with the very liberal conditions on what grammatical functions the pivot of a FSC can hold. This is discussed in the next chapter.

8.5.2 Nominalized clauses or nominalized VPs?

The obligatory deletion of subjects from subordinate nominalized clauses suggests the possibility that such clauses could be generated directly as VPs. The crucial question here is: do any constituents appear that are not subjects, yet outside the VP as defined elsewhere in the grammar?

The answer is yes: manner second predicates on the subject (of the subordinate clause) (8-69), other second predicates on the subject such as ASSOCIative NPs (8-31), and subject-construed 'locus' body parts (8-70) can all appear in the nominalized clause:

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9 An interesting question, which I have yet to investigate, is: how many of the normal properties of 'subjects' in K (2.3.1) are possessed by the pivots of resultative clauses? For example, can they control the reflexive pronoun *marin-da* 'self'? Does their person value control the choice of complementizing case? And can they control manner nominals? If the answers to these questions are yes, then we have a strong case for calling these pivots 'subjects', despite their ergative argument structure.
(He) comes back (from the dead) after being sung, and embraces the man who has sung him properly (well).

I saw him going up (the hot sand) on his wet feet, in comfort.

This suggests the following constituent structure, in which the object complement is a full nominalized clause with subject omitted, rather than just a nominalized VP:

8.5.3 Comparative Note

All Tangkic languages have various types of lexical nominalization in -n-.

Agentive nominalizations are found in all four languages: instrument nominalizations in K and L. But besides K, the only Tangkic language to use nominalized verbs in clausal constructions is Yangkaal, which employs plain nominalizations as object complements (8-71) and consequential nominalizations as circumstantials (8-72):
8-71 ngada bijilkurri-ju niwan-ju kali-n-ku
I:NOM watch-FUT him-MPROP jump-N-MPROP
I will watch him jump.

8-72 kali-n-ngarrba niya balji-j
jump-N-CONS he:NOM fall-ACT
After jumping he fell.

These examples are from Hale's field notes. No examples of nominalizations with NP arguments occur, so we cannot know whether Yangkaal employed an 'associating' oblique like Kayardild.

The use of nominalized verbs in clausal constructions therefore appears to be a Kayardild-Yangkaal innovation. If this is correct, nominalizations have thus developed in the opposite direction to -Tharrba nominalizations, which evolved from clausal to lexical use (see 8.3.2.6).

8.6 Movement purpose complements

These give the purpose motivating the main clause action. The main clause action is semantically restricted: it must involve movement by the subject, as in "I have come to talk to you". This complement type is only attested with the main verbs warraja 'go', dalija 'come' and the verbal purposive case -janiija which implies 'go looking for'. Where the main clause does not imply movement (e.g. 'we built the dam so fish would get trapped in it'). FSCs in the future are used (9.3.9).

Motion purpose clauses contain a verb and optionally an object (8-7, 8-74): I do not know if other NP arguments are permitted. No overt subject appears, the complement being controlled by the main clause subject. The Allative inflection -iring-10 appears after the verb thematic and nominal stem, followed by the modal case appropriate to its main clause: ABLative with a PaST main clause (8-73), PROPrietive with main clause FUTURE (8-7, 8-74). and OBLique with main clause APPrehensive (8-75) or DESiderative (8-76):

8-73 ngada ngumban-jani-jarr kamburi-j.iring-kina
I:NOM you-VPURP-PST speak-TEHMAT.ALL-ALL-MABL
I came to talk to you.

10 The final /ng/ in verbal and nominal allative inflections is due to the restoration of the full form before a following suffix. See 3.2.
Tomorrow I will go to spear dugong.

Don't hit each other, the policeman might come looking for you to tie up.

He should come on and dance.

Two analyses of these constructions are possible:

(a) they are Directed clauses (which have verbs in -THir(i) and objects in the modal ALLative (−kiri(ng)−)) being used as complements, and receiving the modal case of their governing main clause. The putative allative segment in the verb inflection is there because the Directed inflection contains a historical allative segment (7.4). On this analysis the subordinate clause in 8-74, for example, should be glossed [dugong-MALL-MPROP spear-INCEP-MPROP].

(b) they are allative complements in which a complementizing allative case is inflected over some sort of unmarked main clause in which the verb takes a bare thematic and the NP is uninflected for relational case.

Both analyses account for the forms, and I see no overwhelming reason for preferring either one over the other, although there are weak reasons for preferring (a). This has the advantage of using an independently-needed clause type (the Directed), where (b) requires a new type ('unmarked'), and a new process (adding a complementizing case directly to an 'unmarked' clause) found nowhere else in the grammar. On the other hand, (a) provides no answer to the question of why only Directed clauses can be directly embedded, and does not show the semantic parallel, brought out by (b), between motion purpose clauses and ordinary allative NPs.

Analysis (a) has the interesting consequence that it permits sequences of two modal cases to occur: the subordinate modal case (here, the ALLative), and the matrix modal case. As argued in 2.4.9, a mechanism for distributing case across constituents is independently needed. This mechanism could handle such double occurrences of modal case, and order them correctly.
CHAPTER 9
FINITE SUBORDINATE CLAUSES

9.1 Introduction

In this chapter we turn to a type of subordinate clause which closely resembles normal finite clauses, permitting almost the full range of verb inflections. Subordination is signalled by intonation, tense sequence, and commonly a Complementizing OBLique or LOCative case appearing after all other inflections, usually on all constituents. This clause type shares many properties of the 'adjoined relative clause' described by Hale (1976): positioning (usually) before or after, rather than within, the matrix clause; distinctive intonation, and the possibility of a number of semantic interpretations (restrictive relative, purpose, cause, etc.) which are not distinguished formally but determined by context and tense sequence. However, embedding can sometimes occur, and I will therefore use the term 'Finite Subordinate Clause' (FSC) instead of the more specific 'adjoined'.

Syntactically, FSCs have several possibilities: (a) they may supply clausal arguments of matrix predicates (e.g. 'I saw that [Clause]'); (b) they may function as adnominal modifiers of matrix NPs (e.g. 'Here is the man who [Clause]'); (c) they may function as temporal, causal, contrast or purpose adjuncts of the main clause, e.g. 'we will dance [as soon as the sun sets]'.

9-1 - 9-3 illustrate two functions of finite subordinate clauses: past and future restrictive relatives (9-1, 9-2), and purpose clauses (9-3). (The full range of FSC functions will be discussed in 9.3.) In these examples the pivot is subject of both clauses. As in ordinary discourse, where there is zero anaphora of established participants (2.2.2) the subject is usually omitted from the FSC (9-1, 9-3); less commonly, it may simply be pronominalized (9-2):
9-1 jina-a dathin-a dangka-a, dan-kina yii-jarrma-tharra
where-NOM that-NOM man-NOM here-MABL put-CAUS-PST
wangal-kina
boomerang-MABL
Where is the man who left the boomerang here?

9-2 jina-a dathin-a dangka-a, niya balmbi-wu wangalk-u
where-NOM that-NOM man-NOM he:NOM morrow-MPROP boomerang-MPROP
kala-thu
cut-FUT
Where is the man, who will cut a boomerang tomorrow?

9-3 ki-l-da karna-ja minal-i, karn-marri-wu rajurri-ju
they-PLU-NOM burn-ACT scrub-MLOC grass-PRIV-MPROP walk-FUT
They are burning off the scrub, so (they) can walk about unimpeded by grass.

9.1.1 Non-subject pivots and complementizing case

The above examples resemble non-finite clause types in equating subject and pivot. They are also morphologically identical to finite main clauses.

One of the peculiarities of FSCs, however, is their tolerance of non-subject pivots. In 9-4, for example, the pivot is object of the subordinate clause, and in 9-5 it is object of both clauses. Both these conditions trigger what I shall call 'odd pivot marking', in the form of complementizing case on every word of the subordinate clause. Pronominal subjects of clauses complementized with the OBLique have special portmanteau forms, e.g. ngijuwa '1sgSUBJ:COBL' in (9-4) below (see 4.1 for the full set). As with the sentences discussed above, the pivot NP is typically omitted from the subordinate clause. This is not obligatory, however, and the pivot may be retained as a pronominal with normal case-marking at all levels (e.g. niwanjinaantha in 9-5). Once again, this follows the pattern of ordinary discourse, rather than being an obligatory rule like the equi-omission found in NFSCs (8).

9-4 dan-da bang-a-a,
this-NOM turtle-NOM
[kakuju-ntha / ngijuwa raa-jarra-ntha walbu-nguni-nj]COBL
uncle-COBL 1sgSUBJ:COBL spear-PST-COBL raft-INSTR-COBL
This is the turtle (which) uncle / I speared from the raft.
9-5  nyíngka kurri-jarra  dathin-kina  dangka-na,
  you: NOM see-PST  that-MABL  man-MABL

[thawurr-inaa-ntha  raa-jarra-ntha  niwan-jinaa-nth]COBL
throat-MABL-COBL  spear-PST-COBL  him-MABL-COBL

Did you see the man, whom (he) speared in the chest?

[Note that the spearer, an established participant, is here
anaphorically deleted from the subordinate clause.]

Object pivots in subordinate clauses are not the only condition requiring
complementizing case. Any complex sentence where the pivot is not subject of
both clauses, e.g. Object-Instrument (for brevity I will first give the pivot's main
clause function, then its subordinate clause function) or Object-Subject, or where
there is no common argument, will trigger complementizing case. These
conditions, which I will call 'odd-pivot conditions', will be examined in detail in
9.2, where I will also discuss the similarities and differences between this system
and the better-known phenomenon of 'switch-reference'.

9.1.2 Clausal argument condition on complementizing case

Another function of 'complementizing case' is to mark clausal arguments of
matrix predicators:

9-6  ngada mummurdawa-th, [ngijin-inja thabuju-ntha thaa-thuu-nth]COBL
  I:NOM be glad-ACT  my-COBL  brother-COBL return-FUT-COBL

I am glad that my brother is coming back.

It might be argued that the complementizing case in 9-6 follows from the odd-pivot
condition, since the subordinate and matrix clauses lack a common argument.
However, clausal arguments require complementizing case, even under
same-subject conditions:

9-7  ngada mungurru / mummurdawa-th,
  I:NOM know(NOM)  rejoice-ACT
 [(ngijuwa)  kada-ntha thaa-thuu-nth]COBL
  lsgSUB:COBL  again-COBL  return-FUT-COBL

I know/am glad that I will come back (here) again.

The nominal predicator mungurru takes complementized clausal
arguments when it has the meaning 'know that'. When it means 'know how
to' the verb it occurs with does not take complementizing case; the most
appropriate parsing treats it as a second predicate: 'SUBJ, knowingly,
Ves' (cf 4-97).
9-8  ngada marin-marri-i-jarr, [dathin-kurrka thungal-urrka
I:NOM self-hear-DT-PST that-LOC:COBL thing-LOC:COBL
kamburi-jurrk],COBL
speak-IMMED:COBL

I heard myself speaking on that thing (the radio).

The presence of complementizing case here, then, cannot be derived from
the 'odd-pivot conditions'. Rather, a distinct condition, which I will call the
'clausal argument condition', is required1.

9.1.3 Main clause functions of complementized clauses

Complementized FSCs may be used as main clauses with two main functions.

One corresponds to the 'clausal argument' condition in complex clauses, but
with the matrix perception, epistemic or command predicate ellipsed. An example
is 9-9: the ellipsed matrix predicator is given in brackets in the English
translation. This 'ellipsed matrix' use of complementized clauses is discussed in
9.4.

here-LOC:COBL east-from-LOC:COBL come-IMMED:COBL boat-COBL

(I can hear) the boat coming here from the east.

Their other function represents an extension of the 'odd pivot' condition into
discourse: complementized clauses may be used, for example, where the topic is
not subject but object. Objects topicalized in this way take the nominative (9-10)
or are omitted altogether (9-11, B1 & B2):

9-10 [yakuri-ya ngalawa diya-jarra-nth]COBL, [bijarrba
fish-NOM lplusSUB:COBL eat-PST-COBL dugong(NOM)
ngalawa diya-jarra-nth]COBL
lplusSUB:COBL eat-PST-COBL

(Speaking of food) we ate fish, we ate dugong.

1Wilkins (to appear), discussing the Mparntwe Arrernte switch-reference system, notes that 'for all
perception verbs, including self-perception verbs, a perceived event will be marked with -rlienge' (the
different subject marker).
Look at that snake on the stone!

Where, I can't see (it).

Here, near the tree.

Now I see (it).

The use of insubordinated clauses in discourse is discussed in 9.5.

9.1.4 Subordinate subject and choice of complementizing case

All examples so far have had first or third person subjects in the subordinate clause: this selects the OBLique complementizing case. With inclusive subjects, by contrast, the complementizing LOCative must be used:

Where is the dugong, which you and me speared?

With second person subjects either case may be used (e.g. 9-13): the choice depends on subtle factors of solidarity to be discussed in 9.1.4.2.

Where is the dugong, which you killed?

The conditions on choice of complementizing case are summarized in 9-1.

COMPLEMENTIZING CASE

Person

'inclusive' LOCative
(1 + 2)

2nd person LOCative/OBLique

1st, 3rd person OBLique

Figure 9-1: Person of subject and choice of complementizing case

The existence of this choice means that, in addition to signalling 'odd pivot'
combinations, complementzizing case roughly characterizes the person of the subordinate clause: LOCative excludes first and third person subjects, and OBLique rules out inclusive subjects. Perhaps because of this, subjects are omitted relatively more often in complementized clauses (see, for example, (9-31)).

The possible origin of this choice is discussed in 9.6.

9.1.4.1 Failure of CLOC to appear on pronominal subjects

As (9-13) illustrates, the pronominal subjects of clauses complementized with the LOCative complementizing case. But non-pronominals apposed to (9-14) or substituted for (9-15) these subjects do receive a complementizing LOCative inflection, showing this to be a specific lexical block against CLOC appearing on pronominal subjects.

9-14 jina-a bijarrb, [nga-ku-l-da bakiin-ki kurulu-tharra-y]\textsubscript{CLOC}
where-NOM dugong(NOM) l-INCL-PLU-NOM all-CLOC kill-PST-CLOC
Where is the dugong, which we all killed?

9-15 kanthathu kamburi-ja dana-th: karrngi-ja dan-da dulk-a
father(NOM) say-ACT die-ACT look after-IMP this-NOM country-NOM
ngumban-d, [duujin-ji wakatha-ya jardi-ya karrngi-juru-ya
your-NOM YBr-CLOC sister-CLOC mob-CLOC look after-FUT-CLOC
dan-da dulk]\textsubscript{CLOC}
this-NOM country(NOM)
(My) father said when he died: look after this country of yours, (you) and all your younger brothers and your sisters must look after this country.

9.1.4.2 Exploiting the LOCative/OBLique choice

With all but second person subjects the choice between COBL and CLOC is determined entirely by the person and number of the subject: both have identical functions. But with second person subjects a choice exists, and is semantically significant. CLOC, with its first inclusive affinities, is used when the speaker wants to group him/herself with the addressee, while COBL is used when no such grouping is sought.

An example is:

9-16 [jinamulu mani nyingka kurrka-tharra-ya rawalan-maan-d]\textsubscript{CLOC}
how much money(NOM) you:NOM take-PST-CLOC baler shell-ORIG-NOM
How much money did you get from (selling) the baler shells?

This was said by a woman who believed she had a right to the proceeds of the
sale: by using the inclusive-oriented CLOC she implies: ‘how much money did you get from selling our baler shells?’.

The OBLique, on the other hand, is used when no such solidarity is implied, or when a contrast is drawn between the activities of speaker and addressee, as in:

9-17 ngada diya-ju wuran-ku, [ngumbaa dan-kuu-ntha
I:NOM eat-PUT food-MPROP 2sgSUB:COBL here-MPROP-COBL
barnkaldi-juu-nth]COBL
sit.cross.legged-PUT-COBL
I’ll eat some food, while you sit here.

9.1.5 Productivity of complementizing case

Every finite clause type, affirmative and negative, may appear complementized, except for the ACTual and the IMPerative. Non-finite clause types are also susceptible: plain (9-18) and privative (9-101) nominalizations, and resultative clauses (9-19).

9-18 [niwa kantharrk-inja rajurri-n-inj]COBL
3sgSUB:COBL unaided-COBL walk around-N-COBL
(I say:) let him (that toddler) walk around by himself.

9-19 [dathin-inja kunawun-inja rik-urrk, rila-thirri-n-inj]COBL
that-COBL child-COBL cry-LOC:COBL wake—RES—N-COBL
(I hear) that child crying now, who’s just been woken up.

Complementizing case is thus almost fully productive. This does not mean, however, that the conditions on its use are uniform for all constructions. As we shall see in 9.2.6, complementizing case obeys rather different conditions in jussives, ‘when’ clauses, and apprehensives.

9.1.5.1 Complementized IMMEDIATE clauses

IMMEDIATE main clauses have verb inflection -THi / -nangki, analysable into verb thematic plus LOCative (5.2.2), and select the modal LOCative (7.1.1). When complementized with the OBLique, both modal locative NPs and the verb final use the LOC:OBL portmanteau (-kurrika):

9-20 ngada kurri-j, [niwa natha-wurrka dana-th.urrk]COBL
I:NOM see—ACT he:NOM camp—LOC:COBL leave—IMMED(VERB.MPROP,LOC):COBL
I saw him leaving the camp.

When IMMEDIATE clauses have inclusive subjects, which would select the
complementizing LOCative, a potential violation of the ban on iterated LOCative suffixes (3.2.3) arises. In constructions of this type, the underlying (M)LOC-CLOC sequences are represented by a single LOCative inflection. Because of the additional lexical block against CLOC appearing on pronominal subjects (9.1.4.1) this leaves such clauses formally indistinguishable from uncomplementized IMMEDIATE clauses:

9-21 yiwi-ja bi-l-d, [nga-ku-rr-a kabathaa-th.iya yakuri-y]CLOC
sleep-ACT 3-PLU-NOM 1-INC-DU-NOM hunt-IMMED(THEMAT.LOC) fish-MLOC
They are sleeping, as we hunt for fish.

In principle, LOCative-complementized clauses are still potentially distinguishable: CLOC should appear on (a) non-pronominals apposed to the subject (cf 9-14, 9-15) and (b) other NPs escaping modal case. But so far I have no examples of this.

Note that two features of IMMEDIATE verb inflections here - their alternation with the (kurrka) LOC:OBL portmanteau, and their conformity to the regular ban on LOC-LOC sequences - favour a synchronic analysis into thematic plus LOCative (5.2.2), and hence a treatment of the whole clause type as having a LOCative distributed over the whole VP (7.1.1).

9.1.5.2 Appearance in complementized clauses of an overt LOCative on locational qualifiers and the reflexive pronoun marin-da

A further interesting feature of ACTual, IMMEDIATE and nominal clause types bearing a complementizing OBLique is the behaviour of locational adjuncts and the reflexive pronoun marin-da. In the corresponding uncomplementized clauses, these fail to take the expected LOCative case, presumably because the locationals have an inherent (relational) locative (cf 4.2), and the reflexive pronoun, confined to object function, has an inherent modal LOCative (cf 6.3.3). The expected LOCative reappears, however, in OBLique-complementized clauses, in the guise of the LOC:OBL portmanteau (-kurrka):

9-22 dathin-a kunawuna dathin-kina dangka-na, [warra-wurrka that-NOM child(NOM) that-ABL man-ABL far-LOC:COBL jirrkara-wurrka niwan-inja kanthathu-nth]COBL north-LOC:COBL his-COBL father-COBL
This is the child of that man, who is sitting over there in the north.
(Lit.: ‘.. who his father is sitting over there in the north’.)
I: NOM see-ACT him-MLOC paint-DT-IMMED:COBL self-MLOC:COBL
I saw him painting himself up.

I have no data yet on the equivalent LOCative-complementized constructions.

9.1.6 Exceptions to concord over the whole clause

In general, complementizing case applies to all words of the clause. But there are five exceptions:

(i) As shown in 9.1.4, pronominal subjects are not marked for CLOC; since non-pronominals apposed to them are marked, we must assume this is a lexical block.

(ii) Particles and conjunctions escape complementizing case, e.g. the Counterfactual particle maraka in (9-69).

(iii) Nominals already taking an OBLique suffix escape a further complementizing case inflection: this reflects the general morphological ban on other suffixes following the OBLique. Hortative verb inflections, which contain an OBLique suffix, also escape further complementizing case. Since hortatives take the modal OBLique, the only place a complementizing OBLique appears in such clauses is on the subject (9-25) and, theoretically, on other NPs escaping modal case (not yet attested).

(iv) The DESiderative verbal inflection -da. (This may be related to its rather aberrant status as the only finite verbal inflection not analysable as thematic plus an old case inflection.) Since objects of desiderative clauses take a modal OBLique, and hence escape complementizing case by (iii), this means that desideratives, along with hortatives, are the least clearly marked of complementized FSCs. Nonetheless, complementizing case still appears on subjects and arguments escaping modal case, such as the PROPrietive theme in (9-26):
(v) Object topics of insubordinated complementized clauses escape both modal and complementizing case, taking the nominative. See 9-10.

This contrasts with the normal case-marking found on non-subject pivots, on the rare occasions when they appear in the subordinate clause (e.g. 9-5, 9-22).

In spite of (i) - (v), the complementizing case system has enough redundancy that the failure of inflections to appear on one argument is covered by their appearance on others. In desiderative clauses with object topics, for example, complementizing case may be absent from the object and verb, but will appear on the subject pronoun.

9.1.7 Embedding

So far all example clauses have been adjoined. But it is also possible to embed the complementized clause: this is most common with purpose and jussive clauses, but also occurs in 'parenthetical constructions' (9.3.5).

Note that my use of the term 'embedding' refers solely to word order - the subordinate clause is positioned within the main clause. I do not wish to imply that such clauses have NP status, which is characteristic of NFSCs but not FSCs.

9-27 

They built corners on the two fishtraps, so the fish would sit down (be trapped) in them / that the fish would sit down in.

9-28 

Cut out a wooden spearhead, so we children can watch you.

---

2 The only situation where all words would escape would be object-topicalized desiderative clauses taking the complementizing LOCative (which wouldn't appear on the subject either). I have no examples of this.
Hale (1976) claims that embedded clauses in those Australian languages that have them (e.g. Kaytej) arise through 'attraction' of adjoined clauses to post-head position. Klokeid (1976) repeats this argument for Lardil. In K, adjoined clauses are certainly less marked and more common than embedded ones, supporting Hale's argument.

The development of embedding as a possibility in K may have been facilitated by the fact that high-level case concord clearly identifies each word of the subordinate clause. In (9-27) and (9-28), for example, every word of the FSC is distinctively marked with complementizing case, and can readily be identified as part of the embedded clause; words lacking complementizing case can likewise be assigned to the matrix. Even clauses lacking complementizing case can be embedded without ambiguity, provided their tense/mood differs from the matrix, since modal case identifies their nominal arguments. Thus in (9-29), for example, the modal proprietary on dulk- 'country' marks it as an argument of the future verb kurriju:

9-29 ngada warra-jarra [kurri-ju dulk-u ] rukuthi-na 
I: NOM go-PST see-FUT country-MPROP (place name)-MABL
I went to Rukuthi to see the country.

9.2 Odd pivot conditions and complementizing case

In this section I discuss and exemplify in detail one set of conditions requiring complementizing case – the 'odd-pivot' conditions – and compare them with those governing the better-known phenomenon of switch-reference. (The other type of condition requiring complementizing case is the clausal argument condition, discussed in 9.1.2.)

There are three types of odd-pivot condition. All are marked identically: the subordinate clause is complementized by COBL or CLOC as the person of the subject dictates.

(a) the pivot is a subordinate non-subject: objects, possessor NPs, and instruments are attested.

(b) the pivot is a matrix non-subject. Only objects and possessors are attested.

(c) no argument is common to the two clauses.

(a) and (b) can apply together, as when the pivot is object of both clauses; (c) is incompatible with (a) or (b).

I will now exemplify these conditions. The question of whether they can be reduced to a single generalization will be left for the end of this section.
9.2.1 Pivot is a subordinate non-subject

Examples of pivots which are matrix subjects but subordinate objects have already been given (e.g. 9-4). Pivots may also be object of both clauses:

9-30 ngada nguku-na dali-jarra-tharr, [bilarri-jarra-nth] Cobl
I:NOM water-MABL come-CAUS-PST spill-PST-Cobl
I brought some water, but (someone) spilled (it).

The pivot may be an instrument in the subordinate clause; so far this is only attested with object antecedents:

9-31 kiyarrng-ka walbu-wa nga-ku-l-da kurrka-th, [dathin-kuru-ya
two-NOM raft-NOM 1-INC-PLU-NOM get-IMP that-MPROP-CLOC
bijarrba-wuru-ya raa-juru-y] LOC
dugong-MPROP-CLOC spear-FUT-CLOC
Let us get our rafts, from which to spear that dugong.

(Cf (9-4), where 'raft' appears as an overt non-pivot instrument.)

9-32 nga-ku-l-da kurrka-tha bakii-ja ngurrumanji, wumburung-k,
1-INC-PLU-NOM get-IMP altogether-IMP bag(NOM) spear-NOM
[raa-juru-y yalawu-juru-y yakuri-wuru-y] LOC
spear-FUT-CLOC net-MPROP-CLOC fish-MPROP-CLOC
Let us get all our bags and spears, to spear and net fish with.

Note that in both these examples two arguments are shared: 'we', which is subject of both clauses, and 'rafts' (9-31) and 'bags and spears' (9-32), which are both matrix object and subordinate instrument. But the object/instrument is the pivot, and triggers complementizing case. (Were K a switch-reference language, on the other hand, we would expect 'same subject' marking here).

Where the pivot is a subordinate location, -THrrba PRECONDition clauses are used:

9-33 dan-da dulk, ngijin-da thabuju barji-jarrb
this-NOM place(NOM) my-NOM older brother(NOM) be born-PRECON
This is the place where my brother was born.

These do not take complementizing case, and are thus an exception to the OP condition.

So far I have not obtained examples with the pivot in other subordinate relations.
9.2.2 Pivot is a matrix non-subject

My corpus contains many instances of Object-Object combinations: and several of Object-Instrument. Examples were given in (9-30) to (9-32). These all trigger complementizing case, but it is not clear whether this is due to the pivot's matrix or its subordinate relation, or both.

To demonstrate unambiguously that matrix non-subject pivots trigger complementizing case, examples are needed where the pivot is subject of the subordinate but not of the main clause. Two types of construction illustrate this.

(a) the pivot is a possessor NP in the matrix (9-34, 9-22).

9-34 dan-da budubudu dathin-kina dangka-na, [niwa this-NOM boat(NOM) that-ABL man-ABL 3sgSUBJ:COBL barruntha-wurrka dali-jurrk] yesterday-LOC:COBL come-IMMED:COBL
This is the boat of the man, who came here yesterday.

(b) ‘subject raised to object’ versions of perception clauses, where the pivot is a matrix object and a subordinate subject. Alongside constructions in which the perceived event is an argument of the perception verb (9-20) are those where the perceived actor is ‘raised’ to main clause object: these require complementizing case (9-35):

I saw him leaving the camp.

Object - subject combinations are also found in concessive clauses, where they trigger complementizing case as expected (9-85). When they occur in jussives, complementizing case is optional (9.2.6.1).

9.2.3 No argument is common

This includes ‘while/whereas’ clauses like (9-36), which contrast two activities occurring at roughly the same time, and ‘immediate’ clauses like (9-37), which express close temporal succession:

They slept, while we were hunting for turtle.
As soon as the sun sets, we will have a big dance.

So strong is the association between contrasting participant sets and complementized clauses that all pronouns may be ellipsed. The complementizing case signals the contrast in participants and to an extent their person, while their exact identity is left to context:

(You) wait here while (we/they) go for panja!

[According to context the subordinate subject could be interpreted as first or third person.]

9.2.4 Syntactic conditions: possible generalizations

As we have seen, complementizing case is not required when the pivot is subject of both clauses. It is required in all other cases, namely (a) when the pivot is a subordinate non-subject, (b) when the pivot is a matrix non-subject and (c) when the two clauses lack a common argument.

Can these various conditions be captured in a single generalization? A first approximation would be to require 'complementizing case' whenever the two clauses have different subjects.

This would be consistent with (a) to (c) above. But it fails to account for sentences like (9-31) and (9-32) where matrix and subordinate clauses have a common subject but still take complementing case, because they also have a non-subject argument in common, and this non-subject argument is the pivot. Complementizing case here is not triggered by comparing the identity of successive subjects, but rather by the non-identity of subject and pivot. A related and more important drawback of the 'different subject' analysis is that although it mostly predicts correctly the appearance of complementizing case, it misses the central functional principle, which operates not by tracking subjects, but tracking pivots and indicating whether they coincide with subjects. This could be formulated as follows:
9-39 In finite subordinate clauses complementizing case will apply whenever the pivot is not subject of both matrix and subordinate clauses.

In K, the various OP conditions are not formally distinguished. Lardil, on the other hand has developed ways of distinguishing the four conditions Sub-Sub, Sub-Obj, Obj-Subj and Obj-Obj. See Appendix E.

Note that the 'derived subjects' of passives count as subjects for the purposes of 9-39. See, for example, 9-77.

9.2.5 Comparison between odd-pivot and switch-reference marking.

It may be useful at this stage to compare Odd Pivot marking (OP) in some detail with the related phenomenon of 'switch-reference' (SR) marking, which signals the identity or otherwise of successive clausal subjects. In characterizing SR I am drawing on articles by Jacobsen (1967), Austin (1981c) and Haiman and Munro (1983); although not all scholars would agree on the exact characteristics of SR. I believe those given below would be accepted by most as typical, particularly in Australian languages.

(a) Both are reference tracking devices. But where SR tracks arguments in the same grammatical function, usually subjects, and evaluates their identity or otherwise, OP tracks referentially identical arguments and evaluates their grammatical function: are they subject of both clauses?

(b) Both appear to code information about referential identity/non-identity elsewere than on the relevant nominal arguments themselves. The fact that SR systems typically employ verbal suffixes (Diyari, Arrernte), particles (Pima – Langdon and Munro 1979) or conjunctions (Yankunytjatjara), while OP marking is realized by case marking over a whole clause, is of no particular significance.

3Thus Haiman and Munro (1981:xi) write: 'characterization of the notion 'subject' (in SR - N.E.) is strictly syntactic, rather than semantic or pragmatic in most cases: it is not the agent or the topic whose identity is being traced'. Similarly Austin (1981c:329) : 'the same controlling category of "syntactic subject" (the conflation of S and A) is found in every language ' (i.e. every Australian language with SR). Foley and Van Valin (1984: Ch.7) accept this as the norm, but cite exceptions involving semantic and 'pragmatic' (i.e. discourse) triggers: in Eastern Pomo 'the switch reference system seems to monitor directly the notions of actor and undergoer', and in the Papuan language Barai pivots are 'pragmatic', depending on relative animacy, definiteness and 'verbal orientation' ('object oriented verbs' are those like 'sicken' with an impersonal, non-topic subject and a topical object). Another example of a SR system where topicality may override syntactic subjecthood as the controlling factor is given in Goddard's grammar of Yankunytjatjara (1983:269): the 'contrastive connective' kaa may signal referentially different subjects, but may also 'divide a stretch of discourse into contrasting sections, not in terms of a contrast or switch in subject or actor, but in terms of topic'.
Verbal suffixes, particles and conjunctions are all classic means of coding functions with clausal scope, and case-marking over a whole clause is another such means, uncommon cross-linguistically but consistent with the rigorous concord found at all levels of K syntax. The formal similarity between OP marking and SR becomes all the more obvious when one considers that in most Australian languages SR verbal suffixes incorporate case inflections, at least diachronically (Austin 1981c).

Although it is often asserted that SR is ‘weird’ because ‘it seems to violate very general iconic tendencies whereby categories which define properties of nouns are expressed by nominal affixes’ (Haiman 1983). I believe it is misleading to see either SR or OP as categories limited to particular nominal arguments.

For one thing, the information provided by SR usually extends beyond the identity of one argument. As Heath (1983) points out, by knowing that clauses have identical subjects we also know that the subordinate object, for example, is different from the main clause subject. As we saw above, SR and OP rules give similar results for most argument combinations: this is a consequence of the multiple information SR and OP marking both provide.

More importantly, I believe that SR and OP should be seen as providing information about clauses rather than nominal arguments. In a number of languages the SR mechanism doubles to code contrasts of a more general kind between the two clauses. In Yankunytjatjara, for instance, the ‘Contrastive Connective’ kaa is used for switch reference but also ‘where one proposition is being contrasted with another, or when in a narrative, a surprising or exceptional development occurs’ (Goddard 1983:296). One of the ‘obviative’ or SR suffixes in Warlpiri subordinate clauses, rlajinta, ‘is used to show SUBJECT control, but with the further implication that the action described in the matrix happened ‘as an accidental consequence of the action described in the controlled clause’ (Simpson and Bresnan 1983:57). In Kayardild, too, the appearance of OP marking

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4SR systems can be regarded as minimal ‘obviation’ systems, where obviation refers to the exclusion of possible antecedents or controllers for arguments (Simpson & Bresnan 1983) and, conversely, to the specification of others. SR systems can only exclude the matrix subject as antecedent; more complex obviation systems such as that found in Warlpiri have one form for subject antecedents, another for object antecedents, and another for oblique antecedents.
occasionally seems to reflect a more general type of contrast - see 9.2.6.35.

The semantic similarity between these two uses of SR morphology, and the fact that both refer to whole clauses, may be shown by the following approximate paraphrases. The 'surprise/contrast' meaning could be expressed as '(in this clause) something happened that one would not expect, knowing what I've been talking about just now'. And the 'different subject' meaning as: '(in this clause) I say something about someone that one would not expect, knowing what I've been talking about just now.' This second meaning, framed with SR in mind, is also suitable for OP marking.

On the analysis proposed here, then, the fact that both SR and OP systems employ syntactic means having clausal scope is iconic, as SR and OP provide information primarily about clauses and only secondarily about particular arguments. By marking all words of the affected clause, K expresses this iconicity in full.

9.2.6 Three problematic clause types

The syntactic conditions above hold for the vast majority of FSCs. But there are three construction types where they are not fully applicable: jussives, precondition clauses, and apprehensives.

9.2.6.1 Jussive clauses

I will use the term 'jussive' rather loosely to include any subordinate clause dependent on a matrix verb of communication, where the communication is intended to bring about the state of affairs described by the subordinate clause. Typical matrix verbs are kamburija 'speak, tell', waratha 'send (word)', wamatha 'shout', and miburiya duuratha (literally 'eye poke') 'warn'.

Jussive subordinate clauses take the future (9-40 - 9-42), or desiderative (9-43, 9-45). The desiderative suggests a more oblique or polite command; and is also appropriate when the communication is via a third person, as in (9-45).

Jussives allow both 'unraised' versions (with the commandee in the

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5 A further example comes from Longacre (1983). Discussing examples from the South American languages Guanano and Turebo, he remarks that 'it is assumed that we can normally expect that actions in succession are performed by the same person, while actions that overlap are performed by different people.' Thus in Turebo there is one suffix for temporal succession and same subject referent, and another for 'overlapping' action and different subject referent.
subordinate clause) and 'raised' versions (with the commandee in the main clause). In the clause types outlined so far, both raised and unraised structures require complementizing case, through the OP and clausal argument conditions respectively (9.2.2) in jussives, however, complementizing case is optional for both types:

9-40 (a) niya kamburi-j, ngada barrki-ju ngij-u
   he:NOM say-ACT I:NOM chop-FUT wood-MPROP

(b) " " ", [ngijuwa barrki-juu-ntha ngij-uu-nth]_{OBL}
   lsgSUB:COBL chop-FUT-COBL wood-FUT-COBL

He said for me to chop the wood.

9-41 (a) ngada niwan-ju kamarri-ju, kinaa-ju ngunguk-u
   I:NOM him-MPROP ask-FUT tell-FUT story-MPROP

(b) " " " ", [kinaa-juu-ntha ngunguk-uu-nth]_{OBL}
   tell-FUT-COBL story-FUT-COBL

I will ask him to tell the story.

9-42 (a) ngada mibur-iya duura-tha niwan-ji, dan-ku dali-nangku
   I:NOM eye-MLOC poke-ACT him-MLOC here-MPROP come-NEG-FUT

(b) " " " ", [dan-kuu-ntha dali-nangkuu-nth]_{OBL}
   here-MPROP-COBL come—NEGFUT—COBL

I warned him not to come here.

With desiderative and hortative clauses it is not always possible to decide whether the clause is complementized, due to the morphosyntactic peculiarities outlined in 9.1.6. In (9-43), for example, the OBLique on 'bag' could be modal or complementizing, and in 9-44 the lack of COBL after the hortative verb inflection could reflect a real lack of complementizing case, or could simply be due to the morphological ban on other suffixes following the OBLique (see 9.1.6), which is a component of the hortative verb inflection. (9-45) is my only unambiguous example; in it the subordinate subject thungaluruuru escapes complementizing case, so we know the jussive clause is not complementized.

9-43 dathin-a maku wara-th, [buru-da ngurrumanji-nj]?
   that-NOM woman(NOM) send-ACT take-DES bag-OBL

That woman sent (word) to bring the bags.

9-44 kamburi-ja dathin-a dangka-a, warra-nanginj
   speak-IMP that-NOM man-NOM go-NEG(HORT.NEGTHEMAT.OBL)

Tell that man not to go.

6 It is possible that some matrix verbs require raising (e.g. miburiya duurattha 'warn' while others proscribe it (e.g. kamburi 'say'); this is the case for English. As yet my evidence on this is sketchy.
There are clear semantic reasons why jussives of the raised variety should be deviant: the unmarked argument structure is for the pivot to be matrix object (of the communication verb) and subordinate subject (performing the action they have been asked to do). The optionality of complementizing case here can thus be explained by postulating two competing interpretations of the 'odd pivot' principle – a 'mechanical' one, obeying the conditions given in (9.2) regardless of the construction type, and a 'semantic' one for which the sequence Object-subject is semantically unmarked, and therefore does not trigger OP marking.

It is less clear why 'clausal argument' jussives should be deviant. One possibility is that sentences like (9-40) should not be treated as complex at all, but as a sequence of two main clauses, the second of which codes direct speech (though with the person values adjusted): 'he said: I should cut wood'.

9.2.6.2 -THarrba 'precondition' clauses

This clause type supplies real or hypothetical preconditions for the main clause action (see 5.2.3.8). The time it specifies can never be absolute but is always relative to that of the matrix clause; accordingly it is never used independently.

Usually -THarrba clauses precede their matrix. Regardless of the coreference relations between the clauses, complementizing case is never triggered. Shared subject:

When you become a big man, you will cut spearheads.

Subject – body part chain:

7Cf Dixon (1979:114) 'the subordinate clause (of jussives – N.E.) describes an instruction that has been given to someone to do something: plainly the participant must be agent, and thus subject, for the subordinate clause.'
When the man got here, lots of blood came out (of his mouth).

Different subjects: (see also 5-28)

When the rains fall, I will return eastwards.

When I die, you look after this country!

Many explanations could be given for the lack of complementizing case here. Temporal clauses are often aberrant with respect to switch-reference marking: since they introduce a sideline or backgrounded event not continuing the main thrust of the narrative, different subject sequences are semantically unmarked, which would explain their failure to trigger complementizing case.

Also significant is the availability of CONSequential nominalized clauses used as second predicates on the subject (8.4.4). These are basically synonymous, but must have the same subject as the main clause. It is likely that with the paradigmatically opposed -THarrba clauses, differing subjects are the unmarked case. Certainly the majority of -THarrba clauses in my corpus have different subjects.

9.2.6.3 Apprehensive clauses

Apprehensives may be main clauses, warning the hearer of an unpleasant consequence (5.2.3.11). Or they may be subordinate clauses, spelling out the unpleasant consequence to be averted by following the instructions given in the main clause. (They may also be clausal arguments of a main clause communication verb – see 9.3.6).

Most often, subordinate apprehensive clauses obey the normal OP rules, escaping complementizing case when the pivot is subject of both clauses (9-50, 9-51), and taking complementizing case under all other conditions, e.g. in the sequences Object: Subject (9-52), and Subject: Object (9-53).

Reesink (1983) discusses examples from several Papuan languages where 'the S/R mechanism skips, as it were, the second clause [e.g. 'when it rained' – N.E.] rendering it into a temporal margin.' From my understanding of Reesink's paper, however, this effect is confined to meteorological clauses and others whose participants are limited to the temporal clause, whereas in K the precondition clause may share human participants with the matrix.
9-50 walmathि karn-da rajurri-n, ba-yii-nyarra yarbuth-iiwa-nhar! on top(NOM) grass-NOM walk-NEGIMP bite-DT-APPR snake-V.I.ALL-APPR
Don't walk across the grass in case you get bitten by a snake.

9-51 dathin-a bal-ung-ka warra-na nga-ku-l-d, mardalk-in ja jurdiin-nyarr sink-APPR
Don't let's go to the west there, in case we sink into the mud.

Put (the meat) in the smoke, so it doesn't get eaten by flies.

You go away, or that man will spear (you)!

I have three examples, however, where the subordinate clause is complementized even under Subject-Subject conditions:

You stay on the south side of the fire (lit. coming from the north), or you’ll get smoke in your eyes.

9-55 buru-na thararr, [naa-nyarra-ya] grasp-NEGIMP ember(NOM) burn(v.i.)-APPR-CLOC
Don't get hold of those embers, or you'll get burned!

9-56 ngada jaa-nangku wida-wu, [yarbuth-inja ba-yii-nyarra-nth] I:NOM enter-NEGPUT hole-MPROP snake-OBL bite-DT-APPR-COBL
I won’t put my hand in that hole, or I'll get bitten by a snake.

One possible explanation is that speakers are using complementizing case here to emphasize the contrast between the two clauses (cf discussion in 9.2.5), which are seen as disjunctive possibilities. This 'contrast use' (if this is indeed the explanation) is extremely marginal, and apparently limited to apprehensive clauses.

It is common for apprehensive/lest clauses to behave unusually with regard to reference-tracking. Austin (1981c), discussing Australian languages with SR, points out that, unlike implicated and sequential clauses, 'lest clauses do not mark sameness of difference of subjects'.
And in Yidiny (Dixon 1977:350-353) 'lest' clauses do not conform to the strict pivot requirements found in other subordinate clause types.

9.2.6.4 Summary

Each of the above construction types deviates from the normal 'odd pivot' conditions in different ways. With jussives, complementizing case appears where expected, but only optionally. With precondition clauses it fails to appear where expected, i.e. where no arguments are shared. And in apprehensive clauses it appears under the expected conditions, but also under subject-subject conditions, which normally exclude complementizing case.

For each a semantic explanation (admittedly speculative) can be given: in jussives the Object-Subject sequence is semantically unmarked; in precondition clauses different-subject conditions are semantically unmarked, and in lest clauses complementizing case is being used to express the contrast between the matrix and subordinate clause actions.

9.3 Functions of finite subordinate clauses

9.3.1 Tense system in subordinate clauses

The tense system of FSCs differs somewhat from that in main clauses.

Main clauses have a basic division between ACTual, which covers past, present and immediate future, and FUTure. While the ACTual is the unmarked, and non-specific, choice for non-future clauses, the more specific PaST and IMMEDiate categories are available if extra precision is desired. These latter, however, are used relatively rarely.

In FSCs the ACTual verb inflection is unavailable: there is no exact equivalent of its non-future semantic range. Instead, there is a tripartite division into PaST, IMMEDiate (present and immediate past), and FUTure. The PaST and IMMEDiate categories are less marked in subordinate than in main clauses, and commensurately more frequent. The relation between modal case and verb inflection in FSCs is identical to that in main clauses.

Subordinate tense is in general relative rather than absolute. The one exception involves the perceptual complements of future verbs, which are coded absolutely (with the FUTure) rather than relatively (with the IMMEDiate) - see 9-60.
With the IMMEDi ate category, spatial proximity may override purely temporal factors. In 9–34, for example, the IMMEDI ate is used even though the event is past (yesterday): this is because it took place in the same place as the speech act.

9.3.2 Syntactic types

FSCs have three basic syntactic possibilities: clausal arguments of a matrix predicate (e.g. epistemic, perception, and utterance predicates), adnominal modifiers of a matrix argument (restrictive relatives), and as clausal adjuncts to the matrix (of time, cause, goal, contrast etc.). The discussion below follows this order.

The positioning of FSCs vis-à-vis the main clause depends on their syntactic function. Clausal arguments and adnominal relatives are invariably postposed, while adjuncts are less constrained, occurring before, within or after the main clause.

9.3.3 Complements of knowledge and emotion predicates

Clausal complements of the nominal predicators mungurru ‘know’ and birrurmurdami ‘be sad. have painful (telepathic) awareness of’, and of the verb murnmurdawatha ‘rejoice’ (9–6) take FSC complements.

Do you know that your father’s dead?

9-58 ngada birrurmurdami [ngi jin-in ja kajakaja-ntha bukawa-thurrk] COBL I:NOM sad(NOM) my-COBL daddy-COBL die-IMMED:COBL
I can feel that my daddy has just died.

Other such predicators taking complementized FSCs as arguments are the nominal predicator burdumbanyi ‘be ignorant that’, and the verb bardakamarutha ‘think (feelingly) that’.

9.3.4 Complements of perception predicators

9.3.4.1 Basic construction

Clausal arguments of perception verbs in the ACTual take the IMMEDIATE modality (cf 9–20, 9–35):

9-59 ki-l-da kurri-j, [ngijuwa murruku-rrka kala-thurrk] LOC
2-PLU-NOM see-ACT lsgSUB:COBL woomera-MLOC:COBL cut-IMMED:COBL
You see/saw that I am/was cutting a woomera.

Where the perception verb is future, so is the complement:
Tomorrow I will watch (the bird) lay eggs.

9.3.4.2 Subject-object raising

Subjects of such subordinate clauses may be raised to matrix object position, with no apparent difference in meaning:

9-61 ki-l-da kurri-ja ngijn-ji, [murruku-rrka kala-thurrk] COBL
2-PLU-NOM see-ACT me-MLOC woomera-MLOC:COBL cut-IMMED:COBL
You see/saw me cut a woomera.

Younger speakers are tending to replace this by a sequence of two ACTual clauses, based on the raised construction. The intonation contour is characteristic of two independent clauses (with two successive falling contours). And the OP condition triggering complementizing case is waived, as it would be (for this sequence) between two independent clauses (9.5.1).

9-62 ki-l-da kurri-ja ngijn-ji, murruku-ya kala-th
2-PLU-NOM see-ACT me-MLOC woomera-MLOC cut-ACT
You see/saw me, (!) am cutting/was cutting a woomera.

Subject-object raised sentences are also found in Lardil (Klokeid 1976:323-4):

9-63 ngada kurri-kun dang-an, yak-ur bule-jirr-kun
I:NOM see-ACTUAL man-OBJ fish-FOBJ catch-CONTEMP-ACTUAL
I saw a man catching fish.

Klokeid gives no unraised sentences comparable to 9-59, so it seems 'object-raised' versions are the only possibility.

9.3.5 Parenthetical clauses

A related construction involves ‘parenthetical clauses’, which supply the perceptual evidence for an assertion:

9-64 [ngijuwa kurri-jarra-ntha] COBL kiyarrng-ka bithiin-da
lsgSUBJ:COBL see-PST-COBL two-NOM man-NOM
kamburi-nju-tharr talk-RECIP-PST
Two men, I saw, were talking.
As a comparison with the normal perceptual complement construction will show, these represent a reversal of the usual pattern in which the perceived event clause is subordinate to the perception clause. In parenthetical constructions, that is, the perceived event clause has main clause morphology and the perception clause has subordinate clause morphology.

Although parenthetical constructions have not, to my knowledge, been reported in other Australian languages, they are common elsewhere, as in English 'Roland, I believe, has already made that quite clear'. Noonan (to appear) notes that 'the syntactic effect of the parenthetical use of the CTP (Complement Taking Predicate - N.E.) ... is to make the complement the main clause'.

But while it is common for the perceived event clause to have main clause status, it is rarer for the parenthetical clause to be overtly subordinated, as it is in K. In fact, its exact status in K is problematic and I would argue that it must be considered a special construction type, with its own specific rules or interpretation, not obviously related to those of other FSCs.

One conceivable analysis would see the parenthetical clause as a temporal or restrictive relative: 'you, when I saw you, were eating meat' or 'that, which I can smell. is rotten food.' But this is not the meaning these clauses convey, which is closer to 'you were eating meat - (I know this because) I saw (it)'.

Under a second possible analysis the perceived clause could be treated as a topicalized clausal object of the verb. (As we shall see in 9.5.2.1, objects may be topicalized by marking all non-object arguments with complementizing case, and leaving the object unmarked: applied here this would leave the perception clause complementized and the clausal argument unmarked, the correct result...
A more serious failing is that some tense/mood sequences in parenthetical constructions have no 'normal' correspondent. The tense sequence of 9-67, for example, is allowed in the parenthetical construction because the perception is very recent (I just saw his camp empty), which in subordinate clauses takes the IMMEDIATE modality: the perceived event is more distant (he must have left before I got there), allowing the Past modality in a main clause. But these are not the modalities which would be selected in the equivalent non-parenthetical construction - we would expect an ACTual perception clause with an IMMEDIATE perceived event clause. Any attempt at deriving parenthetical clauses by topicalizing the clausal object of a normal construction would therefore be complicated by the need to alter the verbal categories of both clauses.

9-67 niya [kurri-jurrka ngijuwa] dana-tharra natha-na
3sgNOM see-IMMED:COBL 1sgSUBJ:COBL leave-PST camp-MABL
He, I just saw, has left his camp.

Since neither of these analyses is satisfactory, it seems wisest not to derive the parenthetical construction from the 'normal' perceptual construction, but to treat it as a basic construction type with its own syntactic rules and semantic interpretation.

9.3.6 Utterance predicates

Clausal arguments of main clause communication verbs like kamburija 'say (that)' or waaja 'sing (that)' give the information communicated by the main clause subject.

9-68 ngada kamburi-ja niwan-ji, [walbu-ntha dathin-inja
I:NOM say-ACT him-MLOC raft-COBL that-COBL
barji-nyarra-nth] capsize-APPR-COBL
I told him the raft would capsize.

Clausal arguments of contrafactive verbs like duruma-tha 'lie' contain the CounterFACTual particle maraka:

[One man fools another into jumping out of a boat into deep water:]
9-69 jatha-a dangka-a duruma-tha niwan-ji, [maraka other-NOM man-NOM lie-ACT him-MLOC CTRFACT malawariyala-thurrk]COBL (sea) be shallow-IMMED:COBL
The other fellow lied to him that the water was shallow.

Utterance predicates coding commands are discussed with jussives (9.2.6.1).

9.3.7 Restrictive relatives

Examples of these have already been given, e.g. 9-1 and 9-2. Restrictive relatives obey the normal OP rules, and invariably follow the main clause: their antecedent is usually positioned main-clause finally. Further examples are:

9-70 Wife : nyingka kurri-ja jangka-ya maku-y you:NOM 3ee-ACT other-MLOC woman-MLOC
Husband: jina-a maku, [ngijuwa kurri-jurrk]COBL where-NOM woman(NOM) lsgSUBtCOBL see-IMMED:COBL
Wife : You’re seeing another woman.
Husband: Where’s this woman who I’m seeing?

9-71 warirra-y dulk-i kurri-j, niwan-marri warra-n-marri, nothing-LOC place-LOC see-ACT him-PRIV go-N-PRIV [dathin-inja kurrka-thurrk]COBL that-OBCL take-IMMED:COBL
(They) can’t see him anywhere, (no sign of) him going around, whom that one (Barrindindi) had just grabbed.

Have you seen the boomerang which I put down here before?

9.3.8 Concealed and indirect questions

In restrictive relatives the relevant NP is definite, translating as English ‘the X who/that ... ’: it is overtly represented in the main clause, and omitted from the subordinate clause. No relative pronoun is used.

A different strategy is employed when the identity of the NP pivot is unknown either to speaker (9-73) or hearer (9-74) — in other words, when there is a ‘concealed question’ (Baker 1968). Here the NP appears in the subordinate clause only, in the form of an interrogative NP. Such constructions can be analysed as clausal arguments: like them, they trigger complementizing case.
I don't know - I didn't see who broke it.

Tomorrow you will see who gave me the boomerang.

Where the subordinate clause contains a question involving location or manner, rather than the identity of a participant, a similar strategy is employed, using an appropriate interrogative. But in contrast to 'concealed identity' questions, the embedded clausal argument does not take complementizing case:

9-75 ngabaya kurri-j, jijina warra-ju spirit(NOM) look-ACT whither go-FUT
The spirits look which way to go.

9-76 ngada marraa-j, jinananganda wangalk-a ngudi-ja nyingk I:NOM show-ACT how boomerang-NOM throw-ACT you:NOM
I will show how you throw a boomerang.

This provides a further exception to the basic rules for assigning complementizing case.

9.3.9 Purpose and jussive clauses
These both name the purpose which the matrix subject hopes to achieve by his action. Jussives may be regarded as a special subtype in which the matrix subject tries to achieve his aim indirectly by communicating it to someone else.

Both purpose and jussive clauses take FUTure or DESiderative verb inflections, if affirmative, and negative FUTure or HORTative inflections if negative, plus the appropriate modal case.

Jussives only optionally take 'odd-pivot' marking - see 9.2.6.1 for discussion and examples.

Purpose subordinate clauses obey the normal 'odd-pivot' conditions, escaping complementizing case where the pivot is subject of both clauses (9-29, 9-77) and receiving it otherwise (e.g. 9-78, 9-79) Purpose clauses in the future are often embedded (but see Text 4, Lines 1-2 for a postposed example). Those in the desiderative are postposed.
you:NOM look after-IMP rob-DT-NEGPUT
You look after (your country), so you won't be robbed of it.

Bring the fish so we can all cook it.

Give me the baler shell, so I can cut (something) (with it)

Purpose clauses following ascriptive measure clauses may convey the meaning 'X to such an extent that [SUBJ can/can't V']:

There's enough food there that we can all have a feed.

Those trees are so dense that you can't see to chop (them).

When a subordinate purpose clause follows a matrix clause describing some real event, it may give an inference, being drawn from the main clause, about the future - cf English clauses with 'so that', which are often ambiguous between purpose and inferential meanings. (In this example the main clause has also been complementized, to signal the topicality of the object 'my country').

Schools of creatures are muddying up my sea-territory, so that (one can infer that) turtle and dugong will be descending westwards upon it.

Contrastive and concessive clauses

Contrastive constructions juxtapose two events occurring at roughly the same time, usually in different places, and seen as unconnected except for the contrast the speaker wishes to draw between them (9-17, 9-21).

In recounting past events the main clause may take the ACTual or PaST, while the 'contrasted' clause always takes the PaST. (That different tenses are
used here for simultaneous events further demonstrates the difference between main and subordinate clause tense systems - cf 9.3.1.)

9-83 bi-l-da kamburi-j / kamburi-jarr, [nga-ku-r-ra kala-tharra-ya
3-PLU-NOM talk-ACT talk-PST 1-INC-DU-NOM cut-PST-CLOC
wangalk-inaba-y loc
boomerang-MABL-CLOC
They talked, while we made boomerangs.

Concessive constructions involve two PaST clauses, or an 'almost' main clause with a PaST subordinate. The dependent clause describes an action which undoes or prevents the action of the main clause.

9-84 dathin-a dangka-a yuuma-nangarr, [buru-tharra-nth]COBL
that-NOM man-NOM drown-ALMOST pull-PST-COBL
That man almost drowned, but (they) pulled him out.

9-85 ngada nguku-na dali-jarma-tharr, [barji-jarra-nth]COBL
I:NOM water-MABL come-CAUS-PST fall-PST-COBL
I brought some water, but (it) spilt.

9.3.11 Simultaneity, close temporal succession, and spatial proximity
Immediate succession constructions comprise a nominal or ACTual main clause, with a subordinate IMMEDIATE clause coding an immediately prior event.
They translate into English 'as/because' or 'as soon as' (cf 9-37):

9-86 mibul-ula-a-ja ngada [warrngal-inja rila-thurrk]COBL
sleep-V.ABL-DT-ACT I:NOM wind-COBL wake-IMMED:COBL
I was pulled from sleep as/because the wind woke me.

9-87 dii-ja nga-ku-l-da yulaa-j, [yarangkarr-inja barji-jurrk]COBL
sit-ACT 1-INC-PLU-NOM fear-ACT star-COBL fall-IMMED:COBL
We sat down and were afraid, as the star fell/because a star had just fallen.

9-88 ngumu-walathida kurirr-walathid, [yalulu-ntha kurulu-thurrk]COBL
black-every cooked-every flame-COBL cook-IMMED:COBL
(The yams) are all black and cooked, as the flames have just roasted them.

9-89 dathin-a mutha-a wuran-d, barri-jiri barakurr, [dathin-kurrka
there-NOM much-NOM food-NOM crawl-DIR ant(NOM) there-LOC:COBL
wirdi-jurrkka marra-wurrrka makarrki-nja nal-inj]COBL
stay-IMMED:COBL near-LOC:COBL anthill-COBL head-COBL
There's a lot of food here, ants crawling around, because there's an anthill near here. (Here 'head' means 'mound'.)

Despite their varying English translations, these constructions all involve a similar
conceptualization in Kayardild: one situation (the main clause) immediately succeeds another (the subordinate clause) in time; there may be an additional implication of spatial proximity (9-89).

Where the prior situation is not seen by English speakers as a cause (e.g. 9-37) the gloss 'as soon as' is appropriate: where it is seen by English speakers as a cause, 'because' may be used. Thus English, unlike Kayardild, distinguishes between necessary succession (cause) and contingent succession, although some subordinating conjunctions (e.g. 'as') ignore this distinction, allowing either interpretation.

Kayardild, on the other hand, leaves implicit the difference between contingent and necessary succession, but grammaticalizes a different distinction: that between immediate and non-immediate temporal succession. 'Immediate succession' is coded in the way just described. 'Non-immediate' succession requires either a consequential nominalization (8.4.4), or a PaST subordinate clause (9-90, 9-22); it is suitable where some time elapses between the two events.

9-90 niya rajuurri-nangku, [thubun-inja ngamathuwalath-inja raba-tharra-nth] COBL
            3sgNOM walk around-NEGFUT hoof-COBL bullock-COBL tread-PST-COBL

He won't be able to walk, because a bullock trampled him.

9-91 niya nal-bala-a-j, [dun-inja kurirr-wa-tharra-nth] COBL
            3sgNOM head-hit-DT-ACT husband-COBL dead-INCH-PST-COBL

She is hitting her head, because her husband has died. (Said at a funeral several days after the death).

9.4 Functions of complementized main clauses I: ellipsed matrix predicators

Complementized clauses may also be used as main clauses. The various main clause functions, nearly all of which have corresponding subordinate functions, fall into two groups:

(a) those in which a matrix command, utterance or perception predicator, which could take the complementized clause as an argument, has been ellipsed. I will refer to this as the 'main predicate ellipsis' type (MPE). The clause that remains will be said to be 'insubordinated'.

(b) those in which the Odd Pivot mechanism has been extended into free
discourse. Since topics in discourse, rather than syntactic pivots, are involved, I will call this the 'Odd Topic' condition. The distinction between Odd Pivot (OP) and Odd Topic (OT) conditions is justified by the difference in triggering conditions, and by a significant morphosyntactic difference: topicalized objects of Odd Topic clauses, when they appear, take the NOMinative, whereas pivots take the case appropriate to their grammatical function (cf 9.1.3).

Complementized clauses resulting from MPE will be discussed in this section: those resulting from the OT condition in 9.5. Although the two conditions are discussed separately for expository reasons, they are not mutually exclusive. Complementized future clauses, for example, may be used as indirect requests, with an ellipsed command predicate (condition (a)), but they may simultaneously involve an object topic (condition (b)); an example is 9-97.

9.4.1 Indirect commands and hints

Insubordinated future, desiderative and hortative clauses are used in a range of indirect commands and hints. Each insubordinated clause of this type corresponds to the jussive or purpose clause of a complex sentence.

In indirect commands the insubordinated clause specifies that an action should be performed, without issuing a direct imperative. Tense/mood in such clauses corresponds to that found in jussive FSCs: like them, they may take the FUTure (9-93, 9-93), DEsiderative (9-26) or HORTative (9-25, 9-95). Indirect commands are used when the speaker wishes to make his wishes felt without asserting himself too obviously. The elliptical form of the construction, while not ruling out the interpretation ‘I, the speaker, want you to do this’, leaves open the alternative of attributing the command to someone else: ‘people say you should do this’.


He better not lose my spear / (I say that) he must not lose my spear.


(One might say) (you) should tip the water into another baler shell.
9-94 [nyingka ngij-uru-ya barrki-juru-y] LOC  
you: NOM wood-MPROP-CLOC chop-PUT-CLOC  
(I say that) you should chop some wood.

Sometimes the commandee is the speaker. Here the implied matrix clause is '(X said that) I should V'. (Further implied: it wasn’t my idea).

9-95 [ngijuwa buru-thinja ngij-inj] COBL  
1sgSUB: COBL get-HORT wood-MOBL  
(Someone said that) I must fetch some wood.

In hints, the desired end result is specified, but not the action used to achieve it. These correspond to purpose constructions with the 'enabling' clause ellipsed. Like subordinate purpose clauses, they take the future tense and MPROP:

9-96 [niya karna-juru-y] LOC  
3sgNOM burn-PUT-CLOC  
(Bring the green spear shaft), so (we) can temper it.

9-97 [dathin-a yarbud thaari-juru-y] LOC  
that-NOM bird(NOM) bring back-PUT-CLOC  
(Eat that bird in such a way that) you can bring him back.  
(i.e. don’t eat it all).

This could also be treated as an indirect command: '(I say to you to) bring that bird back.' This illustrates the dangers of postulating complex structures for these clauses: there is great leeway for the linguist’s imagination.

9.4.2 Evidential qualification

9.4.2.1 Immediate perception

Complementized IMMEDIATE clauses are used when a proposition is being asserted on the basis of immediate perceptual evidence. This resembles the use of IMMEDIATE clauses as arguments of perception verbs (9.3.4):

9-98 [dan-kurrka ri-in-kurrka thardawankawuru-ntha]  
here-LOC: COBL east-FROM-LOC: COBL aeroplane-COBL  
burri-jurrk] COBL  
emerge-IMMEDIATE: COBL  
(People are sitting at the airport waiting for the plane. Suddenly one exclaims:)  
(I can hear) the aeroplane is coming in, here from the east now.
(I see) the flames burning him, he's getting burnt.
(This is from one of Wurm's tapes, offered as a translation of 'I see him being bitten by the flames'.)

For further examples see 9-9, 9-19.

9.4.2.2 Hearsay and inference

With other tense/moods the nature of the speaker's evidence is less clearly defined: it may be hearsay or inference, depending on context. The 'hearsay' meaning can be related to complex constructions where the FSC is a clausal argument of an utterance predicate ('they say that CLAUSE'), but the 'inference' meaning cannot be related to actually-occurring matrix predicates. (There is no verb 'infer' or 'realize'. the nearest candidate is the nominal predicaor mungurru 'know').

(a) (They say) big brother has gone.
(b) Big brother must have gone (since he's not here).

(a) So (they say) daddy hasn't arrived?
(b) It seems daddy hasn't arrived yet, eh?

Typologically, this is an unusual way of coding evidential categories. Particles are far more common: Australian languages using them include Yankunytjatjara (Goddard 1983), Warlpiri (Laughren 1982) and Arrernte (Wilkins 1984b). A well-known Amerindian example is Imbabura Quechua (Jake and Chuquin 1979).

9.4.3 Use of complementized IMMEDIATE and ascriptive clauses for 'relevant present'

One use of insubordinated clauses cannot be straightforwardly related to complex constructions. Complementized IMMEDIATE and ascriptive clauses can function as main clauses expressing what might be called the 'relevant present': a present situation, usually newly-arisen, that motivates the speaker's comment (9-102), curiosity (9-103, 9-105) or action (9-104). Informants always translate these with 'now'.

9-100 [thabu-j ntha warra-jarra-nth]COBL
big brother-COBL go-PST-COBL
(a) (They say) big brother has gone.
(b) Big brother must have gone (since he's not here).

9-101 [kajakaja-ntha dali-n-marri-nj]COBL
daddy-COBL come-N-PRIV-COBL
(a) So (they say) daddy hasn't arrived?
(b) It seems daddy hasn't arrived yet, eh?
That man is married now (i.e. sleeps in his own camp, with his new wife).

Where's our dad now? B: Our dad's way over in the east now.

The sea is hitting the rocks now (we better move).

A: What (are you up to) now? B: Going out looking for spearheads.

A number of analyses could be proposed here. One would see this construction as a metaphorical extension of the IMMEDIATE 'spatial proximity' construction (cf. 9-89). Just as the subordinate clause there describes an event close in space to the matrix event, so the -THurrka 'relevant present' construction indicates the proximity of the described situation to the speaker's interest. Alternatively, one could argue that the 'immediate perception' use of -THurrka clauses (9.4.2.1.), which describes a quintessentially present occurrence, has been extended to yield a new tense. But such analyses remain purely speculative.

9.4.4 Discussion

One appealing treatment of these insubordinated clauses would be to interpret them as complex sentences from which the matrix predicator has been ellipsed.

This approach, tacitly adopted in the foregoing subsections, is not without precedent in linguistics, particularly in treatments of various Romance languages. In Italian, for example, subjunctives frequently occur in independent clauses, but a governing clause can always be supplied – see Moretti & Orvieto 1979:114. Their examples include the following subjunctive sentences (with the 'supplied' governing clause in brackets):

I hear a knock at the door. Could it be Marco?
(Lit.: (Is it possible) that it is Marco?)
Robin Lakoff's (1968) study of independent subjunctives in Latin attempted to formalize a similar insight. She observed that an independent subjunctive like venias 'come(2sgsubj)' could have three meanings: (a) '(I order) you (to) come', (b) '(I want) you (to) come' and (c) '(maybe) you (will) come'. Each corresponds to a complex sentence in which the subjunctive clause is governed by a matrix predicator having the 'supplied' meaning: (a) impero ut venias, (b) volo ut venias, (c) potest fieri ut venias. Moreover, these governing clauses require different negatives in their complements — (a) and (b) take ne. (c) takes non — and so do the corresponding independent subjunctives: ne venias 'I order you not to come/I want you not to come', non venias 'maybe you won't come'. To account for these facts Lakoff proposed that independent subjunctives were derived from deep structures in which 'abstract verbs', corresponding to the governing clause, were present. These abstract verbs, according to Lakoff, determined the meaning of the sentence, accounted for the presence of the subjunctive, and conditioned the choice of negator, but were 'deleted' between deep and surface structure.

The K data presented in this section invite a similar analysis. As the examples I have given indicate, it is not hard to supply appropriate main clauses. To the insubordinated yaluluntha karnajurrkka niwanjurrk [flame burns dim]C LO g. for example, we can supply a main clause ngada kurrija 'I see': this would account for the presence of complementizing case, the IMMEDIATE verb inflection, and the meaning supplied on the occasion of the utterance: 'I see him being burned by the flames'.

But although this is undoubtedly the historical source of these constructions, it encounters several problems as a synchronic analysis.

Firstly, there is a large, even infinite, number of possible 'ellipsed' main clauses. How do we know that the ellipsed matrix predicator in the above example was not birrmurdami 'feel telepathically', mungurru 'know', or even murnmurdawatha 'rejoice that'? And how do we know that the 'ellipsed' matrix subject is 'I' and not 'you', 'they', etc.?

The ellipsis analysis, then, predicts that such sentences are multiply,
perhaps infinitely, ambiguous: while in fact they are at most semantically vague, meaning something like 'I perceive that', with the type of perception recoverable from context.

More importantly, the 'subject' of the higher verb is constrained according to the construction: first singular with immediate perception constructions, third person with evidentials, and deliberately unspecified with jussives. So the 'ellipsis' argument would additionally require some sort of filter to rule out other possible higher subjects.

Two other arguments against the ellipsis analysis may briefly be mentioned.

One concerns the postulation of matrix predicates that have no corresponding lexeme in the language. As we saw in (9.4.2.2), one meaning of past insubordinated clauses is 'I infer that', yet K lacks any lexeme 'infer'. Matrix Predicate Ellipsis could only be made to work here if one postulated 'abstract verbs' never realized as actual lexemes. But this undermines the whole motivation for the Ellipsis analysis, which is to relate one actually-occurring structure to another.

The second argument concerns the identifiable meaning difference between full complex sentences and 'insubordinated' main clauses (cf. Shopen 1973 on ellipsis in general). This is most clear with insubordinated jussive clauses (see 9.4.1), where the failure to specify authorship of the command is an important part of the insubordinate jussive meaning. Jussives that are socially appropriate when insubordinated, with the vague meaning '(someone might say) you should do X', would be quite inappropriate if delivered with a matrix command predicate: 'I say you should do this'. This would be seen as a bald and unacceptable assertion of authority.

For these three reasons, then - the lack of predicted ambiguity, the impossibility of always finding plausible main clause predicate lexemes, and the meaning difference between 'full' and 'insubordinated' versions - the 'matrix predicate ellipsis' analysis cannot be justified synchronically.

I see two alternatives to it, which I can do no more than sketch here:

(a) The simplest approach is straightforwardly paradigmatic: insubordinated clauses have certain meanings, that can be described as above; their resemblance to the corresponding complex clauses is interesting, but cannot be accounted for synchronically (although it can be diachronically).
(b) A rather different approach would be to treat complementizing case as a marker of conversational implicature (cf Grice 1975): the statement is not to be taken at face value; rather, its relevance to the conversation is to be deduced by the hearer, using certain general principles (e.g. that the only way someone can know about something happening at the moment of speech is be perceiving it directly). The use of subordinate clause morphology for this is not implausible, given that the logical interpretation of subordinate clauses cannot be done in isolation, but requires reference to higher clauses.

One attraction of this approach is that it suggests how the 'relevant present' meaning of -Thurrka clauses could arise. While the use of complementized clauses as evidentials draws attention to an apparent violation of the Gricean maxim of 'quality' (i.e. the speaker's belief in what he says), the 'relevant present' use draws attention to an apparent violation of the maxim of 'relevance'. Needless to say, the 'implicature' analysis would need to be supported by a full study of Kayardild conversational principles, a project I have yet to undertake.

9.5 Complementized main clauses II: Odd topic marking

The second main function of complementized main clauses corresponds to the 'odd pivot' use of complementizing case in FSCs. Such complementized main clauses are used in connected discourse, and indicate a deviation from the thematically neutral discourse sequence, which is basically a chain of identical subject-topics. Before detailing the 'thematically non-neutral' discourse conditions that occasion OTM, however, I shall outline the characteristics of 'thematically neutral' sentences in K.

9.5.1 Thematically neutral discourse conditions in Kayardild

The least marked discourse sequence is a series of actions performed by the same subject. After its first appearance, SUBJ is usually omitted anaphorically (2.2.2). Where objects remain in the same syntactic function over a stretch of discourse with an unchanging and topical subject, they too are usually anaphorically omitted.

This fragment of narrative continues a story in which both subject (the speaker) and object (some birds) have already been introduced.
New participants may be introduced in any syntactic function. They appear as non-pronominals, with appropriate case inflection and usually fronted; established participants tend to be postposed. Participants that first appear as non-subjects may subsequently become subjects without the clause being specially marked. For instance, in the following example (from Text 1) ‘our man’ is introduced as an object, then becomes a subject in the second clause.

As (9-109) illustrates, changes in subject do not trigger any special marking. This contrasts with the situation in complex clauses, where successive different subjects trigger complementizing case.

9.5.1.1 Topic elaboration chains

Another very common type of discourse sequence is what I shall call the ‘elaboration chain.’ Here the speaker gives a series of clauses similar in all respects but the identity of one participant. In a ‘subject elaboration chain’, for example, essentially equivalent actions are attributed to a series of different subjects (9-110). Although the exact identity of successive subjects varies, all are seen as similar, not only in the sense that they are performing similar actions, but also because they all belong to some larger natural class. In (9-110), for example, they are all ‘mobs’ or ‘hordes’ of ‘old time people’.
The white people trod (set foot in) that place. The people from before - the old time people - never set foot there. The western mob never set foot (there), the northern mob never set foot, the eastern mob never set foot. They walked about far away.

Such ‘elaboration chains’ do not fit easily into the usual categories involved in discourse analysis. They are not contrastive, and the emphasis is not on singling out a single entity of whom the predication is true: they could not be translated with a pseudo-cleft like ‘it was the northern mob who never set foot there’. They are simultaneously new, as individuals (e.g. the western mob), and given, as a generic class (the old time people). There is no doubt, however, that such chains contain and elaborate the ‘topic’ – the thing being talked about.

Where the elaboration chain involves objects rather than subjects, the marking strategy depends on the tense/mood of the clause. If it is the unmarked ‘ACTual’ tense/mood, the elaborated object-topics are usually fronted and appear in the nominative:

9-111 buranthan-da ngada raa-j, ngarrawurna ngada raa-j, bonefish-NOM I:NOM spear-ACT bluefish(NOM) I:NOM spear-ACT
karwarrk-a ngada raa-j queenfish-NOM I:NOM spear-ACT
I speared bonefish, I speared bluefish, I speared queenfish.

9-112 ngarii-ja mirrayala-tha ngurrwarra-y ... jatha-a buru-tha first-ACT build-ACT fishtrap-MLOC another-NOM take-ACT
ngurrwarr fishtrap(NOM)
First (Black Crane) built a fishtrap... (then) made another fishtrap.

Here ‘fishtrap’ takes full object marking when first introduced, but only the NOMinative when repeated.

In other tense/moods, however, complementizing case marking is triggered. This will be discussed in 9.5.2.2.
9.5.1.2 Passive

The passive may place a participant in subject function for several successive clauses:

[Describing a massacre of Bentinck Islanders:]

child(NOM) take-DT-ACT

(They) were shot, chased, followed, robbed of their women, the teenage girls were taken away.

But its prime motivation is always semantic, and it will only be used when the speaker is focussing on significant changes in the patient's ontological state or location. It is thus appropriate in (9-113), where the protagonists are suffering grievous abuse. But it is not suitable for 'object elaboration chains' like (9-111) and (9-112), where the speaker wants to enumerate tokens of a type (fish that he speared) rather than focus on the effect on them (being speared).

9.5.2 Discourse conditions on complementizing case

We now turn to the various 'thematically marked' discourse conditions requiring complementizing case: (a) object or instrument topics (b) object elaboration chains (c) contrastive subjects. I will argue that all three conditions exemplify 'odd topic sequences', in the sense that the subject is not the topic, and then examine a type of clause in which non-subject topics are thematically neutral: questions. Finally I will compare the functions of complementizing case in complex sentences and in discourse.

9.5.2.1 Object and instrument topics.

Here an object or instrument is either an established topic (9-114, 9-11) or what might be considered a contextual topic - further comment is elicited when they are pointed out (9-115), held up (9-116) or appear on the scene (9-117). In all such cases the relevant clause is complementized, and the (non-subject) topic is either omitted or appears clause finally in the NOMinative. Verbs take the active form with object topics (9-114, 9-117), and the detransitivized form with instrument topics (9-115, 9-116).
The use of a detransitized verb with instrument topics here echoes its use in 'instrumental nominalizations'. See 8.2.2.

9-114 kambud-a barji-j, ngaarrka barji-ja rar-umban-da
pandanus fruit-NOM fall-ACT pandanus nut(NOM) fall-ACT south-ORIG-NOM
warmarr. [mutha-wuu-ntha darr-u-ntha diya-juu-ntha
wind(NOM) much-MPROP-COBL time-MPROP-COBL eat-MPROP-COBL
ngaarrk]COBL
pandanus nut(NOM)

The pandanus fruit falls, the pandanus nut falls at the time of the south wind. (One) can go on eating pandanus nut for a long time.

The failure of objects here to take relational, modal or complementizing case suggests an analysis as a cleft construction: '(it's) pandanus nut that one can go on eating for a long time'. But there are reasons to reject this as a synchronic description of K: (a) it is not semantically appropriate, for it means something like 'speaking of that pandanus nut - one can go on eating it for a long time' rather than the pseudo-cleft meaning given above. (b) the clause has the intonation contour of a simple declarative sentence, not a complex one. (c) words from the topicalized NP may be mingled with the rest of the clause (e.g. the second sentence of (9-119)); this would not be possible with a complex sentence.

[R. holds up a shell knife and tells me:]

9-115 [banga-ntha bijarrba-ntha kala-a-jurrk] COBL
turtle-COBL dugong-COBL cut-DT-IMMED:COBL

Turtle and dugong are cut (with it).

[Discussing marndi, a type of disinfectant leaf:]

9-116 [kunawuna-ntha kari-i-jurrk] COBL
baby-COBL cover-DT-IMMED:COBL

Babies are covered with it.

[A young man appears, and P. says:]

9-117 [ngijuwa mima-tharra-nth] COBL
1sgSUBJ:COBL beget-PST-COBL

He's my real son. (i.e. 'I begot (him)').
9.5.2.2 Object elaboration chains

This is the commonest discourse condition triggering complementizing case. The speaker makes a series of statements involving the same action, performed by the same subject, on objects thought of as similar in some way. In 9-118 and 9-119, for example, both excerpted from a long text on 'the old days', they are all food. The object normally appears clause-initially in the nominative: a qualifying adjective or specific noun, also nominative, may appear later in the clause. All other constituents take complementizing case.

9-118 [bul-da rarrwa-tharra-nth] COG.
yam sp.-NOM roast-PST-COBL
[thawal-da diya-jarra-ntha mutha-a] COB ....
yam-NOM eat-PST-COBL much-NOM
wuran-mutha-diya-n-da rar-umban-da dangka-a, diya-jarr
food-much-eat-N-NOM south-ORIG-NOM person-NOM eat-PST
yakuri-na, diya-jarra bijarrba-na, bang-a diya-jarr
fish-MABL eat-PST dugong-MABL turtle-MABL eat-PST
(We) roasted feather-yams, (we) ate lots of yams.
Great food-eaters were the south people, (they) ate fish, (they) ate dugong, and ate turtle.

9-119 [mutha-a wuran-da ngalawa diya-jarra-ntha wakaku] COG,
much-NOM food-NOM lpl:SUBJ:COBL eat-PST-COBL sandfrog(NOM)
[mutha-a wuran-da ngalawa yakuri-ya diya-jarra-nth] COB,
nga-1-da kala-tharra rawalan-ku, nga-1-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 presence in the discourse of a series of objects, categorizable in the same way, does not necessarily count as an object elaboration chain. In the fourth line of (9-118), for example, the storyteller continues listing objects eaten on Bentinck Island, but the emphasis has shifted from what was eaten to what well-fed people they were, a transition signalled by the sentence wuranmuthadiyanda rarumbanda dangkaa 'great food-eaters were the south people'. In discourses of this type, that is, the speaker can choose either subject or the 'object chain' as topic, and in (9-118) chooses each at different points in the discourse. In (9-119) she maintains the object chain 'food' until moving on to describe other more diverse old-time activities (cutting with baler shells, floating
on rafts) where the subject is the only continuous topic, and reverts to the 'normal' discourse pattern.

Instead of elaborating the topic chain by naming a number of comparable entities, the speaker may choose to further qualify the same entity. Here he characterizes 'what was eaten' as 'a small part':

[A has passed B a large fish, for B to eat a part of. When B gives it back, A complains:]

9-120 A: ngijin-ji wuu-ja jul-i! dan-da jul-d!
me-MLOC give-ACT bone-MLOC this-NOM bone-NOM
B: [kunya-a dulk-a ngijuwa diya-jarra-nth!]COBL
small-NOM place-NOM lsgSUBJ:COBL eat-PST-COBL
A: (You're) giving me bones! These are bones here!
B: I only ate a little bit (of it)!

Or a secondary predicate about the object may be made using an object complement:

9-121 A: nyingka duruma-tha ngijin-ji, kurri-jarrili!
you:NOM lie-ACT me-MLOC see-NEGIND
You lied to/ you're lying to me, you didn't see (the dugong)!
B: eee, mirra-a ngunguk, [ngijuwa kurri-jarra-ntha
good-NOM story(NOM) lsgSUBJ:COBL see-PST-COBL
mayii-n-d]COBL
spout-N-NOM
Eee, it's the truth, I saw (it) "spouting" (making ripples).

As the above examples illustrate, the 'object topic' may be elaborated in a number of ways: by enumerating specific members of a class, by adding an adjective (9-120) or by adding a second predicate on the object (9-121). In all cases, OT marking is triggered, in the form of complementizing case over all clausal subconstituents save the object / object complement.

9.5.2.3 Contrastive focus on subjects

OT marking also applies to clauses involving contrastive focus on the subject:

[Two brothers discussing who will cut down a tree:]

9-122 A: [ngumbaa barrki-d]COBL B: [ngijuwa barrki-d]COBL
2sgSUBJ:COBL chop-DESID 2sgSUBJ:COBL chop-DESID
A: Will you cut (it)? B: I'll cut it.
Determining the topic in such sentences is difficult (cf Chafe 1976). The predicate (=VP) is presupposed, possibly with an indefinite subject pronoun, e.g. 'someone will cut (the tree)'. Often the set of possible subjects is also presupposed (e.g. (you, me)). Perhaps the most plausible way of partitioning such clauses into topic and comment is to have a complex topic like 'the person who will chop the tree' and a comment supplying their identity - 'is me'. Whatever the exact analysis proposed, it is clear that the topic is not just the subject, and to this extent the construction is thematically non-neutral.

Attempts to elicit paradigms of subject pronouns commonly yield this construction. The following sentence comes from a tape containing a series of different subjects: 'you saw the snake on the stone, he saw the snake on the stone, etc.' This was interpreted by the speaker as a series of contrastive statements - showing that not even paradigms can escape being treated as coherent discourses!

Information questions and unmarked topics

In contrast to declaratives, where the unmarked thematic structure has a subject-topic, in WH-questions the unmarked topic is the interrogative word, regardless of its grammatical relation. For example, the (topical) interrogative word may be subject, object, and instrument (among others), and none of these trigger complementizing case:

9-125 ngaaka thungal-da bad-a naa-j
what(NOM) thing-NOM west-NOM burn-ACT
What’s that burning in the west?

9-126 ngaaka-na thungal-ina raba-tharr ?
what-MABL thing-MABL tread on-PST
What did (he) tread on?

Cf Grimes (1975:325) on topic structures in general: 'the non-polar interrogative has as its topic a WH or question element'.
What did you wash your hands with?

However, it is possible for the topic not to be the WH-word, as in the following example, part of a long conversation which establishes ‘the story’ (anaphorically omitted) as topic. In such cases complementizing case is triggered.

Who told (you) (the story)?

Information questions thus have a different ‘unmarked thematic structure’ from declaratives: it is the WH-word rather than the subject which is the unmarked topic. But thematically marked versions still trigger complementizing case: here the condition is disjunction of topic and WH-word rather than of topic and subject.

9.5.2.5 Summary of ‘odd topic’ conditions in discourse

The unmarked structure for K discourse is a sequence of subject-topics. However, successive clauses may have different subjects, and non-subjects in one sentence may advance to subject position in the next, without requiring any special discourse marking. Object-topics may be made subjects by passivization, but only where they are seen as seriously affected by the action.

Several discourse types stray from this unmarked type, and trigger complementizing case: object-topics and instrument-topics, object elaboration chains, and clauses with contrastive subjects. In none of these do subject and topic coincide.

In information questions the unmarked topic is the interrogative word. Interrogative words may bear any grammatical relation without triggering complementizing case, since they are unmarked topics. But it is possible to have non-interrogative topics (e.g. an object topic with a subject WH-word), and this triggers complementizing case.

So whether the unmarked topic is the subject, as in declaratives, or the WH-word, as in information questions, the choice of another constituent as topic triggers complementizing case.
9.5.3 Comparison of Odd Pivot and Odd Topic marking

Odd Pivot and Odd Topic marking are essentially the same phenomenon: one operates between matrix and subordinate clauses, the other between successive simplex clauses in discourse. Nevertheless, there are significant differences: certain coreference conditions that trigger complementizing case in subordinate clauses do not do so in simplex clauses. In complex clauses, recall, any departure of the pivot sequence from the ‘subject - subject’ pattern triggers complementizing case. Yet simplex clauses in coordinated discourse allow two such departures to go unmarked: sequences where the topic is first a non-subject, then a subject (9-109), and those where successive clauses share no common arguments (again 9-109, second and third sentences). Other coreference conditions are treated identically in complex clauses and coordinated discourse: object-object sequences, for example, trigger complementizing case in both situations.

9.5.3.1 Which is historically prior?

The use of complementizing case for reference-tracking is found on subordinate clauses in Yukulta, Kayardild and Lardil, but only in K is it used in discourse, suggesting that its use in main clauses is a recent innovation\textsuperscript{11}. This development provides another example of ‘insubordination’ - the use of a formally subordinate clause type as a main clause. By this means K could recruit into main clauses a useful reference tracing device, which could supplement the passive as a way of topicalizing non-subjects\textsuperscript{12}.

9.5.4 Reference tracking in syntax and discourse: overview

For the bulk of this chapter I have characterized the OP and OT systems in rather mechanical terms. This was motivated by the need to supply a well-classified corpus that could be compared with other reference tracking systems. In this conclusion I would like to step back and take a broader, more discourse-based perspective.

The Kayardild OP and OT systems can be broadly characterized as ways of

\textsuperscript{11} Lardil has developed another way of handling object-topics in discourse. See Appendix E.

\textsuperscript{12} A roughly similar development has occurred in Mparntwe Arrernte, where switch reference has been extended into discourse. This ‘trans-sentential switch reference’ is discussed in Wilkins (to appear).
indicating 'non-neutral thematic structure.' As indicated by the many special cases I have considered, and the need to tailor our triggering rules to the type of clause linkage, 'neutral thematic structure' cannot be given a single characterization, but varies with the type of discourse and the type of clause juncture.

In 'tight junctures' involving Non-Finite Subordinate clauses (Ch. 8) the discourse possibilities are most heavily syntacticized, to the extent that subject and pivot must be identical in the subordinate clause.

In 'loose junctures', involving FSCs, there is more latitude: the pivot need be subject of neither clause. But all departures from the unmarked sequence of successive subject-pivots are treated as non-neutral, and trigger OP marking. Only where the construction has an unusual and definite semantic structure is this rule neglected. Thus in jussives Object - Subject sequences, which are semantically unmarked, only optionally trigger OP marking, even though they violate the 'neutral' subject-subject sequence. Alternate constructions, with their own limitations on thematic structure, may also have an influence: 'precondition clauses' with different subjects do not trigger OP marking as expected, possibly because they are paradigmatically opposed to perfective nominalizations which, though synonymous, require subject-subject coreference.

Expectations about thematic structure are least restricted at the level of coordinated clauses in discourse: in addition to the universally unmarked sequence of successive subject-topics, three other sequences pass without special marking: successive clauses sharing no arguments, those with no common arguments, and those in which an argument advances from non-subject to subject. So do information questions with non-subject topics, provided the topic is the WH-word. However, certain discourse patterns still provoke odd topic marking: declarative sentences with object topics, object elaboration chains, or contrastive focus; and information questions where the topic is not the WH-word.

The gradual widening of thematic possibilities as we move from tight juncture to free discourse is quite natural. The universe of discourse is enlarged, the constraints on unity of time, place and participants are relaxed, and the number of participants, and the number of roles they may play, increase in complexity. It is likely that a more detailed study of how discourse is structured at higher levels, and of how reference tracking is tailored to different speech genres (e.g. rapid
interactional repartee vs mythological monologue) would reveal further differences in the conditions triggering complementizing case.

9.6 Evolution of complementizing case

The peculiar K system of 'Odd Pivot' marking appears to have evolved from an original system based on case agreement with the main clause antecedent NP. Under this system, preserved in Yukulta, subordinate clauses can be left unmarked, or further marked with one of two outer complementizing cases: the ergative (CERG) or the DATIVE (CDAT). The first is cognate with the Kayardild Complementizing LOCative, the second with the complementizing OBLique. As in K, these suffixes appear on every word of the subordinate clause.

9.6.1 Complementizing case in Yukulta

Although the forms, domains, and word-positions are identical, the conditions governing the use of complementizing case in Yukulta differ radically from those in K. The basic principle is antecedent agreement, using an AS pivot in the subordinate clause. (This correlates with the accusative morphology of subordinate, as opposed to main, clauses. See 7.4.)

When the antecedent is a matrix S or O (i.e. in the unmarked ABSolutive case), the subordinate clause is unmarked\(^{13}\):

9-129 dii-ja =thayi [maka-thurlu]
sit-ACT lsgS:FUT rest-IMPLICATED
I’ll sit down and have a rest. [S, S]

9-130 ngabanarra =ngarri marri-ja [dan-ki murndamurr-i
curlew(ABS) lsgA:30:PRES hear-ACT this-LOC island-LOC
wama-th-i kamburi-kamburi-ji]
call-THEMAT-LOC speak-speak-SIMUL
I can hear the curlews crying out on this island. [O, S]

9-131 dangka-ya=kanda kurri-ja maku , [kunawuna-naba
man-ERG 3A:30:PAST see-ACT woman(ABS) child-ABL
jampila-tharrba]
kick-PRIOR
The man saw the woman kick the child [O, A]

\(^{13}\)To avoid confusion with the inner layer of complementizing case in Yukulta, which marks relative tense/mood (see 7.4.1.3), only the outer, reference-tracking layer of case will be shown. Verb inflections will not be decomposed into thematic plus a (tense/mood) suffix, as they were in 7.4.1.3.
See 7-56 for an \([S, A]\) combination.

Where the antecedent is an `A` (transitive subject), which takes the ergative case, the subordinate clause agrees:

9-132 dangka-ya=karrri ngida karna-ja \([makurrarra-wurlu-ya\]
man-ERG 3A:3S:PRES wood(ABS) light-ACT wallaby-PROP-CERG
karna-jurlu-ya[\(CERG\)
light-IMPLICATED-CERG
The man lit a fire in order to cook the wallaby. \([A,A]\)

9-133 munyi diya-ka dan-da wurlan-da, \([ngama-nymarra-ya]\)CERG
now eat-IMP this-ABS food-ABS hunger-LEST-CERG
Eat this tucker now so you won't be hungry. \([A,S]\)

Where the antecedent is DATive, so is the subordinate clause:

9-134 birlkali-ja =baka \([miyarl-inaba-ntha darla-tharrba-ntha]\)CDAT
feel sorry for-IND 20BL:1S spear-ABL-CDAT break-PRIOR-CDAT
I'm sorry for you breaking your spear. \([DAT, A]\)

So far, the assignment of complementizing case has involved strict agreement with the antecedent. But subordinate clauses may also receive the dative under several other conditions:

(a) Where the subordinate clause is an argument of a middle verb. Rlarli-ja 'wait', for example, may take as an argument either a dative NP or a dative-complementized clause.

9-135 rlarli-ja-ngala \([yakuri-li-nja naa-j-ursor-ntha]\)CDAT
wait-IND lplus:S:PRES fish-CDAT burn-THEMAT-PROP-CDAT
We're waiting for the fish to cook.

Yalali 'be glad that' is another verb taking phrasal or clausal dative arguments. This condition is clearly the forerunner of the 'clausal argument' condition on complementizing case in K.
(b) When the antecedent is an underlying object assigned a non-ABSolutive case by the General Antipassive (7.4.1.2). In this example the object NP does not appear overtly, being cross-referenced on the auxiliary. But were it to appear, it would take the LOCative (7.4.1.2). So here the case of the antecedent (LOCative) diverges from the complementizing case (DAT):
9-136 mutha=kurrarringga kurri-kurri-ja [wirrka-jarrba-ntha
lot 1nsgOBL:3pluS:PAST watch-REDUP-IND dance-PRIOR-CDAT
wangarr-inaba-nthalo]CDAT
corroboree-ABL-CDAT
A big mob watched us dancing in the corroboree [O:LOC, S]

(c) Where no main clause antecedent exists for the subordinate subject
(although the subordinate object may have an antecedent):

9-137 dangka-ya=kanda kurri-ja maku, [kunawuna-ntha
man-ERG 3A:30:PAST see-IND woman(ABS) child-CDAT
jampila-tharrba-nthaly]
kick-PRIOR-CDAT
The man saw the woman get kicked by the child.
The man saw the woman, as the child kicked her.

9-138 baa-ja =kandi dathin-ki dirr-i [bala-tharri-nja=ma]CDAT
bite-IND 3A:30:FUT that-ERG snake-ERG hit-NEGIND-CDAT if
That snake will bite if someone doesn’t kill (it).

Keen (1983:246) treats condition (c) as a type of concord: ‘the complement
is marked by a dative case which agrees with an unfilled dative NP in S1’. This
explanation is attractive. But to establish it satisfactorily we would need sentence
examples in which the dative marks main clause NPs destined to become future
pivots, and unfortunately Keen gives no examples of this. Without them, it is
better to treat this construction as a special case of ‘obviation’, supplementing the
antecedent-agreement system.

There are thus two exceptions to the antecedent-agreement principle
governing complementizing case: the complementizing DATive can appear when the

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14Despite this lack, her explanation gains cross linguistic support from some Warlpiri data reported by
Hale (1982:296-7), showing 'pure obviative complements' which take subjects in the dative:

9-139 kurdu-ngku ka jarntu warru-wajilipi-nyi, [karnta-ku miyi
child-ERG PRES dog around-chase-NPST woman-DAT food
purr-a-nja-la]
cook-INFIN-OBVIATIVE
The child is chasing the dog around, while the woman is cooking food.

But it is possible to ‘foreground’ the infinitival subject by raising it into the main clause, still marked
dative. The subordinate infinitival complement then optionally agrees with it in case:

9-140 kurdu-ngku ka-rja jarntu warru-wajilipi-nyi karnta-ku, [miyi
child-ERG PRES-3sgOBJ dog around-chase-NPST woman-DAT food
purr-a-nja-la(-Id)
cook-INFIN-OBVIATIVE(-DAT)
The child is chasing the dog around, while the woman is cooking food.
antecedent is a LOCative underlying object, or where no antecedent exists at all 15.

9.6.2 Evolution of the Kayardild Odd Pivot system

It is likely that pT - or at least proto Kayardild-Yangkaal-Yukulta - had a system essentially identical to the Yukulta one just described. At some later stage, the case marking strategy for main clauses shifted from an ergative to an accusative system (7.4.2.2) with objects coming to take the LOCative. As the pT form (kiya) lost its ergative function, the affiliations of the old complementizing ergative would no longer have been clear, and it was reanalysed as a LOCative, with which it was formally identical. If the rules for assigning complementizing case remained unchanged - and this is quite plausible, given the relative conservatism of subordinate clause constructions (cf Givon 1979:89) - we would obtain the schema illustrated in 9-2 (OBV represents the case where the subordinate subject has no antecedent).

Almost the entire complementizing system in stage 1 follows from the single principle of case agreement - the 'obviative dative' and the use of the complementizing dative where the antecedent is an object remarked with the LOCative are two minor supplementary principles. By contrast, that at stage 2 lacks any obvious rationale, and would have to be learnt as a collection of unmotivated rules. Clearly the pressure to somehow refashion it would be great. One simple way would be to reinstate a modified agreement rule: if the antecedent is nominative (A or S), don't mark the subordinate clause, otherwise mark it. Assuming further that speakers were aware of two alternate markers (*LOC and *DAT) but were unsure how to use them, we may postulate a stage in which all subordinate clauses with non-subject antecedents could take either. At this stage we essentially have a switch reference system, which marks identity (unmarked) or non-identity (marked) between matrix and subordinate subjects.

Still later, in modern K, the choice between LOCative and OBLique (ex DATive) cases was reanalysed and aligned with the person of the subject, with LOCative used wherever the subject includes a second person referent (9.1.4).

15 It is not uncommon for systems of antecedent-agreement to employ as complementizers only a subset of the available (relational) case inflections, resulting in exceptions to the agreement principle. In Martuthunira (Dench, to appear) 'Finite Relative Clauses' can be complementized with the Accusative or the Locative, marked on the verb. While the Accusative is used only with accusative antecedents, the Locative covers Genitive as well as Locative antecedents.
Stage 1: Yukulta; pK-Ya-Y

Syntactic role of antecedent

<table>
<thead>
<tr>
<th>Subject</th>
<th>Object</th>
<th>IObj</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>S</td>
<td>0</td>
</tr>
<tr>
<td>0*</td>
<td>IObj</td>
<td>Obv</td>
</tr>
</tbody>
</table>

Case of antecedent

<table>
<thead>
<tr>
<th>ERG</th>
<th>ABS</th>
<th>ABS</th>
<th>LOC/DAT</th>
<th>DAT</th>
</tr>
</thead>
</table>

Complementizing case

| ERG    | 0      | DAT   | DAT     | DAT |

Stage 2: pre-K

Syntactic role of antecedent

<table>
<thead>
<tr>
<th>Subject</th>
<th>Object</th>
<th>Obv</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>S</td>
<td>O</td>
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</table>

Case of antecedent

<table>
<thead>
<tr>
<th>NOM</th>
<th>NOM</th>
<th>LOC</th>
</tr>
</thead>
</table>

Complementizing case

<table>
<thead>
<tr>
<th>LOC</th>
<th>0</th>
<th>DAT</th>
</tr>
</thead>
</table>

O* represents objects assigned the DATive or LOCative by the General Antipassive. Note also that Dative Indirect objects disappeared sometime before modern Kayardild (6.2.4.1); they are not shown here.

Figure 9-2: The disengagement of complementizing case from its antecedent in pre-Kayardild

How this happened remains a mystery. One possibility is that the LOCative became confused with a formally identical second person subject clitic: in Yukulta the 2nd person subject clitic is -yi and the complementizing LOCative is -ya. But this is inconsistent with the suggestion in 7.4.3 that such clitics did not exist in pT. Another possible influence is the K 'vocative', homophonous with the LOCative, which always relates the constituent it marks to a second person addressee (3.3.14.3).

The steps just outlined would produce a system close to that found in modern K: subordinate clauses with non-subject antecedents, or lacking a common argument with the main clause, would take the LOCative or OBLique depending on the person of the subject. There remains one vital difference: this hypothetical system functions with reference to the subordinate subject (and is thus a true SR system), whereas the actual K system functions with reference to a pivot that need not be the subject.

The relevant change here would have occurred if there was a typological shift from a subject prominent language to one where both subject and topic are
prominent. As Givon (1979) has argued, a necessary precondition for such a change is the tolerance in ‘free discourse’ of non-subject topics; such topics can then be syntacticized and come to act as pivots in complex constructions.

Although Keen does not specifically analyse the question of topics in Yukulta discourse, some of the texts she cites provide evidence that they may have (at least) A, S or O function. In the following example (Keen 1983:263), the topic ‘he’ persists through five successive sentences, from each of which it is anaphorically omitted: it tours through A, S, O, S then A functions.

9-141 kamu=kanda — bilwarmma nguku
and 3A:30:PAST (A) burst water(ABS)
And (he) burst the water
kamu=yingka — biya-ja bikali-ja
and 3S:PAST (S) swim-ACT float-ACT
and (he) floated.
ngudi-ja=kanda — nguku-ya wambal-irlu
throw-ACT 3A:30:PAST (O) water-ERG land-ALL
The water threw (him) on solid ground.
wanyji-ja=yingka — kamu=kanda kurri
go up-ACT 3S:PAST (S) and 3A:30:PAST look (A)
(He) climbed out and looked around.

At the level of discourse, therefore, though not at the level of complex syntax, Yukulta allows non-subject topics; we may assume pK-Ya-Y. and probably pT. did too. At a certain stage before modern Kayardild, these topics could have been syntacticized to the extent of becoming pivots in complex (finite) constructions.

Once non-subjects could be pivots, the conditions controlling complementizing case could be formulated equally well in terms of an odd-pivot or a switch-reference rule. As argued in 9.2.5, the switch-reference rule (SR) and the odd-pivot rule (OP) give the same results for almost all conceivable combinations. Consider, for example, the sequence [Matrix object - Subordinate object], as in (9-30) ‘I brought some water, but (they) spilled (it)’. The SR rule requires complementizing case, since the subordinate subject ‘they’ has no main clause antecedent. but so does the OP rule, since ‘water’ is object of both clauses and therefore not subject of both clauses.

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16 Comparative support for this comes from the fact that Lardil, which split off from the Tangkic group relatively early, has evolved non-subject topics, although their syntactic realization is rather different from in K (Appendix E).
The only sentences where the two rules give different results are those like (9-32) 'let us get our spears so (we) can catch fish (with them)'. Here the two clauses have the same subject (which under the SR rule would disallow complementizing case) but the pivot 'spears' is not subject of either sentence and thus requires complementizing case under the OP rule. Given that the two rules make identical predictions about the vast majority of cases, it is likely that, at a certain point, some speakers had a SR rule and some an OP rule to account for the same data. Finally, the OP rule would have been generalized: the only sentences affected would have been those like (9-32) where the OP but not the SR rule required complementizing case.

The evolutionary path just proposed has been rather tortuous: it involves, more or less simultaneously, changes in case systems and a change from a basically subject-prominent language (Yukulta) to one which is both subject and topic prominent (Kayardild). Needless to say, it is extremely tentative, and further data from Yukulta may force some revisions. I have also omitted the very interesting data from Lardil, which would have complicated my exposition without affecting my conclusions (a full synchronic description is in Klokeid 1976, and a summary of the changes between pT and Lardil is in Appendix E.)

But even if the details are sketchy, I hope to have convinced the reader that the K 'odd pivot' system could have arisen from an 'antecedent agreement system' where the subordinate clause agreed in case with its main clause antecedent, and took an 'obviative' dative if no antecedent existed. Moreover, an intermediate 'switch-reference' stage is quite likely. The possibility of a language passing through these three stages so rapidly (remembering the virtually dialectal relationship between K, which represents the third stage, and Yukulta, which preserves the first) emphasizes the close functional and formal similarity between these three types of discourse tracking mechanism.
The following brief vocabulary is provided for basic lexical comparisons with other languages; a full Kayardild dictionary is in preparation. Words are given in their citation form, which in both languages lacks final /a/ (1.7.2); thus the citation form of bungkalda 'knee' is bungkald in both languages. Yangkaal words in initial [l] are written with L, as in Lardil. Kayardild words are from my own fieldwork, the Yangkaal words are compiled from Hale’s field notes and Tindale’s tapes, and supplemented with my own work with the last partial speakers, Rosie Charles, Ronnie Charles, Ross Charles and especially Cora Peters.

<table>
<thead>
<tr>
<th>English</th>
<th>Kayardild</th>
<th>Yangkaal</th>
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<tbody>
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<td>1. body</td>
<td>kinyind, yurr.</td>
<td></td>
</tr>
<tr>
<td>2. head</td>
<td>nald</td>
<td>-</td>
</tr>
<tr>
<td>3. hair</td>
<td>bulda-juld</td>
<td>buld</td>
</tr>
<tr>
<td>4. beard</td>
<td>thukand</td>
<td>thukand</td>
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<tr>
<td>5. face</td>
<td>kirrka miburld</td>
<td></td>
</tr>
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<td>6. forehead</td>
<td>ngarraa</td>
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<td>7. eyebrow</td>
<td>ngirrku</td>
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<td>8. eye</td>
<td>miburld</td>
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<td>9. nose</td>
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<td>10. mouth</td>
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</tr>
<tr>
<td>28. thumb,</td>
<td>bardangind</td>
<td>-</td>
</tr>
<tr>
<td>Term</td>
<td>Translation</td>
<td></td>
</tr>
<tr>
<td>-----------------------------</td>
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<td></td>
</tr>
<tr>
<td>big toe</td>
<td></td>
<td></td>
</tr>
<tr>
<td>29. fingernail, toenail</td>
<td>wirrind</td>
<td></td>
</tr>
<tr>
<td>30. thigh</td>
<td>darr</td>
<td></td>
</tr>
<tr>
<td>31. knee</td>
<td>bungkald</td>
<td></td>
</tr>
<tr>
<td>32. shin, calf</td>
<td>kurthurr</td>
<td></td>
</tr>
<tr>
<td>33. ankle</td>
<td>buraa</td>
<td></td>
</tr>
<tr>
<td>34. foot</td>
<td>jar, jaa</td>
<td></td>
</tr>
<tr>
<td>35. penis</td>
<td>ngulu</td>
<td></td>
</tr>
<tr>
<td>36. testicles</td>
<td>burld, kuru wrrjiwrrji</td>
<td></td>
</tr>
<tr>
<td>37. vagina</td>
<td>jald</td>
<td></td>
</tr>
<tr>
<td>38. skin</td>
<td>nguyarr</td>
<td></td>
</tr>
<tr>
<td>39. bone</td>
<td>juld</td>
<td></td>
</tr>
<tr>
<td>40. blood</td>
<td>kandu</td>
<td></td>
</tr>
<tr>
<td>41. urine</td>
<td>kunbuk</td>
<td></td>
</tr>
<tr>
<td>42. faeces, shit</td>
<td>durd</td>
<td></td>
</tr>
<tr>
<td>43. heart</td>
<td>buljiy</td>
<td></td>
</tr>
<tr>
<td>44. liver</td>
<td>karrmid</td>
<td></td>
</tr>
<tr>
<td>45. egg</td>
<td>kuru</td>
<td></td>
</tr>
<tr>
<td>46. tail</td>
<td>walku</td>
<td></td>
</tr>
<tr>
<td>47. man, person</td>
<td>dangkaa</td>
<td></td>
</tr>
<tr>
<td>48. woman</td>
<td>maku</td>
<td></td>
</tr>
<tr>
<td>49. child</td>
<td>kunawun</td>
<td></td>
</tr>
<tr>
<td>50. spirit, ghost</td>
<td>ngabay</td>
<td></td>
</tr>
<tr>
<td>51. husband</td>
<td>dirrkuli, dund</td>
<td></td>
</tr>
<tr>
<td>52. wife</td>
<td>karndi</td>
<td></td>
</tr>
<tr>
<td>53. mother</td>
<td>ngamathu, kulakul</td>
<td></td>
</tr>
<tr>
<td>54. father</td>
<td>kanthathu, kajakaj</td>
<td></td>
</tr>
<tr>
<td>55. food</td>
<td>wurand</td>
<td></td>
</tr>
<tr>
<td>(all types)</td>
<td>wurdalji</td>
<td></td>
</tr>
<tr>
<td>56. dog, dingo</td>
<td>kurthurrwarrayarrb ngawurr</td>
<td></td>
</tr>
<tr>
<td>57. wallaby</td>
<td>wardund, kumbun</td>
<td></td>
</tr>
<tr>
<td>58. (mangrove) rat</td>
<td>kulthangarr</td>
<td></td>
</tr>
<tr>
<td>59. flying fox</td>
<td>bangaa</td>
<td></td>
</tr>
<tr>
<td>60. sea turtle</td>
<td>maali</td>
<td></td>
</tr>
<tr>
<td>61. swamp turtle</td>
<td>bulkurdudu</td>
<td></td>
</tr>
<tr>
<td>62. crocodile</td>
<td>yarbud</td>
<td></td>
</tr>
<tr>
<td>63. (any) snake</td>
<td>warrund</td>
<td></td>
</tr>
<tr>
<td>64. goanna</td>
<td>yakuri</td>
<td></td>
</tr>
<tr>
<td>65. (any) fish</td>
<td>miid</td>
<td></td>
</tr>
<tr>
<td>66. crayfish</td>
<td>wakaku</td>
<td></td>
</tr>
<tr>
<td>67. frog</td>
<td>barrmakal</td>
<td></td>
</tr>
<tr>
<td>68. spider</td>
<td>ngirrngud</td>
<td></td>
</tr>
<tr>
<td>69. house fly</td>
<td>kunguld</td>
<td></td>
</tr>
<tr>
<td>70. mosquito</td>
<td>miid</td>
<td></td>
</tr>
<tr>
<td>71. house fly</td>
<td>ngarmungarrmu</td>
<td></td>
</tr>
<tr>
<td>72. wasp</td>
<td>bulmbaa</td>
<td></td>
</tr>
<tr>
<td>73. grasshopper</td>
<td>minyingarnal</td>
<td></td>
</tr>
<tr>
<td>74. grub</td>
<td>barakurr</td>
<td></td>
</tr>
<tr>
<td>75. ant</td>
<td>thuburungkurru, kulirr</td>
<td></td>
</tr>
<tr>
<td>76. eel</td>
<td>murndurndurnd</td>
<td></td>
</tr>
<tr>
<td>77. worm, maggot</td>
<td>marirrwalad</td>
<td></td>
</tr>
<tr>
<td>78. centipede</td>
<td>wamban</td>
<td></td>
</tr>
<tr>
<td>79. scorpion</td>
<td>yarbud</td>
<td></td>
</tr>
<tr>
<td>80. (any) bird</td>
<td>yarlbud</td>
<td></td>
</tr>
</tbody>
</table>
81. eaglehawk  jirdabirri, bukaji  jurdabirri
82. crow  jardarrk  jardarrk
83. whitecockatoo  ngarnal
84. parrot (king)  biljirri
85. kookaburra  thalkurrrki
86. brolga  birrangarr
87. black crane  bujuku
88. pelican  wanikarr
89. scrub turkey  naljirrirri
90. pigeon  kurukuku
91. seagull  kaarrku
92. tree  thungald, diwald  thungald, diwarr
93. bark  nguyarr  thalund
94. leaf  jirndiy
95. root  jara thungald  jaa thungald
96. grass  karnd
97. stone  kamarr
98. mud  mardalk
99. sand  ngawund, dulk  dulk
100. ground, dirt  dulk
101. hole  widaa
102. well  ngambu  ngambu-nguku
103. fresh water  nguku
104. salt water, sea  malaaj
105. river, creek  katharr  katharri
106. hill  kurndaji
107. fire  ngid, kaburrrb  nyud , ngid,
108. charcoal  tharrr  karrr
109. embers  kaburrrb
110. ash  ngawund
111. smoke  waku  wurungkull
112. light, flame  yalulu  nganjarrrd
113. sun  warrrkru  warrrku
114. moon  walldarr  walldarr
115. star  yirangkarr, yarangkarr, miburl-thungald  miburlda thungald
116. cloud  rukaruk, wund
117. wind  warrrmar, warrngald  warrmar
118. thunderstorm  warild, mangar
119. lightning  birringk
120. rainbow  thuwathu  thuwathu
121. rain  wund
122. road, track  yubuyubu, wayirri
123. camp  nathaa
124. raft  walbu
125. boomerang  wangalk
126. woomera  murruku
127. (any) spear  wumburungk
128. club  karwaa
129. yamstick  kathirr
130. firestick  kwand
131. axe (stone)  warndawarnd
(shell)  narraa
132. dilly bag  ngurrumanji
133. fish net  mijild, kirru
134. yesterday  barrunthay  barrunthay
| 135. tomorrow | balmbiwu, balmbu | balmbara |
| 136. one     | warngid         | warngid |
| 137. two     | kiyarrngk       | kiyarrngk |
| 138. three   | burldamurr      | burldamurr |
| 139. several | mirndind        | - |
| 140. many    | muthaa          | - |
| 141. good    | mirraa          | birdi |
| 142. bad, no good | birdiy     | birdi |
| 143. sharp   | dikurr, wurrw   | wurrw |
| 144. blunt   | dami            | warawarr |
| 145. big     | jungarr, jungarrb, bardangu |
| 146. small   | kunyaa          | kunyaa |
| 147. thin    | balkaji         | bardubardu |
| 148. long, tall | yulmburr, dingkarr | yulmburr |
| 149. short   | damurr          | mura |
| 150. wide    | ngirri          | - |
| 151. straight | junku           | - |
| 152. crooked | murndamurnda    | - |
| 153. hot     | ngithalkuru     | - |
| 154. cold    | rikaa           | - |
| 155. wet     | dukurduku       | - |
| 156. dry     | dinthirr        | - |
| 157. heavy   | thaliy, jirdangkul | jirdangkul |
| 158. light   | barrbarr        | barrbarr |
| 159. full    | birrbirrbi      | - |
| 160. empty, hollow | jambarnd | duuru |
| 161. hungry  | bardakawarri    | ngamand |
| 162. thirsty | ngawarri        | ngawarri |
| 163. full    | bulband         | bulband |
| (with food)  | ngarrku, bardu  | ngarrku |
| 164. hard    | murldind, durdiy | durdii |
| 165. soft    | ngumu           | ngumuyurr |
| 166. white   | balarr          | balarrayurr |
| 167. raw     | kunku           | kunkuw |
| 168. cooked  | burungk         | burlungk |

**Verbs**

| 170. come    | dali-j         |
| 171. go      | warra-j        |
| 172. climb up | wanji-j       |
| 173. go down  | thula-j        |
| 174. run      | budii-j, jawi-j |
| 175. jump     | kali-j         |
| 176. fall down | barlji-j     |
| 177. throw    | ngudi-j        |
| 178. follow   | jinka-j        |
| 179. pick up  | jirrma-j       |
| 180. take     | kurrka-th, buru-th |
| 181. leave    | dana-th        |
| 182. stay     | wirdi-j        |
| 183. sit down | dii-j          |
| 184. stand    | thaldi-j       |
| 185. stand up | labi-j         |
| 186. stand (tr) | thaldijarrma-th |
| 187. lie down | yiliwi-j | buthiya-j |
| 188. put down | yii-j, yijarma-th | yiijarrma-th |
| 189. bathe, bogey | kujuu-j | - |
| 190. swim | biya-j | - |
| 191. cut | kala-th, barrki-j | kala-th, barrki-j |
| 191. cut | nurri-j | - |
| 192. scrape | kuluu-j | wii-j |
| 193. hit | bala-th | bala-th |
| 194. spear | raa-j, kurdala-th | laa-j, kurdala-th |
| 195. dig | kuluu-j, wirrnga-j | kulu-j |
| 196. pull | bula-th, buu-j | bula-th, buu-j |
| 197. rub | burukuraa-j | - |
| 198. break | dara-th | dara-th |
| 199. burn, cook | karna-j | karna-j |
| 200. cook (intr) | naa-j | - |
| 201. eat | diya-j | diya-j |
| 202. bite | baa-j | baa-j |
| 203. drink | diya-j, ngamaka-th, kurtdama-j | diya-j, ngamaka-th |
| 204. smell | barndii-j | banji-j |
| 205. hear | marri-j | marri-j |
| 206. speak, talk | kamburi-j | kamburi-j |
| 207. ask (about) | daami-j | daami-j |
| 208. ask (for) | kamarri-j | - |
| 209. cry | rikarrkali-j, rikalkali-j | riki-j |
| 210. shout | wama-th | - |
| 211. laugh | yathuyii-j | yathuyi-j |
| 212. wait | ngaka-th | ngaka-th |
| 213. look at, see | kurri-j | kurri-j |
| 214. hide | kinayiwa-th | - |
| 215. lose | yurrjalu-th | - |
| 216. search for | jani-j | jani-j |
| 217. find | kaba-th | - |
| 218. give | wuu-j | wuu-j |
| 219. die | bukawa-th, kurrirrawa-th | buka-th |
| 220. yes | (no word) | ngii |
| 221. no, nothing | warirr | - |
APPENDIX B

THE VOCABULARY OF KAYARDILD KINSHIP

B. 1 Basic classificatory terms

B-1 and B-2 give schematic versions of the main kinship terms, with male and female egos respectively. My set of female terms is incomplete and possibly inaccurate; they are provided here for reference purposes only. More research needs to be done here, preferably by a female investigator, as people saw little point in teaching me the more peripheral female-ego terms.

B-3 illustrates the sibling terms. Note that kin types can be defined consanguinely (e.g. MBS) or affinally (e.g. DHF), and in many cases alternate consanguineal definitions are possible (FZS or MBS). To avoid cluttering I have given a single definition, reflecting what I consider to be the primary meaning: readers may work the others out for themselves by tracing marriage and descent lines. Alternate names in brackets are 'secondary extensions', discussed below.

B. 1.1 Superclasses and 'extended' kin terms

The Kaiadilt kinship system is of the Aranda type, distinguishing four patriline (corresponding to ego's four grandparents). Note that although there are no named subsections, the pattern of extension of kin terms reveals an implicit system of kinship 'superclasses' (Scheffler 1978) here numbered 1 to 8, which correspond exactly to the eight 'subsections' which we would obtain by dividing each patriline into two 'merged alternate generation sets'\(^1\).

\(^1\)There are two basic recipes for deriving 'subsections'. We can start from large social units and work from the top down, for example by taking two moieties, subdividing each into two semimoieties, and then subdividing each semimoiety into two merged alternate generation sets. Or we can take the individual as our point of departure, and work from the bottom up by extending the reference of certain kin terms via 'merging rules' like 'sibling equivalence'. The first approach was taken by scholars such as Radcliffe-Brown, and is continued in Fox (1967), whereas the second view was persuasively advocated by Scheffler (1978). Because there is no evidence of moieties or the like in Kaiadilt society, the second approach is more plausible in this case. I would do not wish to imply, however, that this is true for other groups: the beauty of most Australian kinship systems is that the same mathematically elegant result can be arrived at from a variety of premises. However, this should not obscure the central differences between subsections and subsection-like superclasses. The former are sociocentric, in that someone is in the kamarrangl subsection, for example, regardless of ego's subsection. The latter are egocentric, so that someone who is in ego's 'father's superclass', for example, will be in the 'ego superclass' for ego's children.
Figure B-1: Kayardild Classificatory Kin Terms: Male Ego

Subsection-like 'superclasses' are numbered 1 to 8.
Figure B-2: Kayardild Kin Terms: Female Ego (incomplete)
These terms may be analysed as follows: *kularrind* 'opposite sex sibling'; *duujind* 'younger sibling of same sex'; *thabuju* 'older sibling, same sex, male ego'; *yakukathu* 'older sibling, same sex, female ego'. *Thabuju* and *yakukathu* are proto Pama Nyungan terms, with the same meanings as in Kayardild. *kularrind* appears to be a new coinage in Kayardild. Its etymology is interesting: it seems to be a nominalization of the verb *kularrija* 'untie'; opposite sex siblings, who begin life with a very uninhibited relationship, are 'untied', as it were, at adolescence, when a relationship of total avoidance begins. This is summed up by the phrase *ngulmuwa wakath* 'deadly sister'; the only other kin term to which *ngulmuwa* 'deadly, dangerous' can be applied is *jibarn* 'mother-in-law'.

**Figure B-3:** Kayardild Sibling Terms (Male and Female Ego)
The extension of terms to cover a 'superclass' may be of two kinds: 'primary', where the extended term is the only way of referring to certain relatives, or 'secondary', where the extended term replaces a more specific term in the same superclass. I will discuss each in turn.

In three of the superclasses, all kin types are known by the one 'primarily extended' term: the mother's mother's superclass (4), the father-in-law's superclass (6) and the mother-in-law's superclass (8). Thus all members of superclass 4 (i.e. MM, MMB, MMBSS, MMBSD, ZDS and ZDD) are known as ngarriju 'mother's mother'; all members of the mother-in-law's superclass (i.e. WM, WMZ, WMB, ZDH, ZSW) are known as jibarn 'mother-in-law' and all members of the father-in-law's superclass (WF, WFZ, ZS and ZD) are known as kardu 'father-in-law'. Despite their wide reference I would assert that each term has a primary meaning (as the glosses indicate) which is systematically 'extended'. This primary meaning will be reflected in the English gloss, and used in exemplifying kin terms.

These primary meanings may be extended by the following principle: if no special term exists, a person is known by the term for (a) their same sex sibling (b) their opposite sex sibling (c) their father's father (terms must be sought in the above order).

The term kardu may be an exception, with two equally primary meanings, 'father-in-law' and 'nephew'; unlike the other two terms, speakers tailor the translation of this word to the kin type.

In other superclasses the primary extensions do not span the whole superclass, and various extra terminological distinctions may be made. Terms may be determined by sex (e.g. the mother's superclass (7), in which all females are ngamathu 'mother' and all males kakuju 'uncle'), by generational seniority or juniority (e.g. in the wife's superclass (2), where all members of the +2 generation are babiju, regardless of sex, while all those of the 0 or -2 generations are karndi 'wife' if female and dund 'husband' if male, or relative age (as with the sibling terms in B-3). The greatest terminological elaboration is in ego's (1), ego's father's (5) and ego's wife's / maternal grandmother's (2) superclasses.

So far we have two reasons for employing superclasses as an analytical device:

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2 This has the consequence that a man calls his wife's brother dund 'husband'; conversely a woman calls her husband's sister karndi 'wife'.
all kin types in a superclass may receive the same term, and no term includes kin types in different superclasses. A third advantage of the superclass analysis is that it accounts for 'secondary extensions' of kin terms, where the focal term of a superclass may replace more specific terms. DS and DD, for example, are normally called malungind 'daughter's child'. But they may also be known as jambathu 'mother's father', which is the primary term for all other members of that superclass. Similarly, FF is basically kangku, but may also be called thabuju, since he is in ego's (and ego's big brother's) superclass.

A realistic account of the kinship system must thus explain three types of use for certain kin terms:

(a) the primary semantic focus or 'prototype', thought of by speakers as the basic meaning of the term, and given in English glosses. Thus jibarn, though it designates a number of kin types (WM, WMB, ZDH, ZSW) will always be translated as 'mother-in-law', and babiju (FM, FMB) as 'granny'. And speakers asked to exemplify a jibarn or a babiju will give a wife's mother and a father's mother respectively, and not, say, a wife's mother's brother or a father's mother's brother.

(b) primary extensions, which allow terms to cover kin types lacking a special name. The extensions of babiju from FM to FMB, and of jibarn from WM to WMB, ZSH and ZSW are examples of these.

(c) secondary extensions, allowing specific kin terms to be substituted by others from the same superclass. These secondary extensions are only relevant where members of a superclass are terminologically distinguished: they therefore bypass superclasses 4, 7 and 8. (For some reason it also does not apply to the father's / father's children's superclass.)

It is hard to give a rule determining which term will be secondarily extended. In the wife's/ mother's mother's superclass the term babiju 'mother's mother' is used; one may call one's WZ, WB or SSW babiju. In one's mother's father's superclass the term jambathu 'mother's father' is used. In ego's own superclass, no single term predominates: instead, the appropriate sibling term is used. Thus a man's FF may be called thabuju 'older brother', his SS duujind 'younger brother', and his SD wakath 'sister'.

The sociolinguistic rules governing the use of secondary extensions are complex. In addressing one's wife's sister, for example, one has the choice between the
primary extension *karndi* 'wife' and the secondary extension *babiju* 'father’s mother'. If the addressee is a young child, where no sexual advances are likely, the term *karndi* 'wife' would probably be used. If she is nubile, on the other hand, the term *karndi* is potentially provocative, or at least flirtatious, and must be finely judged. If her husband is present (and he would normally be a classificatory brother to the speaker), one may use *karndi* in a spirit of brotherly camaraderie (implying 'we’re brothers, we’re mates, your wife is my wife'). But if there is some friction or jealousy, it would be more prudent to use *babiju* (implying 'look, you needn’t worry, I’ll treat your wife as I’d treat my own grandmother').

Unfortunately I have not yet made a full study of all types of secondary extension and their social context. But it should be obvious that the reference of kin terms is by no means fixed, and is susceptible to social manipulation of various kinds, although always within the bounds of the appropriate superclass.\(^3\)

### B.1.2 Skewing

A further complication is introduced by a 'skewing' rule which reclassifies cross-cousins, and their spouses and children, giving them special names and effectively shifting them up one generation. This is illustrated in B-4: the 'expected' terms are in [square brackets], followed by the special names and the terms people use to explain them (in parentheses).\(^4\) WARNING TO THE READER: my data on this are not fully consistent, so this section should be treated as a provisional sketch only. The effect of this skewing rule is to stress the non-marriageability of cross-cousins by placing them in the non-marriageable, mother’s (+1) generation: as the alternative terms in parentheses indicate, the special term *ngayarndathu* (MBD) may be replaced by *kunyaa ngamathu* 'little mother' or *marrkathu* 'aunty'. Her husband may be known as *kakuju*, likewise shifting him up to ego’s parents' generation, even though his expected term is *ngarriju* (ego’s generation).

Skewing extends to the cross cousin’s offspring, known by the special term *ngathiju* (sometimes translated as 'cousin'), and to the male offspring’s wife, known by the special term *budurdu*. These replace the expected -1 generation terms, *jibarn*

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\(^4\)I am grateful to David Trigger for pointing out the possibility of a skewing rule in Kayardild and discussing the similar Garawa/Waanyi system with me.
and *kardu* respectively. (I do not know what the female *ngathiju*’s husband is called.)

Subsequent generations return to the normal pattern, so that the offspring of *budurdu* (ZD) and *ngathiju* (MBDS) will be known as *malungind* (DS/DD) or by the term *jambathu* in its superclass extension.

As yet I am unsure whether the skewing rule applies to all kin of the appropriate classification, or only to those from ‘close up’. But the fact that I was given the terms *jambathu* and *ngarriju* first suggests that skewing only applies in certain cases.

Similar skewing rules are found in Garawa and Waanyi (Trigger 1983) and in Lardil (Sharpe 1935).^5^

**B.2 Other kin terms**

The kin terms given above are *classificatory*: they extend to anyone whom the algebra of kinship places in the appropriate category. In addition, Kayardild possesses a number of other kin terms serving various purposes.

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^5^Sharpe observes that ‘In relation to the mother’s brother daughter (or *yurrwardin* – N.E.) an anomalous change in terminology may occur. She may, as the natives say, “follow her father’s sister”; i.e. Ego may apply the same term to her that he does to her father’s sister, which is mother (*ngama*). The regular term for mother’s brother’s daughter may at the same time be retained and used in conjunction with the term for mother, so that this woman becomes “mother’s brother’s daughter–mother” (*yurrwardin-ngama*). In this event, the logical sequence in terminology is followed through by Ego, who thus calls her husband, father (*KANDA*), and her children, brother and sister (*TABU*, *KUNGGO*, and *YAKU*), although the father is in Ego’s own generation and the children, who become brother and sister, are in the generation below Ego.”
B. 2. 1 Affective terms

Words like kajakaj ‘daddy’ and kulakul ‘mummy’ are used for someone in the ‘father’ or ‘mother’ category whom one regards emotionally as a mother or father. This includes biological parents but also others who have played a major part in one’s upbringing.

B. 2. 2 Actual terms

These commemorate biological or significant social relationships based on events that have actually occurred. Examples are ngiijnimatharrb ‘begetter of me, biological father (genitor)’, ngiijnimayarrb ‘begotten by me, my biological offspring (male speaker)’ ngiijnbadlyarrb or ngiijnbadind ‘carrier of me, my biological mother (genitrix)’, ngiijnbadind ‘carried by me, my biological offspring (woman)’, ngarlinmarrayarrb ‘before gone, actual older sibling’, danaanmarrayarrb ‘after gone, actual younger sibling’, ngiijnkinyilutharrb ‘giver of form to me, my (actual) midwife’, ngiijnkinyililyarrb ‘given form by me, child delivered by me’, ngiijnadaratharrb ‘breaker of me, my circumcizer’, ngiijnadarayarrb or ngiijnadarathirrind ‘broken by me, my circumcizee’. (Formally these are all nominalizations – see 8.2, 8.3).

Note that each of these terms singles out one significant and prototypical individual from a set of classificatory equivalents: one’s biological father from the set of classificatory fathers, one’s actual midwife from the set of classificatory ‘aunties’ (who are the only people entitled and obliged to perform the delivery), one’s actual circumciser from the set of classificatory fathers-in-law (who alone are entitled and obliged to act as circumcisers).

The pronominal part of the nominalization may be varied, e.g. niwandaratharrb ‘circumciser of him’, ngumbandaratharrb ‘circumciser of you’ and so on (8.3).

There are also a number of compound terms for actual affines: nathawakathawuru (literally ‘camp-sister-having’) ‘actual sister’s husband’, nathakambinjuru (lit. ‘camp-child-having’) ‘actual child-in-law (male ego), actual brother’s child-in-law (female ego)’. (See 3.6.3). The sole non-compound term in this semantic domain is kabiriju ‘(actual) mother’s co-wife’ (who will normally be a ‘mother’s sister’).

A number of classificatory terms may be made ‘actual’ by the addition of the suffix nganjii ‘own’. For example kardu can be applied to any classificatory father-in-law, while kardunganji is limited to the speaker’s actual father-in-law. -nganjii terms may be used in reference or address.
This suffix is most often heard with kardu. When I tried it on other terms, e.g. marrkathu-nganji [aunt-OWN] or kularrin-nganji [opposite sex sibling-OWN], these were at first accepted, but later my informants had second thoughts. I am therefore unsure whether this suffix can combine with all kin terms.

B.2.3 Triangular kin terms

These code information about the mutual relationships between three people: speaker, hearer, and a third person (or 'propositus'). Developed systems of triangular kin terms have been reported for Nyangumarda (O'Grady & Mooney 1973) and Gurindji (McConvell 1982).

Kayardild does not have a complete set of triangular terms. However, some may be derived by using first person nonsingular pronominal prefixes. Thus ngakinmaand 'begetter of us' specifies that the referent is father to both speaker and addressee. Because these terms are only possible if both speaker and addressee bear the same relation to the propositus they are confined to conversation between siblings.

More interesting is the following monomorphemic triangular term, to my knowledge the only one available in Kayardild. The term biriid is used by a child's babiju (father's mother) to refer to the child's father (who is the babiju's son.)

B.2.4 Bereavement terms

These are used when addressing or referring to someone suffering recent bereavement. For most kin types the bereavement term simply consists of the kin term compounded with the word kurirr 'dead', e.g. kangku-kurirr 'one whose father's father has recently died', kambin-kurirr 'one whose child has recently died'. But there are special monomorphemic terms for three categories of kin most affected by loss: kuwariwari "orphan", one who has recently lost a parent; marirr, 'widow(er), one who has recently lost a spouse' and burjululu 'one who has recently lost a sibling'.

---

6. Another language with an incomplete set of triangular kin terms is Kalkatungu, which has only two: one where propositus is speaker's M and hearer'sMZ, and one where propositus is speaker's F and hearer's FB (Blake 1979:81).

7. This is homophonous with a word meaning 'alive'.

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B.2.5 Dyadic terms

These take a suffix -ngarrba (formally identical to the CONSequentail case) after the stem. They name pairs of people, one of whom calls the other X, and stresses that these two people are acting together. They may be used in reference (B-1) or address (B-2):

B-1 kiyarrng-ka-rna yiwi-j, thabuju-ngarrb
two-NOM-now sleep-ACT EB-DYAD(NOM)
Two are lying (in the sleeping bag) now, two brothers together.

B-2 yakukathu-ngarrba dali-j, nga-ku-l-da warra-j!
EZ-DYAD(NOM) come-IMP 1-INC-PLU-NOM go-IMP
You two sisters come on, let’s all go!

They may also be used ironically to emphasize that the referents’ behaviour is not appropriate to their kin relationship (cf Merlan & Heath, 1982):

B-3 jambathu-ngarrba karndi-ya dun-d
cousin-DYAD(NOM) wife-NOM husband-NOM
Those two cousins are husband and wife.

Where the base term is not self-reciprocal, as in (a), the senior term is used (b):

(a)

<table>
<thead>
<tr>
<th>Term</th>
<th>Base Term</th>
<th>Reciprocal Term</th>
</tr>
</thead>
<tbody>
<tr>
<td>kangku</td>
<td>FF, FFZ, SCH</td>
<td>kangku-ngarrba</td>
</tr>
<tr>
<td>kularrin-da</td>
<td>Sibling of opposite sex</td>
<td>kularrin-ngarrba</td>
</tr>
</tbody>
</table>

(b)

<table>
<thead>
<tr>
<th>Term</th>
<th>Base Term</th>
<th>Reciprocal Term</th>
</tr>
</thead>
<tbody>
<tr>
<td>yakukathu</td>
<td>EZ</td>
<td>yakukathu-ngarrba Z with Z</td>
</tr>
<tr>
<td>thabuju</td>
<td>EB</td>
<td>thabuju-ngarrba B with B</td>
</tr>
<tr>
<td>ngamathu</td>
<td>M</td>
<td>ngamathu-ngarrba M with Ch.</td>
</tr>
</tbody>
</table>

An interesting exception occurs with pairs containing a *kakuj* ‘uncle: son-in-law’ and a *kardu* ‘father-in-law: nephew’. Here whichever term refers to the senior member of the pair serves as the base: *kakujngarrba* ‘uncle with nephew’; *kardungarrba* ‘father-in-law with son-in-law’. This reflects the ‘dual focus’ of these terms mentioned in B.1.

---

8Note the difference between this and the DUal {-kiyarrng-ka}. *Ngamathu-yarrng-ka* [mother-DU-NOM] refers to two people who are both mothers to some other person, whereas *ngamathu-ngarrba* is used of two people, one of whom is mother to the other. In other words, the DUal follows a stem expressing the relation of two people to an outside referent, whereas the DYAD follows a stem expressing a relation within the group.
Note that with the terms karndi-ya 'wife (male ego), sister-in-law (female ego)' and dun-da 'husband (female ego), brother-in-law (male ego)', the derived dyad terms allow only the in-law meaning: karndi-ngarrba is 'pair who are each other's sisters-in-law' and dun-ngarba is 'pair who are each other's brothers-in-law'. 'Husband and wife' can only be translated by karndiya dunda (order fixed)\(^9\).

The formal similarity with the CONSequential may be more than accidental. One semantic rationalization is that the pair behave the way they do because they have this kin relationship\(^10\). A comparative study of the etymology of dyad suffixes throughout Australia would be interesting.

B.2.6 Affectionate terms in barda

These are used in address, when 'showing you really love someone'. They are particularly appropriate in such situations as expressing condolences (B-4) or asking for favours (B-5).

The suffix -barda usually follows the regular stem, e.g. jambathu-bard 'cross-cousin-AFFEC', duujin-bard 'younger brother-AFFEC'. But the two words kakuju 'uncle' and thabuju 'older brother' have irregular stems before this suffix: kakutha-barda and thabutha-barda\(^11\).

B-4 bi-rr-a kamburi-ja dandanangan-d: yakukathu-bard - ngada
3-DU-NOM say-ACT like this-NOM older sister-AFFEC I: NOM
bi-rr-wan-da yakukathu - yakukathu-bard, ngakin-da
3-DU-POSS-NOM sister(NOM) older sister-AFFEC lnsgINC: POSS-NOM
kardu-wa kurirr
son-NOM dead(NOM)

They spoke (to me) like this: dear older sister – I'm their older sister, our son is dead.

B-5 dan-da kada wuu-ja kajakaja-bard
here-NOM again(NOM) give-IMP daddy-AFFEC

Give some more here darling daddy!

There is one special monomorphemic form in this series: wangkurdu may replace kularrinbard 'darling opposite sex sibling'.

\(^9\)One possible reason for this is that there is neither an appropriate reciprocal term (K lacking a word 'spouse') nor a clearly 'senior' term, so neither of the regular principles could be employed.

\(^10\)Almost every ethnography of an Australian Aboriginal society contains ample discussion of how people's kin relationships determine their behaviour together. See, for example, Thomson (1935), Meggitt (1962), and the discussions by Dixon (1971), Haviland (1979b) and Rumsey (1982b) on appropriate speech styles.

\(^11\)Speakers disagree on the forms of some of the other kin terms: some suggested forms without -THu, e.g. babi-barda, marrka-barda, while others suggested the full form: babiju-barda, marrkathu-barda. Forms on the pattern of thabuju, with irregular final -tha (e.g. babitha-barda) were not accepted.
APPENDIX C

PHONOLOGY

This appendix deals with several phonological questions not covered in 1.7: isolating the word, segmental phonetics, phonotactics, stress, and prosodic lengthening of consonants.

C.1 Isolating the word

The following criteria allow us to segment Kayardild utterances into words. The units defined by phonological and grammatical criteria coincide with those defined grammatically.

Phonological criteria:

Phonotactic constraints: Each Kayardild word must begin with a consonant and end with a vowel (except where 'prosodic truncation' applies – see below). Other phonotactic constraints, such as the restriction of consonant clusters to word-medial position (C.4.2), rule out some possible word boundaries.

Stress placement: Primary stress always falls on the first syllable of a phonological word (C.3.2).

Prosodic truncation: Word-final short /a/ may be prosodically truncated when it is the final syllable of a breath-group.

'Exposed' vs 'protected' allomorphs: Certain nominal and verbal suffixes have reduced forms when they appear word finally.

Grammatical criteria:

Potential pause: Pauses may be made between two words, but not within the word.

The sole exceptions are the conjunctions bana and birra: these have word-like phonological properties, and are permutable within limits (6.7.5), but cannot be uttered in isolation.
Permutation: With certain well-defined exceptions (2.2) sequences of words may be permuted without substantial changes in meaning. Segments within the word, on the other hand, cannot be permuted without either altering the meaning or yielding nonsense.

Concord: All constituents higher than the word display complete concord. This process of 'downward percolation' of inflections stops when the unit 'word' is reached.

Isolability: Speakers are happy to talk about, and assign meanings to, grammatical words, inflected or not, but in general they will not recognize parts of words or give meanings to them.

C.2 Segmental Phonology

The Kayardild phoneme inventory was given in 1.7.1, to which the reader is referred. In this section I give crucial minimal pairs, and discuss the phonetic realization of these phonemes.

C.2.1 Crucial minimal pairs

Consonants

<table>
<thead>
<tr>
<th>Phoneme</th>
<th>Neutralized</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>/d/ - /rd/</td>
<td>(neutralized)</td>
<td>wadu 'smoke'</td>
</tr>
<tr>
<td></td>
<td></td>
<td>kardu 'father-in-law'</td>
</tr>
<tr>
<td>/n/ - /rn/</td>
<td>(neutralized)</td>
<td>miniriy 'place name'</td>
</tr>
<tr>
<td></td>
<td></td>
<td>mirnirnmaa/ 'rub eyes'</td>
</tr>
<tr>
<td>/d/ - /th/</td>
<td>(no initial /d/)</td>
<td>badind 'carrying'</td>
</tr>
<tr>
<td></td>
<td></td>
<td>bathind 'coming from the west'</td>
</tr>
<tr>
<td>/n/ - /nh/</td>
<td>(neither found initially)</td>
<td>kurdalanangku 'will not spear'</td>
</tr>
<tr>
<td></td>
<td></td>
<td>kurdalanharr 'might spear'</td>
</tr>
<tr>
<td>/th/ - /j/</td>
<td>/arij 'swallow'</td>
<td>matharr 'nail fish'</td>
</tr>
<tr>
<td></td>
<td>/thaarij 'bring back'</td>
<td>majarri 'navel'</td>
</tr>
<tr>
<td>/nh/ - /ny/</td>
<td>(no initial /nh/)</td>
<td>waranyarr 'might go'</td>
</tr>
<tr>
<td></td>
<td></td>
<td>waranhharr 'might send'</td>
</tr>
<tr>
<td>/th/ - /rd/</td>
<td>(r)duland 'fat'</td>
<td>nathaa 'camp'</td>
</tr>
<tr>
<td></td>
<td>thuland 'descending'</td>
<td>nardaa 'bullrush'</td>
</tr>
<tr>
<td>/rr/ - /r/</td>
<td>(no initial /rr/)</td>
<td>kurrij 'see'</td>
</tr>
<tr>
<td></td>
<td></td>
<td>kurij 'wash'</td>
</tr>
<tr>
<td>/rr/ - /d/</td>
<td>(&quot; &quot;)</td>
<td>ngarra-ban 'we two (exc) too'</td>
</tr>
<tr>
<td></td>
<td></td>
<td>ngada-ban 'me too'</td>
</tr>
</tbody>
</table>

2 However, Roland Moodoonuthi, perhaps my most articulate informant, will talk about certain case suffixes in isolation, provided they have word-like phonotactics and a fairly constant meaning, e.g. the instrumental suffix nguni.
Short vs long vowels

/i/ - /ii/  
diijarr 'dorsal fin; nail'
diijarr 'sit-PST'

/a/ - /aa/  
maliny 'place name'
maali 'swamp turtle'

/u/ - /uu/  
burrmath 'duck'
buurrmath 'fart'

C.2.2 Consonantal allophones

Stops and nasals.

Bilabial /b/ requires closure of the lips in careful speech, but in more casual styles is often followed by a labial offglide, or may be lenited to [w]. (The corresponding nasal /m/ is always phonetic [m]).

Gloss       Phonemic form      Phonetic realization

'white'      /balarr/          [bɛlarr] (careful speech)
             ['bɛlarr] (casual)
             [wɛlarr] (casual)

The corresponding nasal /m/ is never lenited.

/k/ is normally a dorso-velar stop, but is fronted to [k] before /i/; similarly /ng/ is fronted to dorso-palatal [ŋ]:

Gloss       Phonemic form      Phonetic realization

'sister'     /wakath/          [wɛkʰθ]
'clap on       /kijand/          [kɪɛʃjɛnt]
water'

'spirit'     /ngabay/          [ŋɛpɛi]

'night'      /ngimiy/          [ŋiʃɛmi]

Apico-alveolar /d/ is produced by placing the tongue tip on the alveolar ridge. For apico-postalveolar /rd/ the tongue tip is curled back to touch the rear of the alveolar ridge.

/th/ and /j/ are most commonly stopped with the blade of the tongue, justifying the phonological label 'laminal'. But the exact articulation of /th/ varies greatly from speaker to speaker. Dugal Goongarra usually produces it by protruding the tip of the tongue between his teeth (an apico-interdental), whereas Darwin Moondoonuthi made it by touching the blade of his tongue against his post-alveolar ridge (lamino-postalveolar); perhaps significantly, his front teeth were lacking.
This wide individual articulatory variation suggests that other articulatory and/or auditory features are as important as place of articulation, and that any articulatory gesture capable of reproducing such features is acceptable. Regardless of its exact place of articulation, /th/ is characterized by affrication, a relatively long hold phase (compared to the apicals), and lack of voicing intervocically. To substantiate this, let us examine several phonetic features of Kayardild stops. Although I will note their values for all stop types, my main aim will be to characterize the distinction between /d/ , /rd/ and /th/ , which is the most difficult for English speakers to hear.

Many older treatments of Australian languages took these features as allophonic, depending on the independent variable 'place of articulation'. But there is a growing realization that while this may provide an elegant summary, the phonetics may be far more complex, and perception of stops and nasals differing only in place of articulation may utilize these so-called allophonic features.

Busby (1979), in a wide-ranging survey of Australian phonemic systems reports that $F_2$ transition loci, which are the clearest acoustic correlate of place of articulation, distinguish peripherals (i.e. bilabials and velars) with low $F_2$ values, and palatals, with high $F_2$ values, but are not distinctive for stops in the mid $F_2$ range, namely those with dental, alveolar and retroflex places of articulation. Because these stops cannot be distinguished by $F_2$ value, other acoustic parameters must be used.

Bradley (1980), in an acoustic study of the seven-valued Yanyuwa stop system, found low $F_2$ values for the peripherals /b/ and /g/, high ones for lamino-palatal /j/ and dorso-palatal /gy/, and intermediate and overlapping values for apico-alveolar /d/, apico-retroflex /rd/ and lamino-dental /dh/. Looking at other acoustic parameters, he found a range of possible cues, including duration of adjacent vowels, of 'silence', of 'burst', and presence or absence of voicing. Relevant here, he found that /dh/ was most likely to be voiceless [ɾ] and /rd/ most likely to be voiced [ɟ]; /rd/ then /d/ had the shortest silence phase and /dh/ the third longest; /rd/ had the longest flanking vowels and /dh/ the shortest, with /d/ having the second shortest preceding vowel and the fourth shortest following vowel; /rd/ then /d/ had the shortest bursts following silence and /dh/ the fourth longest.

Let us now examine these phonetic cues one by one. My phonetic transcriptions will be used as a starting point, backed up where useful by evidence from sound spectrographs made from recordings of two male speakers (DM and PG).

Voicing correlates with three main variables: word-position, type of stop, and syllabic prosody. The last factor is confined to intervocalic peripherals, which are lengthened and voiceless between two stressed syllables (C.3.3). This variation is
<table>
<thead>
<tr>
<th>Stop</th>
<th>/#_</th>
<th>/V_V</th>
<th>/Sonorant_</th>
<th>/_#</th>
</tr>
</thead>
<tbody>
<tr>
<td>/b/</td>
<td>b</td>
<td>b</td>
<td>p</td>
<td>p</td>
</tr>
<tr>
<td>/d/</td>
<td>—</td>
<td>d</td>
<td>t ~ t^R ~ d^R</td>
<td>d</td>
</tr>
<tr>
<td>/rd/</td>
<td>d ~ r</td>
<td>d ~ r</td>
<td>t ~ t^R ~ d^R</td>
<td>d</td>
</tr>
<tr>
<td>/th/</td>
<td>t</td>
<td>t</td>
<td>t</td>
<td>t</td>
</tr>
<tr>
<td>/j/</td>
<td>J ~ c</td>
<td>J</td>
<td>c</td>
<td>J ~ c</td>
</tr>
<tr>
<td>/k/</td>
<td>g</td>
<td>g</td>
<td>k</td>
<td>k</td>
</tr>
</tbody>
</table>

Figure C-1: Voicing and stop type tabulated in Figure C-1. As can be seen, stops are all voiceless after sonorants (nasals, laterals and rhotics), but their realization elsewhere depends on their type: initially, /th/ is voiceless, /rd/ is voiced or even a retroflex flap, and /k/. /b/ and /j/ vary. Word-finally, peripherals are voiceless, apicals are voiced, /th/ is voiceless, and /j/ varies: intervocically apicals and /j/ are voiced, peripherals are voiceless (except between stressed syllables – see C.3.3), and /th/ is voiceless.

This suggests that voicing could be a cue for distinguishing /th/ from the apicals. Figure C-2 illustrates the acoustic differences between apico-alveolar, apico-retroflex and lamino-dental stops with sound spectrograms of the words /wadu/ 'smoke', /bardu/ 'hard' and /bathu/ 'west-PROP'. Note the voicing striations in the apical stops, which are absent from the lamino-dental. Figure C-3 illustrates the contrast between /th/ and /rd/ word initially, with spectrograms of the words /thuland/ 'descending' and /rduland/ 'fat': again, voicing striations are clearly present with the apical and as clearly absent from the lamino-dental.

Hold duration correlates with voicing, as we would expect, since the longer closures make it more difficult aerodynamically to sustain the glottal pulse. The /rd/, always voiced intervocically and finally, is either a tap or an extremely short stop, /d/ also has a relatively short hold phase. /th/, on the other hand, is much longer.
Figure C-2: Acoustic characteristics of intervocalic /d/, /rd/ and /th/.

Wide band, high-shaped spectrograms of /bathu/ ['bathu] 'west-MPROP', /wadu/ ['wadu] 'smoke' and /bardu/ ['bardu] 'tough'. The speaker was a male aged about sixty five. Recordings were made with a Uher 4000 Report Monitor in a quiet room. Horizontal lines mark frequency intervals of 1000 Hz, and the vertical strokes through the 7000 Hz line mark time intervals of 0.1 seconds. Note the differences (a) in voicing, with vertical striations representing the glottal pulse with /d/ and /rd/ but not /th/; (b) in length of stop closure, longest for /th/ and shortest for /rd/; (c) in length of the preceding vowel, longest before /rd/ and shortest before /th/; (d) in the intensity, frequency spread, and duration of the aperiodic 'burst', greatest for /th/ and least for /rd/.
Figure C-3: Acoustic characteristics of initial /rd/ and /th/.

Wide band, high-shaped spectrograms illustrating the words /rduland/ ['dɔlnt^] 'fat' and /thuland/ ['tɔlnt^] 'descending'; speaker and recording conditions as for Figure C-2. Note the clear voicing striations of initial /rd/, contrasting with their total absence with initial /th/; and the strong aperiodic burst after /th/, absent after /rd/. Note also the voiceless trilled release after /nd/, particularly clear with the word /rduland/. 
(though not as long as /b/ or /k/). The length of the preceding vowel is inversely proportional to stop length, being shortest with /th/ and longest with /rd/ (as well as r-coloured). In other words, the sequence $C_1V C_2$ has the same total duration for all $C_2$, but the relative length of $V$ and $C_2$ vary with the place of articulation.

Nasals (not illustrated here), behave similarly, and length may be the main cue distinguishing /nh/ [nː] from /n/ [n].

Affricated release characterizes /th/ and /j/, whereas the apicals are always unaffricated. The minimal pair /kurkath/ 'take-ACT' and /kurkad/ 'take-DES' is thus distinguished phonetically by the contrast between a voiceless affricated and a (partially) voiced unaffricated stop: [kerrkath] vs [kerrkad]. To heighten the contrast, many speakers give final apico-dental stops a voiceless vocalic release: [kerrkad]. C-4 gives sound spectrograms illustrating this contrast.

Because preceding sonorants devoice all stops and tend to reduce the length differences between them, removing the normal cues distinguishing /d/ from /th/, the contrast /SON d/ vs /SON th/ is often hard to hear. However, many speakers, particularly women, give a trilled release to apical sonorant + stop clusters: /nalad/ 'head' [nəlɛd], /nalad wuuj/ 'pass the (fish)head' [nəlɛdwoːɻ], /wurand/ 'food' [wʊռɛnd].

/ngarnd/ 'beach' [ŋɛ nɛr̥]. (Trilled release of /nd/ is clearly shown in C-3.) Dissimilation prevents this before following /rr/: /wardarr/ 'moon' may be [welɛr] but not [welɛr]. Those speakers allowing whispered vocalic release retain this with final apical sonorant+stop clusters, and voice the stop: /ngarnd/ 'beach' [ŋɛndɾɛs], /nalad/ 'head' [nəlɛdɾɛs]. Laminal sonorant+stop clusters never have a trilled release: /kurunth/ 'barramundi' [kɒɾɒnt].

There are good physiological reasons for most of these cues, and they closely resemble those found for Yanyuwa by Bradley (op cit.). The area of tongue in contact with the roof of the mouth is greatest with velar and laminal stops, least with apicals, and we would expect both stop length and affrication to be proportional to the area of contact. Voicing is most likely to be maintained during a short stop. And trilling is more easily accomplished with the tongue tip than with a laminal wedge. It seems likely that Kayardild has exaggerated these cues to make certain contrasts (particularly /d/ vs /th/) more distinctive. However, there is no single phonetic 'feature' that can distinguish these two phonemes consistently - rather, a combination of cues, varying with the position in the word.
Figure C-4: Acoustic characteristics of word-final /th/ and /d/.

Wide band spectrograms of /ngada kurrkath/ [ŋ ə də gorkɔ ʤ ] 'I'm taking (it)' and /ngijuwa kurrkad/ [ŋ ʊ ʃ oʊ gork ɛ dɪ] 'I want to take (it)'. The speaker was a man of about fifty; otherwise recording conditions were as for Figure C-2. Note the differences (a) in voicing: /d/ partially voiced (with initial glottal pulses), /th/ voiceless; (b) in duration, with /th/ longer, and (c) in release of the /d/, with short-lived but distinct transients at 1800 and 2900 Hz, representing the accrescent [i] vowel.
**Laterals, rhotics and glides:**

/\l/ is always a voiced lateral. Intervocally and before peripherals and apico-alveolars it has an apico-alveolar articulation: interdentals and palatal allophones are found before the respective stops and nasals.

<table>
<thead>
<tr>
<th>gloss</th>
<th>phonemic form</th>
<th>phonetic realization</th>
</tr>
</thead>
<tbody>
<tr>
<td>'descending'</td>
<td>/thuland/</td>
<td>[tʰʌlənd]</td>
</tr>
<tr>
<td>'raft'</td>
<td>/walbu/</td>
<td>[wɛルpə]</td>
</tr>
<tr>
<td>'bush oven'</td>
<td>/walk/</td>
<td>[wɛlk ]</td>
</tr>
<tr>
<td>'place name'</td>
<td>/kalthuriy/</td>
<td>[kʌltʃuri]</td>
</tr>
<tr>
<td>'muscle'</td>
<td>/wurdalji/</td>
<td>[wʊrdæl]</td>
</tr>
</tbody>
</table>

/rr/ is an apical trill finally and preconsonantally; intervocally it is usually a tap but in declamatory speech, particularly among women, it is trilled:

<table>
<thead>
<tr>
<th>gloss</th>
<th>phonemic form</th>
<th>phonetic form</th>
</tr>
</thead>
<tbody>
<tr>
<td>'tree'</td>
<td>/dabarr/</td>
<td>[dɑpɑr]</td>
</tr>
<tr>
<td>'dugong'</td>
<td>/bijarrb/</td>
<td>[bɪfɑrp]</td>
</tr>
<tr>
<td>'ear'</td>
<td>/marrald/</td>
<td>[merɛlt] &quot; [mɛrɛlt]</td>
</tr>
</tbody>
</table>

/r/ is an apico-alveolar approximant initially. Between high vowels the closure is greater and it approaches fricative quality, as it does word finally, and initially before /i/. (Tindale 1962a:261 exaggerates this effect, transcribing /rar/ as ['ra:rθ].

In all positions it is slightly palatalized before /i/. Between low vowels some speakers, e.g. Dugal Goongarra, pronounce it as a retroflex flap, neutralizing the distinction between /r/ and /rd/.

<table>
<thead>
<tr>
<th>gloss</th>
<th>phonemic form</th>
<th>phonetic realization</th>
</tr>
</thead>
<tbody>
<tr>
<td>'south'</td>
<td>/rar/</td>
<td>[rɛr]</td>
</tr>
<tr>
<td>'egg'</td>
<td>/kuru/</td>
<td>[kʊrʊ]</td>
</tr>
<tr>
<td>'east'</td>
<td>/riy/</td>
<td>[ɛiɛ]</td>
</tr>
<tr>
<td>'young girl'</td>
<td>/nguriw/</td>
<td>[ŋuɾɪɛ]</td>
</tr>
<tr>
<td>'red ant'</td>
<td>/barakurr/</td>
<td>[bɔɾækɔɾ] &quot; [bɛɾɛkɔɾ]</td>
</tr>
</tbody>
</table>

For some older speakers (e.g. Pluto) /r/ may be realized as either [ɾ] or [ɾ] before stops, including /rd/. Other speakers allow only the [ɾ] pronunciation.

<table>
<thead>
<tr>
<th>gloss</th>
<th>phonemic form</th>
<th>phonetic realization</th>
</tr>
</thead>
<tbody>
<tr>
<td>'boy, male'</td>
<td>/wurlkar/</td>
<td>[wʊlklɛɾ] &quot; [wʊlklɛɾ]</td>
</tr>
<tr>
<td>'hand'</td>
<td>/marld/</td>
<td>[mɛɾɾ]</td>
</tr>
</tbody>
</table>

Historically /r/ is a merger of the phonemes /r/ and /rl/, distinct in proto Tangkic (and preserved in Yukulta):

\begin{align*}
\text{pT / Yukulta} & \quad \text{Kayardild} & \quad \text{Kayardild} \\
\text{phonemic} & \quad \text{phonetic} & \quad \text{phonemic} \\
'get, fetch' & /kirlatha/ & [kiɾlæθ] /kirath/ \\
\end{align*}
In Lardil, as well, /rl/ and /r/ have merged, with the lateral allophone predominating initially and before retroflex stops and nasals, and the rhotic elsewhere.

Historic /rd/ clusters are in Kayardild phonetic [j], which differs phonetically from the simple retroflex stop /rd/, phonetically [d]. in three ways: (a) there is a longer retroflex onglide and a shorter preceding vowel before the cluster (b) the stop in the cluster is voiceless, conditioned by the preceding sonorant, whereas the simple retroflex stop in voiced (c) [j] allows a trilled release as [r̝j]:

phonemic               phonetic
'corkwood' /murdu/     [moʊdə]  
'three' /burldamurr/   [poʊ^t'mor]  

Morphological evidence suggests that this is phonemically /r/ + /rd/: for example:

/mar.rda/ 'hand-NOM'.  /mar.iya/ 'hand-LOC'.  /mar.mirr/ 'handcraftsman'.

However, this is awkward orthographically, so the sequence /rd/ is used, as in Hale's and Klokeid's Lardil orthographies. The alternative phonemicization this implies, i.e. /l/ with assimilation before /rd/, is quite plausible: /l/ occurs before every other stop and would condition devoicing and trilled release of the following stop.

/w/ is a labio-velar glide. Word-initially before high vowels it is sometimes elided, leaving following /i/ rounded but no residual effect on /u/:

gloss          phonemic               phonetic
'food' /wurand/       [wkont] ~ [wɔnt]  
'stay' /wirdij/       [wɛrijk] ~ [ɛrijk]  

/y/ is a palatal glide. It too may be elided initially, before /i/ only:

'star' /yirangkarr/  [jeŋkɔr] ~ [eŋkɔr]  

Optional elision of initial glides before corresponding vowels is common in Australian languages (cf Dixon 1972:278).
C.2.3 Vowel allophones

The six vowel phonemes display considerable allophonic variation, which depends on (a) place of articulation of flanking consonants (b) degree of stress (c) phonemic length. In general, following retroflex consonants rhotacize and slightly lengthen and centralize preceding vowels, following palatals front them, following interdentals shorten them, following trills lower them and preceding /w/ rounds them. Decreasing stress centralizes them, and phonemic length lowers high vowels.

C.2.3.1 Short vowel allophones

(Values before glides will be dealt with in C.2.3.3.)

/ɪ/:

[ɪ] in stressed positions before all consonants but apicals and laminodentals.

[ I ] with main stress before alveolars except /rr/, and before laminodentals; also in secondary-stressed except before /rr/ and retroflexes; finally after /rr/.

[e] before /rr/: /bɪrr/ 'they two' [bər].

[e'] before /rd/: /birdɪy/ 'bad' [bɪdɪl]

[ eɪ ] (slightly rounded centralized rhotacized mid vowel) between /w/ and /rd/, with preceding /w/ contributing the rounding and following /rd/ the rhotacization: /wɪrdɪj/ 'stay' [weɪdɪj ].

/u/ is generally less rounded and more centralized than cardinal 8. Its allophones are

[ ʊ ] in most stressed positions, and in final open syllables: /ngudij/ 'throw' [ŋʊdɪj ], /kardu/ 'fa-in-law' [kʊ dʊ ].

[ o ] before /rr/: /barakurr/ 'ant' [bɪrɔ kʊr].

[ oʊ ] before retroflex consonants: /murdu/ 'corkwood' [moʊ dʊ ], /kuru/ 'egg' [koʊ ʊ ].

[ oʊ ] (rounded centralized rhotacized mid vowel) between /j/ and /rd/: /jurdiij/ 'set (of sun)' [joʊ dɪj ]. The phonetic difference from /i/ in this environment is very slight and only heard in the most careful speech: the /i/ allophone is less rounded. Cf /jirdawath/ 'salivate' [joʊ dəwet].
/a/ is [ə] in most environments, reducing to [ə] in protected word-final position: /balanangku/ 'will not spear' [balanʌŋgʌkʊ], /ngada kurrij/ 'I see' [ɲdʌŋɡɔːrɪɲ]. Departures from these values are

[ɛ⁴], slightly fronted, before palatals: /majarri/ 'navel' [meʃərɪ].

[ɛ⁴] before retroflexes: /nardaa/ 'bulrush' [ɲdə¸].

[ɛ ] between /y/ and /r/: rayarrb/ 'spear-PRECON' [ræγəːr].

In contrast to many Australian languages, /a/ is not rounded after /w/, so that /wangarr/ 'song' is [wøɡәɾ], not [*woɡәɾ].

C.2.3.2 Long vowels

Besides being longer, vowel quality changes. /ii/ and /uu/ are lower than /i/ and /u/ in corresponding environments, so that they are normally realized as [e:] and [o:] respectively: /miiːd/ 'lobster, louse' [me:d], /kuuk/ 'sore' [go:k].

In this respect Kayardild resembles another Australian language, Yidiny, (Dixon 1977:34), but departs from the European norm: 'this tendency of long high vowels to be slightly lowered (in Yidiny) goes against Lehiste's (1970:30-3) measurements for a number of European languages, in which "long vowels are characterized by more extreme values - positions further removed from the center"'.

Long /aa/, when not followed by a palatal, is more backed than short /a/: /maa̯li/ 'swamp turtle' [maːli], /malaa/ 'sea' [maːl:a:].

Before palatals long vowels tend to have a palatal offglide. This is most marked with /aa/ e.g. /baaj/ 'bite' [baːʃ], but also possible with /uu/: /duujind/ 'younger brother' [duːʃɪnd] - [duːʃɪnd]. Similarly /ii/ varies between [eː] and [ei] before /-j/: /diij/ 'sit' [deʃ] - [deʃ].

As mentioned above, short vowels are somewhat longer (notated [V·]) before retroflexes. All phonemic long vowels are longer than this, notated [Vː].

All phonemic long vowels before retroflexes even more so [Vːː], e.g. /buurnd/ 'sandfly' [boːːnt].
C.2.3.3 Vowel-Glide-(Vowel) sequences

As well as phonemic long vowels, Kayardild has a number of phonemic short vowel – glide – short vowel sequences, some of which are realized as phonetic diphthongs. The realization of short vowel – glide – long vowel sequences never gives rise to diphthongs, always involving two distinct syllables, and is therefore not treated here.

In view of the ample justification of the vowel–glide–vowel analysis of diphthongs in many Australian languages, (see Dixon 1972 for Dyirbal, Donaldson 1978 for Ngiyambaa, Austin 1981a for Diyari), only sketchy reasons will be given here: the main reason is phonotactic, allowing the generalization that no two phonemic vowels occur contiguously: certain phonetic differences from phonemic long vowels also exist.

Of the 18 possible permutations of 3 vowels x 2 glides x 3 vowels, 14 are attested. This excludes (a) the sequences /iyu/ and /uwi/ (b) the sequences /iyi/ and /uwu/, where vowel and glide have the same locus (cf Catford 1977:164): where one would expect these on morphological grounds, the corresponding long vowels /ii/ and /uu/ occur. Thus maku- 'woman', -wuru 'PROPrietive' but makuuru 'woman-PROP'.

The sequences /iyi/ and /uwu/ are attested, however, across reduplication boundaries: buku-wuku 'timothy vine', kirrmili-yirrmili 'pig's foot vine'.

Most of the 14 permutations are phonetically realized as vowel – glide – vowel sequences: apart from the lowering of /i/ before /y/, vowels have their expected values:

<table>
<thead>
<tr>
<th>Sequence:</th>
<th>Example: (phonemic)</th>
<th>(phonetic)</th>
<th>gloss</th>
</tr>
</thead>
<tbody>
<tr>
<td>/iya/</td>
<td>kiyarrngk</td>
<td>[gejernk]</td>
<td>'two'</td>
</tr>
<tr>
<td>/iwa/</td>
<td>kiwalath</td>
<td>[krvelt]</td>
<td>'churn up'</td>
</tr>
<tr>
<td>/iwi/</td>
<td>jiwirrij</td>
<td>[fjrff]</td>
<td>'spin round'</td>
</tr>
<tr>
<td>/aya/</td>
<td>ngayarndathu</td>
<td>[gjyanrdj]</td>
<td>'cross cousin'</td>
</tr>
<tr>
<td>/ayu/</td>
<td>kayulumuliij</td>
<td>[kJolomboleJ]</td>
<td>'speak recklessly'</td>
</tr>
<tr>
<td>/awi/</td>
<td>jawij</td>
<td>[Jeuf]</td>
<td>'run'</td>
</tr>
<tr>
<td>/awa/</td>
<td>bawath</td>
<td>[bawat]</td>
<td>'blow (wind)'</td>
</tr>
<tr>
<td>/uyi/</td>
<td>kuyild</td>
<td>[gojilt]</td>
<td>'file stingray'</td>
</tr>
<tr>
<td>/uya/</td>
<td>kuyalakamarnjuth</td>
<td>[gojelkamarnjot]</td>
<td>'back-bite'</td>
</tr>
<tr>
<td>/uyu/</td>
<td>kuyurru</td>
<td>[gojor]</td>
<td>'wind-pipe'</td>
</tr>
</tbody>
</table>

The sequences /ayi/, /awu/, /uwa/ and /iwu/ are phonetically diphthongs: the second vowel component is usually longer.
Prosodic truncation of final /a/ (see 1.7.2) affects several of these sequences, leaving diphthongs:

<table>
<thead>
<tr>
<th>truncated sequence (phonemic)</th>
<th>example (phonemic)</th>
<th>truncated sequence (phonetic)</th>
<th>example (phonetic)</th>
<th>gloss</th>
</tr>
</thead>
<tbody>
<tr>
<td>/iy/ [eɨ]</td>
<td>yakuriy</td>
<td>[jɛko-ei]</td>
<td>'fish-LOC'</td>
<td></td>
</tr>
<tr>
<td>/iw/ [iʊ]</td>
<td>nguriw</td>
<td>[nʊ-iʊ]</td>
<td>'girl-NOM'</td>
<td></td>
</tr>
<tr>
<td>/ay/ [eɨ]</td>
<td>bardakay</td>
<td>[bɛdɛkeɪ]</td>
<td>'stomach-LOC'</td>
<td></td>
</tr>
<tr>
<td>/aw/ [aʊ]</td>
<td>walaw</td>
<td>[wɛlɛ]</td>
<td>'rifle-fish'</td>
<td></td>
</tr>
<tr>
<td>/uy/ [oʊ]</td>
<td>makuy</td>
<td>[meko-o]</td>
<td>'woman-LOC'</td>
<td></td>
</tr>
<tr>
<td>/uw/ [oʊ]</td>
<td>ngukuw</td>
<td>[nɔk-oʊ]</td>
<td>'water-NOM'</td>
<td></td>
</tr>
</tbody>
</table>

Compared to similar vowel-glide-vowel sequences, vowel-glide sequences give greater length to the first vocalic segment. For example, /ay/, phonetically [ɛɨ], is distinguished from /ayi/, phonetically [ɛɪ], by the relative length of the two components. In other words, the vowel-glide-vowel sequence gives a rising diphthong, with greater emphasis on the second element, while the vowel-glide sequence is a falling diphthong, with greater emphasis on the first element (cf Catford 1977:216).

C.3 Prosodic features

C.3.1 Truncation

The most important prosodic process in K is breath-group final truncation of word-final /a/. This was discussed in 1.7.2.

A number of suffixes undergo various sorts of truncation which may have originated as prosodic markers, but non-final position within the pause-group is no longer sufficient to protect the full form — protection by a following suffix is required. I therefore treat these as alternations conditioned by position within the word. Because of their idiosyncratic nature they are not discussed here but in the relevant morphology sections. The main ones are ABLative (-kina(ba)), PROPrieteive (-ku((r)u)), ALLative (-kir((i)ng)), NOMinative augment (-wa -ya), LOT (-wala(d)), FUTure (-THu((r)u)) and DIRected (-THir((i)ng)).
C. 3.2 Stress

Stress in Kayardild is non-contrastive. Although predictable from the form of a word and its affixes, the rules governing its placement are more complicated than in many Australian languages: combined with the staccato effects of truncation, this gives Kayardild a jerky rhythm which contrasts with the even flow of Yukulta. The description 'heavy' applied to their language by Bentinck Islanders and others alike, in contrast to the 'light' Yukulta and Lardil, probably refers to this.

Three levels of stress may be identified: main ('), secondary (\') and unstressed. Primary and secondary stressed syllables are pitched higher than unstressed. With decreasing stress short vowels become increasingly centralized (C.2.3.1): prosodic lengthening of consonants between adjacent main and secondarily stressed syllables is another correlate (C.3.3).

The final schwa eventually dropped by prosodic truncation (1.7.2) is always included in syllable-counts made for stress assignment. Pre-truncated forms are also used with ABLative (-kinaba): individuals vary with respect to PROPrivative (-kuru), some using the full and others the truncated form.

**Main stress** falls on the first syllable:

' rebound'  kúkalúth(a)
' cut oneself'  kálə̂aj(a)

**Secondary stress** falls on:

(a) all non-initial long vowels, and non-initial short vowels whose syllable closes with a trill.

(b) penultimate syllables.

(c) the first syllable of the second element of a compound, of a two or more syllabled inflectional or of any derivational suffix.

(Two of these criteria may of course coincide.)

Note that nothing prevents adjacent syllables from taking secondary stress.
Examples are:

'sea'     málāà  (criterion (a))
'dabarr'  dàbärr(a)  (criterion (a))
'cut'      kālà-th(a)  (b)
'didn't cut'  kālā-thàrrī  (b/c)
'face (lit. nose-eye)'  kīrrka-mìbùrld(a)  (c, then b)
'rope'      thúngai-kùrndiind(a)  (c, then a/b)
'someone else's'  dàŋngka-nàbà-n-da)  (b)
'impenetrable'  kūkai-ì-n-kùru  (a, then b)
'killed by me'  ngūjīn-bālā-a-n-ngārrb(a)  (c, then a/b/c)
'but with uncle's'  kākuju-kàrra-ngūnī-nāa-nthā)  (c, then c, then a/b/c)
'shit scared'  bàràdaka-yùlāà-n-da)  (c, then a/b)
'got by a shark'  kūlkiji-i-wà-nhàrma)  (c, then c, then b/c)

In fluent connected speech the stress on the penultimate syllable of each word is dropped, only remaining on the second last syllable before each pause, and all but the first primary stresses reduce to secondary. Thus /ngakulda/ 'we plural inclusive-NOM' in isolation is [ŋəkolt]. /ngudija/ 'throw-ACT' is [ŋədrj] and /mijilda/ 'net' is [məjəll]. When these are merged into one breath group, the first primary and last secondary stress are retained, other primary stresses weaken to secondaries, and other word-penultimate secondaries are de-stressed: /ngakulda ngudija mijild/ 'let us cast the net' is realized as [ŋəkoltudxja məjəll]. The same applies to other word order permutations, so that /mijilda ngakulda ngudij/ will be [məjəlltəŋəkoltar]ŋədrj.

C.3.3 Interstress consonant lengthening

Where main and secondary stress fall on contiguous syllables, single intervening consonants are lengthened (1b. 2), i.e. the period of closure is increased. This lengthening is particularly marked if the second syllable is long (3b. 4. 5), or is a short vowel followed by a trill (6). Because this lengthening follows from definable stress and syllable-structure combinations, I treat it as prosodic, not phonemic.
In addition, the phoneme /b/, which would otherwise have voiced and unvoiced allophones in free variation in this position, is obligatorily devoiced (and optionally lengthened): /ngabay(a)/ 'ghost' is [ŋpɛr] or [ŋpɛr].

Clusters in this position are not lengthened:

<table>
<thead>
<tr>
<th>phonemic</th>
<th>phonetic</th>
<th>gloss</th>
</tr>
</thead>
<tbody>
<tr>
<td>dangkaa</td>
<td>[dɔŋka:]</td>
<td>'man-NOM'</td>
</tr>
</tbody>
</table>

Nor are single consonants separating two long stressed vowels. Retroflexes likewise do not lengthen, probably because the preceding vowel is half long:

<table>
<thead>
<tr>
<th>phonemic</th>
<th>phonetic</th>
<th>gloss</th>
</tr>
</thead>
<tbody>
<tr>
<td>kuujuuj</td>
<td>[ko:jɔ:j]</td>
<td>'swim-ACT'</td>
</tr>
<tr>
<td>jurdiij</td>
<td>[jɔd:d:e:j]</td>
<td>'set (sun)-ACT'</td>
</tr>
</tbody>
</table>

And if the second syllable ends in a liquid plus stop cluster, no lengthening occurs:

<table>
<thead>
<tr>
<th>phonemic</th>
<th>phonetic</th>
<th>gloss</th>
</tr>
</thead>
<tbody>
<tr>
<td>duburrk</td>
<td>[dɔbɔrk]</td>
<td>'mullet'</td>
</tr>
<tr>
<td>dakald</td>
<td>[dɔkɛlt]</td>
<td>'stone oyster crusher'</td>
</tr>
</tbody>
</table>

Homorganic nasal plus stop clusters ending the second syllable, however, do allow lengthening:

<table>
<thead>
<tr>
<th>phonemic</th>
<th>phonetic</th>
<th>gloss</th>
</tr>
</thead>
<tbody>
<tr>
<td>rulungk</td>
<td>[jɔlɔŋk]</td>
<td>'eastward'</td>
</tr>
</tbody>
</table>

Consonant lengthening also occurs after stressed vowels if the next syllable but one is both stressed and phonetically long, including diphthong sequences such as /iy/: 

<table>
<thead>
<tr>
<th>phonemic</th>
<th>phonetic</th>
<th>gloss</th>
</tr>
</thead>
<tbody>
<tr>
<td>yakuriya jawi</td>
<td>[jɛkɔ:ɾiʃɛɾiʃɛɾiʃ]</td>
<td>'fish are running'</td>
</tr>
<tr>
<td>yakuriy</td>
<td>[jɛkɔ:ɾui]</td>
<td>'fish' (final truncation leaves phonetically long vowel on third syllable)</td>
</tr>
<tr>
<td>ngakinmaand</td>
<td>[ŋɛk:ınmaınt]</td>
<td>'father of us'</td>
</tr>
</tbody>
</table>
This prosodic lengthening may be partly explained as a device to space contiguous stresses, not permitted in many Australian languages (in Yidiny, for example (Dixon 1977), syllables are alternately stressed and unstressed). If we count morae as for Japanese, giving two to closed or long syllables\(^3\), and to long consonants, and assume that the stress target is to fall on non-contiguous morae, it is clear that by lengthening intervening single consonants an unstressed mora will be created between adjoining stressed syllables. This need does not arise when the first syllable is long (two morae) or closed (two morae) by a cluster, so no lengthening takes place.

This does not explain why words like /duburrk/, with contiguous stressed syllables separated by a single consonant, but a closed second syllable, do not lengthen the consonant; nor why words like /yakuriy/ with non-contiguous stress do lengthen. At present I am unable to account for this.

C.4 Phonotactics

C.4.1 Word structure

Discounting the effects of prosodic truncation, all Kayardild words bar some recent loans begin with a consonant, end with a vowel\(^4\), and have at least two syllables. Verbal roots and stems must end in a vowel; nominal roots may end in a vowel or in any consonant but /b/, /rd/, /m/, /nh/, /w/ or /y/. A number of di- and tri-consonantal clusters occur medially, but no vowel clusters, so words have the phonotactic structure:

\[
C_1 V_1 ((C_2 (C_3)) C_4 V_2 )^n
\]

Where \( n > 0 \), \( C_{1,2,3,4} \) represent single consonants, and \( V_{1,2} \) represent short or long vowels.

Roots vary from one syllable (some verb roots with long vowels: e.g. \textit{baa-} ‘bite’) to at least seven syllables, as in \textit{bunjanbalayambala}– ‘honeyeater’. The generous suffixing possibilities allow one to construct, and in context to have accepted, forms like \textit{kunawanurruwalakarranguninabayada} ‘whereas still using the ...
of the many (people) with children' (16 syllables), but such long forms have not
been heard in free speech. The longest spontaneously occurring word I have recorded
is ngurruwarrawalathinabamaruthurruka 'for the (ones) from the many fish-traps' (13
syllables), in a text by Roonga Bentinck. Inflected words with eight or nine syllables
are common.

C.4.2 Distribution of consonants

Word initially only 12 of the 18 consonant phonemes have been recorded: b, rd, th, j, k, m, rn, ny, ng, r, w and y. Apico-alveolars do not occur
because the alveolar-retroflex contrast is neutralized initially; stem–finally, on the other
hand, this contrast is neutralized in favour of the apico-alveolar (C.4.1 above). In
addition nh, l, rl and rr have not been recorded word–initially.

1 and rl, well-attested initially in Yukulta, correspond to r in
Kayardild. nh begins just one word each in Yukulta (nhangkunhali
'grasshopper') and Lardil (nhura 'tree sp.'); neither Yukulta or Lardil
allow initial rr.

Word finally only vowels may occur. All three short vowels are possible, but
the only long vowel is /aa/ in some nominative noun/adjectives. (In Yukulta only
short vowels are possible; Kayardild /a###/ reflects pT /ara###/, preserved in
Yukulta). The changed interpretation of prosodic truncation among younger speakers
(C.3.1) makes final consonants possible: in fact word–final position allows the full
range of intervocalic possibilities for these speakers.

Intervocalically all consonants may occur: there are also a number of
root–internal clusters, of the following types (for this section full digraphs are used in
all cluster elements e.g. nth for normal orthographic nth). These are given in Fig.
C-5.

These clusters can be classified as follows:

Diconsonantal:

(a) all homorganic stop plus nasal clusters.

(b) apico-retroflex nasal plus non-apical stop; apico-dental nasal plus
peripheral stop; palatal nasal plus bilabial stop.

(c) lateral plus any stop or any non-apical nasal.
(a) mb nd rnrd nhth nyj ngk
(b) rnb nb nyb
(c) lb ld (l.rd) lth lj lk
 lm lny lng
(d) rb (r.rd) rth rj rk
 rm rng
 rr brd rrd rrj rrrk
 rr nng
(e) jb
(f) nym
(g) rw ry
 rrw rry
 lw
(h) lmb lngk
 lnnk

Bracketed (r.rd) and (l.rd) represent alternative phonemicizations of phonetic [ld].

Figure C-5:  Permissible root-internal intervocalic consonant clusters in Kayardild

(d) a rhotic plus a peripheral or laminal stop, or a peripheral nasal.

(e) the two stop sequence -jb- (rare).

(f) the two nasal sequence -nym- (rare).

(g) a liquid plus a glide.

Tri consonantal:

(h) l or rr plus a peripheral homorganic nasal plus stop cluster.

Except for (e), (f) and (g), these clusters all consist of one or two sonorants plus a non-sonorant, a typical pattern in Australia (cf Austin 1981c:26). This can be phrased even more specifically: except for (e) and (f) (which both involve palatal plus labial clusters), increasing closure is required for successive elements of a cluster (taking account of both tongue and velic closure). This constraint rules out nasal plus glide clusters (found in Yukulta).
Word examples are:

(a) wumburungka ‘spear’, banda ‘soon’, marnrdurra ‘close-up dead’, kanhthathu ‘father’: nganyjuna ‘sand frog’.


(e) ngi/balutha ‘cool (food)’.

(f) ngunymurra ‘grease, whale oil’.

(g) karwarrka ‘queen fish’, wiryilda ‘plant sp.’: durrwaja ‘chase’, kurryaa ‘rock flagtail’. bulwija ‘be shy’.

(h) balmibwu ‘tomorrow’. kurdalalngka ‘stingray’: barngkaa ‘lily-root’.

Across morpheme boundaries this is increased by the clusters n-m, rn-m, ny-ng: n-j: l-w: and rr-n. Examples are: ban-marri ‘not in the west’: ngarn-mulaaja ‘leaving the beach’: yARBUNy-ngarrpa ‘because of the snake’: kuwan-ji ‘firestick-LOC’: wangi-warri ‘without a boomerang’. damurr-nurru ‘with the short one’.

C.4.3 Distribution of long vowels

Long vowels in lexical roots may be fall in the first syllable, as in maali ‘swamp turtle’, yuulutha ‘go first’, miida ‘lobster, louse’: or in the second syllable as in yulaaja ‘be afraid’. In one word only both first and second syllables are long: kuuuluuja ‘swim’ (this is apparently a frozen reduplication: ‘swim’ in Yukulta is kuuja).

Several inflectional and derivational processes also create long vowels in non-initial position. Disyllabic nominals with root-final /a/ lengthen the vowel in the nominative, e.g. malaa ‘sea-NOM’ (cf malaya ‘sea-LOC’). Many detransitivized verbs also contain long vowels. whether through stem-lengthening or insertion of –yii–: kalatha ‘cut-ACT’, kalaa ‘cut-DT-ACT’: raja ‘spear-ACT’: rayiija ‘spear-DT-ACT’ (see 5.4.1). Note that where a long-vowelled derivational suffix is inserted, as in the last example, the preceding vowel is shortened.
C. 5 Sporadic vowel harmony

There is a tendency for vowels to assimilate to /u/ of a neighbouring syllable. Some such alternations occur in everyone’s speech:

mura- 'short' + -ru-tha 'FACTitive-ACT' → mururutha 'shorten'

Sometimes harmonized and non-harmonized forms are in free variation, as in wuthiwuthi or wuthuwuthi 'piggyback': -wuthinda or -wuthunda 'a few': dijurdiju or dujurduju 'place name'.

But most often old speakers preserve an original form (demonstrated by etymology), which is harmonized by the young:

<table>
<thead>
<tr>
<th>Word</th>
<th>Form</th>
<th>Speaker(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ri-y</td>
<td>(all speakers) 'east-NOM'</td>
<td></td>
</tr>
<tr>
<td>ri-lung-k</td>
<td>(Dugal, Pat) 'east-ALL-NOM'</td>
<td></td>
</tr>
<tr>
<td>ru-lung-k</td>
<td>(Darwin, all young speakers)</td>
<td></td>
</tr>
<tr>
<td>kurirr</td>
<td>(all speakers) 'dead-NOM'</td>
<td></td>
</tr>
<tr>
<td>kuri-lu-tha</td>
<td>(Roma) 'dead-FAC-ACT'</td>
<td></td>
</tr>
<tr>
<td>kuru-lu-tha</td>
<td>(Darwin, all young speakers)</td>
<td></td>
</tr>
</tbody>
</table>

All instances of vowel harmony given so far have been within words that would be listed in a dictionary. I have only one example where vowel harmony affects an inflection: the ALLative inflection -kiring- becomes -kurung- under the influence of /u/ in both flanking syllables:

C-1 ngada jinka-ju dathin-ku dangka-wu mirrarun-kurung-ku
I:NOM follow-FUT that-MPROP man-MPROP house-ALL-MPROP
I will follow that man into the house.

C. 6 Reduplication

Reduplication is frequent with both nominals and verbals. Its semantic functions are discussed in 3.6.4 and 5.7.

Usually the entire stem is copied (although I have no examples where the reduplicated portion is more than 3 syllables): ngambungambu 'flatulent', kukalu-kukalu-tha 'rebound and rebound'.

Certain initial consonants of the reduplicated segment may be changed:

(i) /b/, /j/ and /k/ may lenite to the corresponding glides: balarr 'white', balarrwalarr 'yolk'; junku 'straight', junkuyunku 'in retaliation, in return'; kurrajwurrall 'a few' (no unreduplicated form). In one recorded case /th/ lenites to /y/: thurdakiyurdaki 'fish species'.

---

5See Text 3, where Roma Kelly gives both the unharmonized kurilutha and the harmonized kunulutha in the one line.
(ii) /rd/ may lenite to /r/: *dunbu* 'deaf', *dunburunbu* 'useless (e.g. matches that won't light). (This could be used to justify placing /r/ with the other glide phonemes.)

(iii) initial velars in verb stems may palatalize - see 5.7.

/k/ may thus change to either /w/, through lenition, or palatalize to /j/.

These changes are only obligatory with /j/: all other phonemes occur intact in some reduplicated form, e.g. *kandu* 'blood', *kandukandu* 'red'. Those phonemes not listed in (i) to (iii) are never altered, e.g. /m/ (*murdu* 'corkwood', *murdumurdu* 'corkwood thicket') or /r/ (*rulurulu* 'human table formed during initiation').

A reduplicated element may be compounded with an unreduplicated one, as where the nonce reduplication *wurarrawurarra* is compounded with the root *ja-* 'rain' to give *jawurarrawurarra* 'a little bit of rain'.
Throughout this thesis I use a different analysis of the Yukulta case system to that in Keen (1972, 1983). The two analyses are compared in D-1; the GENitive raises extra problems that are irrelevant here, and is left off the table.

<table>
<thead>
<tr>
<th>CASE</th>
<th>FORM</th>
<th>Keen's analysis (B)</th>
</tr>
</thead>
<tbody>
<tr>
<td>(All parts of speech)</td>
<td>Non-pronominal</td>
<td>Pronominal</td>
</tr>
<tr>
<td>ERGative</td>
<td>(-kiya) (=LOC)</td>
<td>Ø</td>
</tr>
<tr>
<td>ABSolute</td>
<td>(-ka)</td>
<td>Ø</td>
</tr>
<tr>
<td>DATive</td>
<td>(-injā)</td>
<td>(-ra)</td>
</tr>
<tr>
<td>LOCative</td>
<td>(-kiya)</td>
<td>(-jiya)</td>
</tr>
<tr>
<td>ALLative</td>
<td>(-kirlu)</td>
<td>(-jirlu)</td>
</tr>
<tr>
<td>ABLative</td>
<td>(-kinaba)</td>
<td>(-jinaba)</td>
</tr>
<tr>
<td>PROPrietary</td>
<td>(-kurlu)</td>
<td>(-kurlu)</td>
</tr>
<tr>
<td>PRIVative</td>
<td>(-warri)</td>
<td>(-warri)</td>
</tr>
</tbody>
</table>

**Figure D-1**: Alternative analyses of the Yukulta case system

My reanalysis\(^1\) has been motivated by several criteria that, though traditionally employed in descriptions of Indo-European case systems (e.g. Latin, Russian) have only recently become accepted by Australianists (cf Mel’cuk 1979, Goddard 1982). To quote Goddard’s formulation (p. 169), 'a case is a class of nominal forms which are mutually substitutable in certain syntactic or semantic environments given that for any

\(^1\)Needless to say, a full justification would require far more discussion and examples than I have given here. I intend to do this at a later date.
two cases, case₁ and case₂, are formally distinguished by at least one subclass of nominal' (italics mine).

On my analysis (A) all nominals in apposition and all nominals that are mutually substitutable, have the same case. In (7-53), for example, the phrase *ngalawanji burldamurri* ('we three (OBJect)') is glossed as containing two words, each in the LOCative: Keen (B) glosses the pronoun 'OBJective' and the nominal 'ERGative/LOCative'. Similarly, the phrase *kirrwa kunawunantha* 'for you two children' is parsed by A into two dative words: B glosses the nominal 'DATive' and the pronoun 'BENefactive'.

A second difference is that I treat the PROPrietive (Keen's COMitative) as a case rather than a derivational suffix (Keen considers this possibility, but does not adopt it). There are two reasons for this: it may mark objects in antipassive constructions, and it marks the subcategorized arguments of certain verbs (as in K). Both features are more characteristic of cases than derivational suffixes.

Finally, note that Yukulta nominals have a truly ergative/absolutive, rather than a 'tripartite' system (with distinct A, S and O cases), since no nominal subclass formally distinguishes S from O.

The 'auxiliary' clitic complex does distinguish A, S and O, but I would argue that it is cross-referencing grammatical functions rather than case. The so-called 'O' clitic, for example, may cross-reference the dative arguments of ditransitive verbs (and it is these dative arguments, rather than the ABSolute 'object', that counts as object for the purposes of determining 'inverse' subject-object combinations). The 'O' clitic also cross-references the underlying objects assigned the PROPrietive case by the antipassive.

Within Yukulta grammar there seem to be three partly independent systems that reflect grammatical functions: auxiliary cross-referencing, case frames, and verbal inflection for transitivity. The integration of these three systems into a consistent theory of grammatical functions in Yukulta is a task for the future.
APPENDIX E

THE SYNTACTIC DEVELOPMENT OF COMPLEMENTIZED CLAUSES IN LARDIL

Lardil, like Kayardild, has reflexes of the pT complementized clause system discussed in 9.6. As in K, clauses appear in a special form when modifying an object antecedent; as in K, 'object pivots' occur. But phonological changes and syntactic reanalyses have led to important differences, both from K and from pT.

E.1 Subject-subject sequences: no marking.

As in K, subject-subject sequences go unmarked:

E-1 kiin ngawa [ngithun-arr be-tharr-ku] bana be-thur ngimbenthar
that:NOM dog:NOM me-MNFOBJ bite-MNF-ACT and bite-FUT you:MNFOBJ
That dog that bit me will bite you too.

E.2 Object-subject sequences: 'objective' clause form

Object-subject sequences require that the subordinate clause take a complementizing 'objective' form in agreement with the main clause object.

E-2 ngada yuud=ne—tha niween, [ne-tharr-ba-nu ngimben-arr-ba][OBJ]
I:NOM PERF hit-UNM him:OBJ hit-MNF-COBJ-ACT you-MNFOBJ-COBJ
I hit him, who hit you / because he hit you.

E-3 niya kangka-ku ngithaan, [ma-thu-ru nguk-ur-u][OBJ]
3sgNOM say-ACT me-OBJ get-FUT-COBJ water-FOBJ-COBJ
He told me to get water.

1 Examples are drawn from Hale (1981) and Klokeid (1976, Chapter 24); the latter contains a fuller synchronic analysis than that given here.
Because radical phonological change in L has removed the original 'objective' suffix (once a complementizing DATive - see below) from the verb and the nominal arguments of the VP, the morphology has been complicated. Instead of the original contrast between unmarked and suffixed forms we have a contrast between truncated and protected forms, since the outer complementizing case suffix, though itself lost through truncation, protected the preceding suffixes. Diagrammatically:

\[
\begin{array}{cccc}
\text{PT} & (\text{Verb}) & (\text{NP}) & (\text{Verb}) & (\text{NP}) \\
\text{Prior(-CDAT)} & \text{CONS(-CDAT)} & \text{Implicated(-CDAT)} & \text{PROPriete(-CDAT)} \\
-T\text{Harrba(-ntha)} & -\text{ngarrba(-ntha)} & -T\text{Hurlu(-ntha)} & -\text{kurlu(-ntha)} \\
\end{array}
\]

At this point the reader might ask: since the final suffix has been lost, how do we know it was once a dative, rather than, say an ergative/locative, or something else? Fortunately, there is one piece of evidence that they were once a dative: subjects of 'objective' clauses, when they appear (examples in E.5.2), take a complementizing Objective, which is a reflex of the pT dative. Its appearance on subjects is the last remnant of the old system whereby it appeared on all words of the subordinate clause.

**E. 4 Lardil Contemporaneous clause = pT \textbf{-THurrka} clause**

Lardil 'contemporaneous' clauses are a reflex of the pT and Y 'simultaneous' construction, in which the 'immediate' verb inflection \textbf{-THi} (further analysable into thematic \textbf{-TH-} plus the LOCative) plus a complementizing dative gave a suppletive form \textbf{-THurrka}; objects took a similar suppletive form \textbf{-kurkka}, analysable into a temporal-complementizing locative plus a coreference-complementizing dative. A Yukulta example is:
The subordinate clause here is complementized with the dative because its antecedent is an antipassivized object.

Once again, phonological changes in Lardil have obscured the analysis. Firstly, the pT verb conjugation -THurrka has become -jirr, through truncation to -THurr, selection of one conjugational variant -jurr (cf 5.3), and assimilatory vowel fronting. More confusing is the marking of objects, which now take the Future Objective suffix -ku(r), regardless of main clause tense.

Presumably the original object marker -kurrka was truncated to -ku(rr) (by regular changes): since this particular suppletive portmanteau appeared nowhere else in the grammar it was no longer analyseable, and was confounded with the near-homophonous Future Objective suffix.

This construction is also used for contemporaneous clauses with no common participants: here the subordinate subject appears, and takes the Objective:

As with Future and Marked Non Future subordinate clauses, the Objective form of the subject is the sole relict of what was once a complementizing Dative inflected on every word of the clause.

The above changes have greatly complicated Lardil grammar. The form of pT SIMULTaneous clauses was derivable from two independently-needed rules—one distributing the complementizing Dative to all words of the subordinate clause, and a suppletion rule converting the sequence LOC:DAT into the portmanteau -kurrka. But Lardil needs three special rules:
(a) a rule assigning the now-unanalyseable CONTEMPoraneous suffix -/jirr/;

(b) an unmotivated rule assigning the OBJECTive to the subordinate subject.

(c) a rule assigning the Future OBJECTive to the clausal object, even when the clause is past, as in E-5.

E. 5 Other pivot combinations

In K all 'odd pivot' combinations (where the pivot is not subject of both clauses) are formally identical, requiring the 'complementized form' of the clause (see 9.2). The only distinction is in which arguments are omitted from the subordinate clause. But this distinction is not absolute: pivot NPs may be repeated in the subordinate clause (e.g. 9-5), and non-pivot NPs may be anaphorically omitted (e.g. 9-30).

Lardil differs from K in two ways, which result in the pivot combination being more highly specified than in K: (a) the 'objective' form of the clause in L is confined to pivots controlled by object antecedents; (b) L has introduced special relational-case rules for subordinate subjects that are not pivots, in the form of the GENitive case for non-pronouns and the POSSessive form for pronominals. The finer characterization of pivot combinations that results from (a) and (b) is summarized in E-1 and discussed in the following sections.

Figure E-1: Marking of pivot combinations in Kayardild and Lardil

<table>
<thead>
<tr>
<th>Function of pivot</th>
<th>Form of subordinate clause</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Matrix</strong></td>
<td><strong>Subordinate</strong></td>
</tr>
<tr>
<td><strong>Subj</strong></td>
<td><strong>Subj</strong></td>
</tr>
<tr>
<td><strong>Obj</strong></td>
<td><strong>Subj</strong></td>
</tr>
<tr>
<td><strong>Obj</strong></td>
<td><strong>Obj</strong></td>
</tr>
<tr>
<td><strong>Subj</strong></td>
<td><strong>Obj</strong></td>
</tr>
</tbody>
</table>
E.5.1 Innovation of special marking for non-pivot subordinate subject

In K, non-pivot subordinate subjects are not specially marked. But Lardil has innovated a special case assignment rule for them, probably by analogy with the demoted agents of passives, which take the same case: GENitive if non-pronominal, possessive form if pronominal:

E-8  karaan-tha ngani  wangal,  [ngithun / thabuji-kan
where-NOW that(NOM) boomerang(NOM) 1sgPOSS  E.Br-GEN
kubari-tharr-ku ]
make-MNF-ACT

Where is the boomerang, which I / big brother made?

E-5.2 Dependence of 'objective' clause form on object antecedent

We saw in E-2 and E-3 that sentences where the pivot is a subordinate subject and a matrix object take the objective form. So do those where the pivot is object of both clauses; these are further distinguished by GENitive/possessive marking of the de-pivotal subject:

E-9  ngada kurri-thur wangalk-ur ,  [ngimben-in
I:NOM see-FUT rang-POBJ 2sgPOSS-COBJ
barki-tharr-ba-nu]cosj
chop-MNF-COBJ-ACT

I want to see the boomerang which you chopped.

E-10  kara nyink ki ku kiin-i thungal-i,  [ngithun-i
Q you:NOM see-ACT that-OBJ tree-OBJ 1sgPOSS-COBJ
kirdi-thu-ru]cosj
chop-FUT-COBJ

Do you see that tree, which I am going to cut down?

As in K (but not Y - see 9.6.1) this is a genuine case of an object pivot: the 'objective' form of the subordinate clause cannot be attributed to the lack of a matrix antecedent for the subordinate subject. This is shown by the use of the objective clause in situations where the two clauses share both subjects and objects, but the object is pivot:

E-11  ngada jani-jani-kun  [ngithun-in ra-tharr-ba]obj karnjin-in
I:NOM search-REDUP-ACT 1sgPOSS-COBJ spear-MNF-COBJ wallaby-OBJ

I looked for the wallaby which I speared.

Where the pivot is object of the subordinate but subject of the main clause, the subordinate clause is unmarked, since its antecedent is not an object. The de-pivotal subordinate subject takes the GENitive/possessive, as in E-8 above.

Insofar as the objective form of Lardil clauses is based strictly on
antecedent-agreement. Lardil is closer to pT than K is. Although the case system has changed, the basic principle of antecedent agreement which underpinned the pT system has been retained.

A further L innovation is the limitation of the OBJECTive form to subordinate clauses from which the pivot has actually been omitted. (Where the pivot appears in the subordinate clause, it takes the nominative). In K such clauses are complementized regardless of whether the pivot is omitted:

E-12 ngada kurri-thur wangalk-ur, ngimben barrki-tharr-kun
I:NOM see-FUT boomerang-FOBJ 2sgPOSS chop-MNF-ACT

wangal
boomerang(NOM)

I want to see the boomerang which you chopped.

E-13 ngada kurri-thur wangalk-ur, [ngimben-in
I:NOM see-FUT boomerang-FOBJ 2sgPOSS-COBJ

barrki-tharr-ba-nu]OBJ
chop-MNF-COBJ-ACT

I want to see the boomerang which you chopped.

E.5.3 Use of unmarked clause where there is no common argument

In fact, Lardil has even stricter rules of antecedent agreement than Yukulta. Recall (9.6.1) that dative-complementized clauses are used in Y under the 'obviative' condition where no matrix antecedent exists for the subordinate subject: this cannot be attributed to pure antecedent agreement. This condition is preserved as the 'no common argument' condition on complementizing case in K.

In L, however, such clauses do not take the objective form. For example, 'causal' subordinate clauses, which take the Marked Non Future, and Purpose clauses, which take the FUTURE, appear in the unmarked form, even if they share no arguments with the main clause:

E-14 ngithun thabu diin-kiya-thur, dulnhu bira-tharr-kun
lsgPOSS E.Br(NOM) here-V.I.ALL-FUT month.fish(NOM) arrive-MNF-ACT

My older brother will come here, because the month-fish have arrived.

E-15 ngada kubari-kun maarn-in, ngithun thabu ra-thur karnjin-kur
I:NOM make-ACT spear-OBJ lsgPOSS E.Br(NOM) spear-FUT wallaby-FOBJ

I made a spear, so my brother could spear a wallaby.

Because such clauses must have one argument unexpressed under identity with the argument of another clause they are, par excellence, what Simpson and Bresnan (1983) call 'controlled clauses'.
E. 5. 4 Subordinate object-pivot construction becomes main clause object-topic

A final difference between K and L that can be attributed to Lardil’s strict interpretation of antecedent agreement involves the different form of ‘object-topic’ clauses in L.

As in K, these have evolved via insubordination of subordinate clauses with object pivots. But in L, matrix object-topic constructions have shed the subordinate clause marking which K has preserved in the form of complementizing case. The shedding of complementizing case can be attributed to the lack of an object antecedent once the clauses were insubordinated. Functionally, this was possible in L because the topicalization of objects could be signalled by the newly-developed GENitive/possessive marking on the depivot al subject:

E-16 diin thawa bidngen-ngan ne-tharr-kun
thin(NOM) rat(NOM) woman-GEN kill-MNF-ACT

This rat the woman killed.

E-17 diin ngarrka ngithun d u ld e-th u r
thin(NOM) well(NOM) isgPOSS dig-FUT

This wall is the one I want to dig.

Because these clauses have shed all trace of subordinate morphology, there is no synchronic reason in L for treating them as a subordinate clause type. Indeed, Klokeid (1976) derives the corresponding subordinate clause type from topicalized main clauses rather than vice-versa.

E. 6 Summary

Although the Lardil system of ‘objective’ vs unmarked subordinate clauses clearly derives from the pT system discussed in 9. 6, it has developed in a different direction to the ‘complementized clause’ system found in K:

(a) Lardil ‘objective clauses’, which correspond to complementized clauses in pT, are used only when the pivot is a matrix object. This preserves the pT ‘antecedent agreement’ principle, despite the change in the overall case system. The ‘obliative’ condition, which in Y represented a deviation from strict antecedent-agreement, does not trigger the objective form in Lardil subordinate clauses.

(b) Like K, Lardil allows object pivots and topics. Unlike K, it assigns a special relational case to de-pivotal or de-topicalized objects: this development allowed the object-pivot construction to be generalized to main clauses without the accompanying complementizing case.
Developments (a) and (b) mean that L has a distinct subordinate clause type for each of the pivot combinations Subj-Subj, Subj-Obj, Obj-Subj and Obj-Obj. K, by contrast, only has two subordinate clause types: uncomplementized, for Sub-Sub conditions, and complementized, for all others.

(c) Phonological change has obscured the morphosyntax of the pT/Y/K -THurrka construction, so that in L it is no longer analyseable as an 'immediate' clause plus a complementizing case. The old nominal LOC:DAT portmanteau -kurrka, reduced by truncation to -ku(rr), has been confused with the Future OBJECTive -ku(r). This has left the resultant construction with an idiosyncratic case assignment rule, marking subjects with the OBJECTive (=pT complementizing dative) and objects with the Future OBJECTive.

Overall, the most significant difference between the L and K systems is that the former is based on an 'antecedent agreement' rule (as in pT), the latter on the 'odd pivot' rule described in 9.2. There are good historical reasons why the antecedent agreement principle should have been retained in L but not K: they have to do with which case came to mark objects once the pT case system was abandoned (7.4.2): the old DATive in L, the old LOCative in K.

In pre-K, the LOCative case assigned to objects bore no relation to the DATive complementizing case assigned to clauses with OBJECT antecedents. There was therefore no reason to analyse the complementizing case suffixes as a form of antecedent agreement, and a new set of rules were made, along the lines suggested in 9.6.2.

In pre-L, on the other hand, objects and indirect objects took the DATive, which was identical with the complementizing case assigned to the subordinate clause. There were thus grounds for postulating a remodelled antecedent agreement system, and extending it to the one instance where antecedent and complementizing case did not coincide — clauses with antecedent transitive subjects — as indicated in E-2.

I have deliberately avoided reconstructing the situation with 'obviative' clauses, since we cannot know whether the option of marking them

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3 I am assuming here, for reasons given in 7.4.1.2, that at the time Lardil developed its accusative case system only the dative could be assigned to objects by the General Antipassive, and that the possibility of LOCative marking on objects was a later development.
Figure E-2: Remodelling the antecedent-agreement principle in pre-Lardil

O* indicates underlying objects assigned the dative by the General Antipassive

Stage 1: pT
Antecedent A S O O* IO
Case of antecedent Erg Abs Abs Dat Dat
Complementizing case Erg Ø Ø Dat Dat

Stage 2: pre-Lardil (after change to accusative case-marking, but with old rules for complementizing case)

Antecedent A S O IO
Case of antecedent Nom Nom *Dat *Dat
Complementizing case Erg Ø Dat Dat

Stage 3: modern Lardil
Antecedent A S O/IO
Case of antecedent Nom Nom Obj (*Dat)
Complementizing case Ø Ø Obj (*Dat)

with the dative was present in pT and abandoned in later L developments, or developed after Lardil split off, which is the minimum date set by the presence of reflexes in Y and K.

The seemingly unimportant fact, described in 7.4.2.2, that L took the old DATive as the new case for objects, while K took the old LOCative, has thus had enormous repercussions in quite a different part of the grammar – the organization of cross-clausal reference tracking.
1 Darwin Moodoonuthi: The Cave at Wamakurld

This text recounts the fatal consequences of an expedition made to Bentlinck Island in the early 1960s with two Europeans. It has become a modern myth, and is constantly repeated to children to demonstrate the importance of following the old law, and as a warning against further European intrusion into secret/sacred places.

1 Wamakurld. dathin-a dulk-a warra-a-jarri, birdi-ya dulk
(place name) that-NOM place-NOM go-DT-NEGACT bad-NOM place(NOM)

Wamakurld. That place was never gone to, it's a bad place.

A recurring theme of the story is unauthorized trespassing. Grammatically, this results in a number of passivized motion verbs, such as warraajarri here, which express the ill effects of motion on a place.

2 dul-marra dangka-a warra-jarri marrwa-y, marrwa-y
land-UTIL man-NOM go-NEGACT near-LOC near-LOC

The boss of that place never went near (it).

3 warra-a warra-j, warra-a thungku
far-NOM go-ACT far-NOM mangrove scrub(NOM)

Far away he walked, (in) the far scrub.

4 rar—umban—d, rar—umban—da warra-a, warra-ya wambal-i warra-j
south-ORIG-NOM south-ORIG-NOM far-NOM far-LOC bush-LOC go-ACT
(People) from the south (stayed) far off, walked in the scrub far off.

5 jirrkur—umban—d, thungkuwa-ya warra-j
north-ORIG-NOM mangrove scrub-LOC go-ACT
(People) from the north went through the scrub.

6 ri-ya, rul—ung-k, bal—umban—da jardi—y, thungkuwa—y
east-NOM east-ALL-NOM west-ORIG-NOM mob-NOM scrub-LOC
In the east, going east, the western mob (stayed) in the mangrove scrub.

7 rul—umban—da jardi—ya thungkuwa—ya thaa—th
east-ORIG-NOM mob-NOM scrub-LOC return-ACT
The eastern mob came back through the scrub.
ngulmu-wa dulk, ngulmu-wa dangka-a, deadly-NOM place(NOM) deadly-NOM person-NOM
(It’s a) deadly place, (they’re) deadly people (there).

marrwa-a warra-a-nangku
close-NOM go-DT-NEGFUT
Nearly mustn’t be gone to.

yulkaan-da mirr- yulkaan-da mirra-a
eternal-NOM goo- eternal-NOM good-NOM
(That’s the way it’s) always been.

Literally: 'Always (it was) good'. (The law was observed.)

dangka-diya-n-d, bath-urrnga jatha-a ngilirr
man-eat-N-NOM west-BOUND other-NOM cave(NOM)
(There are) man-eaters, on the west side (of the saltpan), another
cave.

jatha-a ngilirra bathurrng
another cave on the west side.

dangka-diya-n-da kandu-diya-n-d.
person-eat-N-NOM blood-eat-N-NOM
Devourers of people’s blood.

Note the prefixation to the verb of both whole and part here – see
4.4.3.5.

ri-ngurrng, kurirr-u dangka-wu, dangka-kuru-lu-n-d
east-BOUND dead-PROP man-PROP man-dead-PAC-N-NOM
The eastern side (of the saltpan) can have a lot of dead men, (it’s)
a man-killer.

Here the PROPrietive expresses 'potential association': the cave is
potentially the cause of death. See 3.3.5.5.

jatha-a ngilirr-a ri-ngurrng, jatha-a bath-urrng
one-NOM cave-NOM east-BOUND one-NOM west-BOUND
(There’s) one cave on the east side (of the saltpan), and one on
the west side.

bath-urrnga-wan-da jardi dangka-diya-n-da kandu-diya-n-d
west-BOUND-ORIG-NOM mob(NOM) person-eat-N-NOM blood-eat-N-NOM
The ones from the west side are eaters of men’s blood.

Those from the east kill in another way – by wasting the muscles of the
transgressor.
Blood comes out— (they) kill (people) by sucking their blood out.

That's the eternal truth:

Some white men wanted to see that close.. they defiled that place.

Rabatha, literally 'tread on', is frequently used with the sense 'transgress on' or 'defile' (a place).

It was never defiled before, the old time people never defiled (it).

The western (mob) didn't defile (it), the northern (mob) didn't defile (it).

They travelled about far away.

Two white men, two white men went to that (place).

(They) took our man (with them).
Another man, the man from there, the boss of that place.

He was the boss, a northerner.

Bukarnayarrbungathi, the boss of the place.

(He) was born at that (place), was a northerner, from Rukuthi (Oak-Tree point).

Dulkiiwatha, literally 'become on the earth' or 'become at the country', is the usual term for 'be born' when discussing the territorial rights conferred by birthplace.

He (one of the white men) shot with his gun, shot his gun.

(In) that cave.

Here, as always with locatives in the instantiated modality, we cannot tell whether the LOCative case marks an object ('shot the cave') or a location ('shot in the cave').

Many flames came out, many flames.

And now he stepped into the cave.
birdi-ya dulk, dangka-kuru-lu-n-d
bad-NOM place(NOM) man-dead-PAC-N-NOM
(It's a) bad place, a man-killer.

dathin-ki dulk-i warra-ja dulk-i
that-MLOC place-MLOC go-ACT place-MLOC
(And he) went to that place, to the place.

warnqiid-a waldarra wirdi-j, warnqiid-a waldarra wirdi-j
one-NOM moon(NOM) stay-ACT one-NOM moon(NOM) stay-ACT
One month passed, another month passed.

jardi-ya ngilirr-i raba-th
back-MLOC cave-MLOC tread-ACT
(They'd) trampled all around the back of the cave.

wuran-ki diya-j, dangka-a
food-MLOC eat-ACT person-NOM
And eaten food there, the man.

maraka raba-nangku dathin-ku dulk-u
CNTRPCT tread-NEGFUT that-MPROP place-MPROP
(They) shouldn't have set foot in that place.

marrwa-ya dali-j, dul-marra dangka-a marrwa-ya dali-j,
close-LOC come-ACT place-UTIL person-NOM close-LOC come-ACT
dulk-uru dangka-a
place-PROP person-NOM
(They) had come close, the boss of that place had come close, the owner.

minyi thaa-tha natha-ya bartha-y
towards return-ACT camp-LOC home-LOC
(He) came back to his home camp (on Mornington).

ngarrku-ru kandu burri-j, ngarrku-ru kandu burri-j
strong-PROP blood(NOM) emerge-ACT strong-PROP blood(NOM) emerge-ACT
His blood came out copiously, his blood came out copiously.

Ngarrkuru 'strongly' is one of two manner-type nominals formed with the PROPriective case. (The other is kantharrkuru 'alone'.)

(jatha-a dangka-a natha-wan-da bartha-wan-da kamburi-j;)
another-NOM man-NOM camp-ORIG-NOM home-ORIG-NOM say-ACT
Another man from the home camp said (to him):

The above line was added later for clarity.
You defiled that cave (when in the) south (i.e. on Bentinck).

at that (place), on Rangurrnga (Bentinck Island) you defiled the cave.

You ate food nearby, at that (place).

Bukarnayarbungathi died two months later, from a mysterious stomach illness.

2 Dugal Goongarra: Kajurku

Kajurku is one of the two main malevolent beings in Kaiadilt mythology. (The other is the lecherous mud-dwelling Barrindindi who, to satisfy her appetite, steals young boys for weeks and then mysteriously returns them). As is typical in Kayardild discourse, he is not referred to here by name, but simply as dathina dangkaa 'that fellow'.

Kajurku, his usual name, also refers to the murex shell, whose spines resemble the spears thrown at Kajurku. Another common appellation is kukaliinkuru, literally 'the one who will be bounced off' (8.2.10.1).

(A night fisherman) went down from the south, a bark torch on his shoulder.

(He) put his bark torch down on a stone.

Then (he) lit the torch. (To attract the fish).

Flames, big flames flared up.

Many fish came up from the east,
No motion verb is needed with the 'from' compass locationals.

6 ngurruwarra-ya bal-ung- k wurd-ya thaa-th
fishtrap-LOC west-ALL-NOM corner-LOC return-ACT
westwards they came back round the corner of the fishtrap.

7 dathin-a dangka-a niya wirdi-j
that-NOM fellow-NOM 3sgNOM remain-ACT
That fellow (Kajurku) was waiting

8 wurd-ya ngurruwarra- y, jardi-ya ngurruwarra- y
corner-LOC fishtrap-LOC behind-LOC fishtrap-LOC
at the corner behind the fishtrap.

9 ril-ung-ka kadaaaaa
east-ALL-NOM again
(The fisherman) went back east again,

10 mar-maru-tha mijil-i, yalawu-j, brrbiru-th
hand-put-ACT net-MLOC scoop up-ACT lift high-ACT
took a net in his hand, scooped up (the fish), lifted the net up high,

11 bilari-ja thaa-tha rar-ung-k
empty-ACT return-ACT south-ALL-NOM
Went south to empty (the net),

Note the 'motion complex' here, in which thaatha is leached of its 'return' meaning: the whole means 'go off to V (and return)'. See 5.10.2.

12 wuu-j, jirrkar-a thaa-th,
put-ACT north-NOM return-ACT
put (the fish down), went back north,

13 yalawu-ja jirrkar-a wurd- y
scoop-ACT north-NOM corner-LOC
Scooped (some more fish) in the north, at the corner,

14 jirrka-an-da kulma-j,
north-FROM-NOM carry-ACT
Carried (them) back from the north.

15 niid-a ngankirr-a warngiid-a
same-NOM pile-NOM one-NOM
(Put them on the) same one pile.

16 ril-ung-ka thaa-tha ni
east-ALL-NOM return-ACT 3sgNOM
Back to the east he went.
Coming back from the east (he'll) be killed at the west corner.

[Here the narrator uses the future in an anticipatory aside.]

(He) scoops (some more fish) up now, facing due west.

From the west the fellow steps up now.

meets him and grabs him by the face; by the face, and (he's) dead.

The people from up high looked from the sandhills, from their camp.

(T hey saw) no bark torch, nothing, no flames. (He) was dead.

(They) found that fellow with the man in his mouth,

In another version, Kajurku audaciously challenges the men to come and try spearing them.
(They) kept spearing (at him).

There going east (they) speared and stabbed and grabbed (at him).

(He) came up at the eastern side (Sweers Island) at Ngarnariy.

Ringurrnga is one traditional name for Sweers Island, which defines the eastern boundary of the intervening channel. See 4.2.4.9.

Up onto Sweers Island at Ngarnariy.

The northern and eastern (mobs) crossed that one's path.

(He) would be stabbed at going east there.

(He) would be thrown (spears) at, the pronged spears would be sharpened up.

(They) would sit down to sharpen up (their spears) again.

(They) would go down to the east, go down to the east.

(They) went down to the saltpan in the east.
37 ril-umban-da jardi-y, junkuwa-th, rar-umban-d, jirrkur-umban-d
east-ORIG-NOM mob-NOM join-ACT south-ORIG-NOM north-ORIG-NOM

The eastern mob, south mob, north mob, they all joined up.

38 kaba-nangku, kuru-lu-nangku niwan-ju
find-NEGFUT dead-PAC-NEGFUT 3sg-MPROP

But (they) couldn't hit home, couldn't kill him.

In another version Kajurku goes underwater and emerges on Sweers Island, where he lights a fire to show he is still alive.

Norman Tindale (p.c.) has suggested that the original Kajurku was a Macassan ship that temporarily abducted a Kaiadilt man, later dropping him off on Sweers Island. Certainly this would explain Kajurku's impenetrability, and the fact that he could hold a man in his mouth (perhaps the ship's bows).

3 Roma Kelly: The McKenzie Massacre

1 rukuthi mutha-ya dangka-ya mala-maru-th dathina-wala do:g
place name many-MLOC person-MLOC sea-V.D-ACT that-IiOT(NOM) dog

At Rukuthi those dogs forced many (Kaiadilt) people into the sea.

2 do:g durrwa-j, dangka-wala jarii-j
dog chase-ACT person-LOT(NOM) run away-ACT

the dogs chased (them), many people

3 yuuma-tha mutha-a dangka-a people, kunawun
drown-ACT many-NOM person-NOM child(NOM)

Lots of people drowned, and children.

4 yuuma-th, dathin-ki thungal-i wanna-j, dathin-kuru bala-a-nyarr
drown-ACT that-MLOC thing-MLOC dislike-ACT that-PROP shoot-DT-APPR

(They) drowned, (they) didn't like that thing, might get shot by it,

5 dathin-ki dalurudaluru wanna-j, bayi-wuru jardi-ya wanna-j,
that-MLOC gun dislike-ACT fight-PROP mob-NOM dislike-ACT

didn't like that gun, didn't like that warlike mob, and

Dal.uru.daluru, though a native Kayardild word analysable as [thundercrack-PROP-REDUP] is always indeclinable (quite irregularly). Cf Text 1, Line 3.

6 yuuma-th. jangka-a dumu-y, jangka-a walmathi, jangka-a yuuma-th.
drown-ACT some-NOM hill-LOC some-NOM high up some-NOM drown-ACT

drowned. Some went to the sandhills, some went high up, some drowned.
(Women) drowned with children still in their bellies, or leading them by the hand.

With children in their bellies and at their hands they drowned.

They swam along turning over, dived into the sea, dived under the sea,

far out to sea they drowned and died.

They sank dead with their children there way out at sea.

Some (stayed) on the crests (of the sand hills), (some) crawled round among the mangroves, in the estuaries,

(they) swam about in the estuaries, and drowned among the mangroves.

(they) went into the mangrove swamps,

they didn't like that thing, that gun thing.

that thing, after (they) had eaten and stolen food.

(They) stole bullocks, the things that are like many mothers
(they) were shot at, chased and constantly shot at, followed.

robbed, robbed of their women.

(McKenzie's men) took the nubile girls back (to their camp), the nubile girls were taken (sexually).

This line clearly contrasts the two possible treatments of an object topic, here marnganda kunawuna. Where the effects on the object are stressed as in the second sentence, describing the girls' rape, the passive is used. In the first sentence, by contrast, the action is less drastic, and the topic merely becomes nominative, with no change in voice.

(They) were robbed of some of their women, robbed of some of their children, of half (their children).

(They) were seized, the nubile girls were seized.

(They) took the nubile girls back towards the south.

McKenzie had a camp at Kurumbali, on the south side of Bentinck Island. One listener remarked here 'just takem one night altogether, bringim back then might be three day altogether. Lot of woman bin find a child, jangkaa kandukandu, jangkay ngumu [some red (half-caste), some black.]

(The girls) were taken southward.

(They) took the nubile girls back to the south.
Some (Kaiadilt) drowned, some (hid) in the mangroves, some (were) scattered about in the swamp.

(Some) crawled about in the mangroves, kept themselves hidden away.

Some couldn’t be found.

The passive is employed here to stress a positive outcome.

Yes, some drowned, some went into the sea, some went into the estuaries with their children.

The English loan is widely used as a particle introducing a reiteration or elaboration of the narrative.

Some were shot high up on the sandhills,

Some were (still) in (their) bellies,

Some already having human form, toddlers, were shot.

The noun *kinyinda* means ‘visible, extended form’ and is appropriate here for a child that has emerged from the invisibility of the womb.

(That) man’s shoulder must have got sore, (he) travelled about shooting,

incapable of feeling sorry, nothing.
(They were) strangers, looked like they came from a long way away,

looked like strangers.

The mob who owned that country,

the dulmarra dangkaa (custodians)

(blocked off the owners from (their own) country.

(You would have thought it was) their country.

(For other possible translations of this phrase see 6.7.2.1)

(The Kaiadilt) went about barred from their own country, unable
to go out in the open,

(McKenzie's mob) shot them out into the sea, and killed, killed,

Mothers ran away, fathers ran away,

mothers ran away, grandmothers ran away,

some drowned, some were dead.

Behind his back (the Kaiadilt) ate (his) food, ate (his) bullocks,
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47 wungi-ja diya-j, bala-a-ja wirdi..., steal-ACT eat-ACT shoot-DT-ACT stay...
Stole and ate (them), they kept getting shot.

48 bi-l-da bala-a-n-janii-j
3-PLU-NOM shoot-DT-N-VPURP-ACT
They were asking to get shot.

49 bala-a-ju bakii-ju
shoot-DT-PUT altogether-PUT
They would all get shot.

50 jangka-a bala-a-j, jangka-a wirdi-ja birjin-d
some-NOM shoot-DT-ACT some-NOM stay-ACT alive-NOM
Some were shot, some stayed alive.

4 Pat Gabori: Invoking the Moon

It was customary to shout invocations at the new moon, begging him to bring up fish, dugong and turtle from the deep seas. In this version, told by Pat Gabori, the shouted invocations are interspersed with asides describing the moon’s lack of response. There is no formal distinction between reported speech and the narrator’s comments, this being conveyed by a difference in voice quality, with a ‘whispered shout’ for the invocation.

Tindale recorded a similar invocation from Percy Rukuthi in 1962.

1 kinyba-tha: kiija-tha bath-in-da kiija-tha bath-in-d,
call-ACT come close-IMP west-FROM-NOM come close-IMP west-FROM-NOM
(One) calls out: “Draw near from the west, draw near from the west,

2 [marrwa-a ngijuwa kurri-juu-nth],
close-NOM lsgSUBJ:COBL see-FUT-COBL
so I can see you close up.

3 kukurdu-ru-tha kukurdu-ru-tha kiija-tha bath-in-d!
near-PAC-IMP near-PAC-IMP come close-IMP west-FROM-NOM
Approach, come near from the west,

4 nyingka kurulu-tha marri-ja ngijin-da kang-k!
you:SUBJ kill-IMP listen-IMP my-NOM word-NOM
you listen carefully to my words!”

For the use of kurulu-tha ‘kill’ as a verbal intensifier see 5.10.1.2.
5 ni-ya marri-j, marri-n-marri, can't marri-j, 3sg-NOM hear-ACT hear-N-PRIV hear-ACT
He hears, (no he) doesn't hear.

6 dathin-a waldarra dathinanangan-da marral-da kuwa-juwa-a-j
that-NOM moon:NOM like this-NOM ear:NOM twist-REDUP-DT-ACT
That moon twists (his) ear like this,

7 can't marri-j, kurndumaa-n-d
hear-ACT stoop forward with hands joined behind back-N-NOM
doesn't hear, he's stooping forward with his hands behind his back.

8 kiija-tha ngijn-da kang-ka kurulu-tha marri-j, kurulu-th
come close-ACT my-NOM word-NOM kill-ACT listen-ACT kill-ACT
"Come close and listen to my words carefully, carefully,

9 kiija-tha bath-in-d, kiija-tha bath-in-d!
come close-IMP west-FROM-NOM come close-IMP west-FROM-NOM
draw near from the west, draw near from the west!"

10 kira bath-in-d, marrwa-a na, mirra-wa-tha bardak.
near(NOM) west-FROM-NOM near-NOM now good-INCH-ACT belly(NOM)
(The moon) is near coming from the west now, near now, (the people)
are happy.

11 nadabala kamburi-ja marrwa-a
'nother fella say-ACT near-NOM
Someone else says (when he's) near:

On rehearing, this lapse into English was replaced with jathaa dangkaa
'another person'.

12 kira bath-in-da kinaa-ja nga-l-d
near(NOM) west-FROM-NOM ask-ACT we-PLU-NOM
"Now you're near, coming from the west, we ask

13 marndi-ja nga-l-da wuran-kuru ngumban-ji
get off-ACT we-PLU-NOM food-PROP you-MLOC
that we get food off you,

14 marndi-ja kamburi-ja kang-k
get off-NOM say-ACT word-NOM
getting (food off you) we say these words."

15 bijarrba bang-a yurdayurda-wula-tha ni-ya kurrka-th
dugong(NOM) turtle-NOM open sea-VABL-ACT 3sg-NOM get-ACT
Dugong and turtle he (the moon) would get from the open sea,
bijarrb, bang-a , yakuri-y.
dugong(NOM) turtle-NOM fish-NOM
dugong, turtle, fish.

that's the kangk.
word
That's the story.

ni-ya dulk , jirndirriwuru.
he-NOM place(NOM) place name.
(That's) his place (i.e. the moon's 'story place'), jirndirriwuru.

Note the 'inalienable possession' construction, which is used with 'story places' belonging to mythical beings. Indeed, 'belonging to' is a misleading expression: the story place is another manifestation of the Moon being.

kamarr-a dangka-a dulk, kamarr: jirndirriwuru
stone-NOM person-NOM place(NOM) stone(NOM) place name
A stone is the fellow's place, a stone: jirndirriwuru.

On the use of dangkaa 'fellow' to track mythical protagonists, see 4.2.2.2.

The Kaiadilt practice of addressing the moon has also been noted by Tindale (1977): 'the Kaiadilt recognize the primary dominance of the moon on their lives, linking it with the tide, whose ebbs at neap and king times govern most of their activities as food gatherers. At first sight of the new moon each month they address it, enumerating their needs for lower than ever tides to expose outer reefs where special shellfish and other foods may be obtained. They demand the absence of night fogs, which frequently make night excursions, far from the shore, hazardous.'

5 Roma Kelly: Eclipse of the moon and the newly dead

Whereas the new moon could be addressed with impunity, even with arrogance, the moon in eclipse was greatly feared. The haze around 'him' was believed to be a net that could scoop up the souls of the newly dead: as it filled he became extinguished, as if dead himself. At this moment people would take cover under male fig trees\(^1\), lest they become like stones, covered with oyster-like sores.

\(^1\)In terms of western botany, fig trees are hermaphrodites. I am unsure of the ethnobotanical rationale for calling certain figs 'male'.

It's an old time story, father told it to us.

(He's) not (just) the moon, the moon's a person.

(Some spirit) comes up from the west, here he comes,

From their graves on Bentinck or Sweers Island spirits head towards Mawurrk, the spirit home in the east. En route the moon intercepts them.

They will go into his stomach,

and the moon himself will become (as if) dead,
The adjective *dunbu* is normally used of extinguished fires, firesticks and torches. Here it refers to the moment of total eclipse.

13 **kurrir-nurr-urwa dangka-nurr-ur** dunbu
dead-ASSOC-NOM person-ASSOC(NOM) extinguished(NOM)
will by extinguished with all the dead people.

14 **dathin-a durldi-jaw bath-in-ki dawurldawur-i dangka-y**
there-NOM cover-ACT west-FROM-MLOC new dead-MLOC person-MLOC
There he is covering (with his net) the spirits coming from the west,

15 **kurrir-i dangka-ya durldi-j**
dead-MLOC person-MLOC cover-ACT
covering the dead people,

16 **niwan-ji bardaka-ya jaa-j**
his-LOC stomach-LOC enter-ACT
(they’re) entering into his stomach,

17 **niwan-ji mijil-i jaa-j**
his-LOC net-LOC enter-ACT
they’re entering into his net,

18 **niwan-ji kinbuyin-ji**
his-LOC web-LOC
into his dark web.

*kinbuyinda* is the faint 'web' seen on the dark part of a half moon.

19 **dirrkulin-da thungal-d, dirrkulin-ji thungal-i ..**
male-NOM tree-NOM male-LOC tree-LOC
A male tree, at a male tree,

20 **namu karndin-ki thungal-i, dirrkulin-ji thungal-i kinayiwa-th**
NEG female-LOC tree-LOC male-LOC tree-LOC hide-ACT
never under a female tree, (people) would hide under a male tree.

21 **dangka-a kinayiwa-tha bana dirrkulin-jiyia-th**
person-NOM hide-ACT and male-V.I.ALL-ACT
A person would hide and go under male (trees),

22 **dirrkulin-ji jaa-j, namu karndin-d**
male-LOC enter-ACT NEG female-NOM
would enter male ones, not females.

23 **dirrkulin-jiwa-tha kirrik-iwa-th, kirrik-i jaa-j, dirrkulin-d**
mai-V.I.ALL-ACT fig-V.I.ALL-ACT fig-LOC enter-ACT male-NOM
Under male wild fig trees, entered wild fig trees, male ones,
24 bana kurubarr-i, kurubarr-iiwa-th, namu karndin-d, and coolibah-LOC coolibah-V.I.ALL-ACT NEG female-NOM
and under coolibahs, to coolibahs, not females,

25 namu maku-wa kirrik, dirrkulin-d, wurkara kirrika dirrkulin-d
NEG woman-NOM fig(NOM) male-NOM boy(NOM) fig(NOM) male-NOM
not woman figs, males, boy fig trees, males,

26 baymbay kurul-ii-ja ni-y, bana jilja-yiwa-th kamarr-wa-th,
WARNING kill-DT-ACT 3sg-NOM and oyster-V.I.ALL-ACT stone-INCH-ACT
or he would be killed, and be got by oysters and become like a stone.

27 dathin-a thungal-d, dathin-a waldarr,
that-NOM thing-NOM that-NOM moon(NOM)
dangka-a karndin-ki wirdi-j
person-NOM female-LOC stay-ACT
(When) that thing, that moon (was around), people stayed under female trees,

The speaker has got mixed up here and corrects herself:

28 dirrkulin-ji wirdi-ja baymbay jilja-yiwa-th,
male-LOC stay-ACT WARNING oyster-V.I.ALL-ACT
jilja-wuru-wa-nharr
oyster-PROP-INCH-APPR
stayed under male trees, lest they be got by oysters, lest they covered in oysters (i.e. sores like oysters),

Note the alternation between the traditional Kayardild construction with the apprehensive verb inflection, and the functionally equivalent neo-Kayardild construction with the evitative particle baymbay and the unmarked ACTual verb inflection.

29 kamarra-wa-th.
stone-INCH-ACT
and become (like an oyster-covered) rock.

30 waldarra-waali-j, bi-l-da waldarra-waali-ja kina-yiwa-th
moon-VEVIT-ACT they-PLU-NOM moon-VEVIT-ACT hiding-V.I.ALL-ACT
They hid away from the moon,

31 [waldarra-ntha kurulu-nharra-nth] COBL
moon-COBL kill-APPR-COBL
lest the moon kill (them).

Note the 'odd pivot sequence' in this lest construction, triggering complementizing case: 'they' is matrix subject and subordinate object.
32 namu maku-wa kirrik, dirrkulin-da kirrik,
NEG woman-NOM fig(NOM) male-NOM fig(NOM)
Never a woman fig tree, a male fig.

33 juuuumangarrba kina-ya dii-j,
biiliiliig:NOM hiding-LOC sit down-ACT
Hidden right away they would sit down,

34 jungarrba-ya kirrungarrba-ya waldarra-y, ngimi-y
big-LOC pitch dark-LOC moon-LOC dark-LOC
while the moon was pitch dark, in the dark,

Kirrungarrba segments into kirru 'net' and the CONSequential case -ngarrba; i.e. 'after the net', referring to the dark phase of the eclipse, after the 'net' has disappeared. But the form has been lexicalized, so that it can now refer to any period of total darkness, whether or not it follows an eclipse.

35 dan-da yalulu, torch, yalulu dan-da ngankirra-walad
this-NOM flame(NOM) flame(NOM) here-NOM pile—LOT(NOM)
this flame, torch, here in piles,

36 kaburrba dunbu, narrkiri-i-ja kaburrb,
coals-NOM extinguished(NOM) bury-DT-ACT coals-NOM
(with) the coals extinguished, the coals were buried,

37 dunbu-wa wirki-ja dirrkulin-ji kirrik-i
extinguished-NOM stay-ACT male-LOC fig-LOC
extinguished they stayed under the male fig trees.

38 jungarrba-ya kina-y, jungarrba-ya wirjang-ki, inthayd.
big-LOC hiding-LOC big-LOC shelter-LOC inside
Deep in hiding, sheltered right away, inside.

39 karndin-kuru wirki-nangku, baymbay jilja-yiwa-th,
female-MPROP stay-NEGFUT WARNING oyster-I.ALL-ACT
(You) couldn’t stay under a female, or you’d be got by oysters,

40 baymbay kamarr-wa-th, jilja-a kamarr-a wirki-j
WARNING stone-INCH-ACT oyster-NOM stone-NOM become-ACT
or you’d turn to stone, become an oyster rock.

This is an example of the constraint limiting the inchoative derivation to lexemes: it can apply to the single word kamarr but not to the NP jiljaa kamarr 'oyster rock'; instead, a periphrastic inchoative with wirkija must be used.
yuujban-da ngunguk-a thory, yuujban-d, ngarmmandathu, old time-NOM story-NOM story old time-NOM grandson(NOM)

baymbay kamarr-wa-th
WARNING stone-INCH-ACT
(That's) an old time story from way back, grandson: you might turn to stone.

baymbay kamarr-wa-th. ni-ya dangka-a bala-nharr, waldarr WARNING stone-INCH-ACT he-NOM person-NOM kill-APPR moon(NOM)
(You) might turn to stone. He might kill (you), the moon.

Compare this topic sequence to the Odd Pivot sequence in (31). Both involve a subject-object sequence with a lest construction in the second clause, but only in 31 is complementizing case triggered. This is because (31) involves the logical subordination of the second clause to the first ('they hid from the moon, lest he kill them'), whereas (42) merely involves two coordinated and independent propositions: Subject-Object sequences trigger complementizing case under the 'odd-pivot' but not the 'odd topic' condition. See 9.5.

6 Pat Gabori: Singing back the dead

People who were 'close-up' dead (marndurr)- for example, in a trance state following a fit or turn- could be sung back to life by certain healers, possessing knowledge of a special spell, and known as mirraa waraa dangkaa 'good mouth people' or kamirr 'word-good'. This version is told by Pat Gabori.

It seems the words of this spell were completely standardized, for Tindale's 1962 tapes contain an identical rendition by Darwin Moodoonuthi (which Pat Gabori hadn't heard). As far as I know it is the sole example of its genre.

The driving rhythmic effect of this spell, with its strict 4/4 metre, is achieved by the insertion of three special syllabic fillers: -tha, -ka and -wa. -tha does not occur elsewhere in Kayardild (but is a clitic in Lardil); -ka is a Focus clitic (6.7.4.2) and wa is an optional increment on nominative noun/adjective stems ending in u (3.2). Note that the long vowel in riinki is metrically equivalent to two short vowels. Although the verb waaia 'sing' is used to describe the execution of this spell, it is more of a rhythmic chant than a song.

Successful healers were rewarded with food and fishing rights.

Pat Gabori also claimed that the same words, differently intoned, could be used to deliberately kill the victim.
People could be sung when they were close up dead.

Here is a child in a coma, having a turn,

(Someone asks:) "Where is a healer?"

(He says to someone:) "You sing him the healing way!"

(Reply:) "I'll sing it wrong and spoil it"
His belly is blown on, now he's alright.

Taken together, the words of the spell only make partial sense, and no line by line translation was offered to me. Riinkl-ka mawurru clearly refers to bringing back the sufferer from the spirit-home in the east, mawurru. But the words dangka-tha=ka rabanharra are more mysterious – perhaps they express the fear (APPR) that the victim (dangkaa) may already have set foot (rabath) in death's domain.

7 Barney Charles: Text in Yangkaal

This is the only surviving Yangkaal text, apart from some Lardil stories where the villains speak Yangkaal. It was told by the late Barney Charles in 1962 to Norman Tindale, who kindly allowed me to obtain a copy of his tape. In 1984 I played this to Cora Peters, who could still understand Yangkaal although she could no longer speak it; without her help the following text could never have been transcribed.

The Yangkaal phonemic system is almost identical to Kayardild, the only important difference is the retention of pT */rl/ in Yangkaal (written /l/ initially as with other retroflexes). But the two languages sound so different that Kayardild speakers to whom I played the tape understood nothing. One cannot, however, rule out the possibility that Barney Charles’ speech was in some way idiosyncratic. The main difference lies in voice quality. Yangkaal, like Lardil, is highly nasalized with a very lax articulation; in addition, stops tend to be voiced or even fricated, whereas Kayardild stops are mostly voiceless – intervocalic /th/ is [ʰ] in Yangkaal (as in Lardil), but [θ] in Kayardild. Darwin Moodoonuthi once summed up Yangkaal pronunciation for me as follows: ‘yeah, they speak our language, but altogether take it a bit light.’

In the following transcript all lexical and grammatical differences from Kayardild are noted; if no comment is made, no difference exists. The dialectal relation between Yangkaal and Kayardild should be obvious.

1 nga-rr-a warra-ju bal-u, kulthangarra-wu bala-thu
we-DU-NOM go-FUT west-ALL flying fox-MPROP hit-FUT
We two will go west, to kill flying foxes.

The Yangkaal allative ‘west’ cardinal alternates between the full form balungka (line 17) and the reduced balu; K requires the full form.
They're hanging as if dead under the branches, we'll soon kill them.

(a) note the /rl/ phoneme in kurlirra and yarlka, which corresponds to Kayardild /r/: kurirra, yarka. Other words with intervocalic /rl/ where K has /r/ are burlung-ku wurlan-ki 'cooked-MPROP food-MPROP' (line 6), yakurli 'fish' (22), kurlkangka 'rushes' (29) and yarlbuda 'game' (35).

(b) the lexeme yarlka, 'under' in Yukulta and Yangkaal, has specialized to 'underground' in Kayardild. (c) as in Lardil, an accrescent /i/ appears in Yangkaal following final the final /rr/, which has been exposed by truncation of short final /a/. Cf Yukulta ngakurra, Kayardild ngakurr(a), Yangkaal and Lardil ngakurri.

And we two will cook (them) there,

And I will cook (them) there.

(We'll) soon come back in daylight, in the afternoon we'll come back,

with the cooked food, we'll carry it back on our heads

for the next day.

Someone will have to go (to invite people) with the message.

Will you go?

The reduced form nyi is shared with Lardil but not K or Yukulta.

Look, it's a long way, this (place) is far to the west.
Like Lardil, Yangkaal has a zero imperative form (although forms in 
also occur — see (19).

11 ngimiiuj labi—juru balmb—u, warra—a liya—thi
predawn—MPROP get up—FUT tomorrow—MPROP far—NOM east—REM

*We should get up early tomorrow, we’re a long way to the east here.*

Yangkaal preserves initial [[]] where K has [ ] . Hale’s Yangkaal field
notes, made with a different speaker (Mick Charles), record initial [ ] for
the same words. It seems likely that in Yangkaal, as in Lardil, these were
different idiolectal realizations of the same phoneme.

12 barri—na kalka—na majimaji
crawl—NEGIMP hurt—NEGIMP calf(NOM)
*Let’s not be crawling around on sore calves,*

13 bana ja—a barrunthaya kalka—th
and foot—NOM yesterday hurt—ACT
*and (my) feet were hurting yesterday too.*

14 wirdi warra—a duulk—a warra—a, nguthunguthu warra—j
stay far—NOM place—NOM far—NOM slowly go—IMP
*That place is a long way away, let’s take it easy,*

15 barrunthaya thaa—th bana nguthunguthu jinka—ja duulk
yesterday return—ACT and slowly follow—ACT ground(NOM)
*I came back yesterday and I was following the ground real slowly.*

16 dan—da lara—lara li—lung—k,
here—NOM south—south east—ALL—NOM
*Here to the south east,*

17 dan—da lara duulk—a kunbalinymarr, ba—lung—ku
this—NOM south place—NOM place name west—ALL—MPROP
jirrkur—ung—ku wanji—ju
north—ALL—MPROP go up—FUT
*This south place, Kunbalinymarr, we can head up to the north west here.*

18 bana jina—ngku wanji—ju? dan—da bad—a wanji—ju jinawurli
and where—MPROP go up—FUT here—NOM west—NOM go up—FUT ?
*And where do we go up? Here in the west we go up, at jinawurli (?) .*

The MPROP allomorph -ngku deviates from Kayardild and Yukulta use —
which would be -wu(ru) . This innovation suggests that /ng/ has been
reassigned from stem to suffix, along lines suggested by Hale (1973) for
Damin.
19 wulimi bath-u karna-ju
deep water fish sp.(NOM) west-MPROP cook-FUT

Wulimi fish we can cook in the west.

The exact reference of wulimi is not known. No other Tangkic language has a cognate.

20 bana jina nguku?
and where water(NOM)

And where is there water?

21 bada jirrkar dimirrbin. yuuda nyuda nga-ku-l-da
west north place name already fire(NOM) we-INC-PLU-NOM

jindiwirrin, ngambu-nguku
place name well

In the north west at Dimirrbin. We already had a fire there at the well.

The use of nyuda for 'fire' is shared with Lardil; K has ngida.

22 dathin-ku buu-ju jirrma-ju yakurli-wu, mutha yakurli-wu.
there-MPROP pull-FUT lift-FUT fish-MPROP lots fish-MPROP

We'll catch fish there, plenty of fish.

23 mutha katharr-i, kurrang-k, dinjuman, dambidambi,
lots esturary-LOC barramundi-NOM salmon(NOM) long tom(NOM)

There's lots in the creek, barramundi, salmon, long tom,

Yangkaal dambidambi = Kayardild karrmuku.

24 dibidibi buu-ju ngarrawurn
rock cod(NOM) pull-FUT bluefish(NOM)

rock cod we'll pull in and bluefish.

25 ngimi jijinanganda warra-ju
night which way go-FUT?

Which way will we go at night?

26 dana-nku, jirrkar-inyin warra-ja nga-ku-l-d,
leave-NEGFUT north-end go-IMP we-INC-PLU-NOM

We won't leave (the island), we'll go round the north end,

NEGFUT -nku appears to be a contraction of the full form -nangku, found in Hale's Yangkaal notes.
and come out at Dunkurrurrungin.

To the north west there are barramundi

and there’s a panja ground in the rushes coming back from the north.

[Yangkaal marrnga = Kayardild kurrngu-wa.]

You have to go up from the north at Dinginburri, and return to Bumanku,

There’s a well there.

And where will we sleep? The well.

Like Yukulta, Yangkaal has buthiya-ja for sleep; Kayardild has yiiiwi-ja.

We’ll stay on at the estuary,

at the estuary we’ll stay and sleep.

Near the well there’s game, on the beach, yeah,

As noted in 6.7.6, K has no word for 'yes'; all other Tangkic languages have a reflex of ngii.

We’ll go north west tomorrow, and come back eastwards along the beach.
37 bana jilirra nga-ku-l-da buthiya-j, mirra-a dulk-a and milkwood we-INC-PLU-NOM sleep-ACT good-NOM place-NOM
dathin there(NOM)
And we'll sleep at the milkwood place, that's a good place,

38 dathin-ku buthiya-ju there-MPROP sleep-FUT
we'll sleep there.

39 ngarn-ku li-lung-ku warra-ju, baalmbi bilmarrkankku beach-MPROP east—ALL-MPROP go-FUT morrow place name
We'll go east along the beach, to Bilmarrkankku the next day.

40 bana wirriyang, bana thungkuru, bana ngamburu, and place name and place name and place name
and to Wirriyang, and Thungkuru, and Ngamburu,

41 dathin-ku buu-ju mutha-wu ngarrawurn-u, there-MPROP pull-FUT many-MPROP bluefish-MPROP
lamukin-mari-thu place name—V.TRANSL—FUT
there we'll catch many bluefish, for (when we get to) Lamukin.

42 kara! wirdi-ki wirdi-ki, mutha what stay—IRR.IMP stay—IRR.IMP? lots(NOM)
tng-ku-l-da buu-n 1—INC-PLU-NOM pull (in)—NEGIMP
What! Leave it, we don't want to catch too much,

-ki in Yukulta is an 'irrealis imperative' or hortative; it has no reflex in Kayardild or Lardil.

43 burldamurr-a kurrka-tha thaari-jarra-ma-th three-NOM take-IMP take back-CAUS-IMP
let's just take back three or four.
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